



Board of Directors Special Meeting Agenda

November 18, 2021, 1:00 p.m. Virtual Meeting

Pursuant to Government Code Section 54953(3) (Assembly Bill 361), and in the interest of public health and safety, Clean Energy Alliance (CEA) is temporarily taking actions to prevent and mitigate the effects of the COVID-19 pandemic by holding CEA Joint Powers Authority meetings electronically or by teleconferencing. All public meetings will comply with public noticing requirements in the Brown Act and will be made accessible electronically to all members of the public seeking to observe and address the CEA Joint Powers Authority Board of Directors.

Members of the public can watch the meeting live through the You Tube Live Stream Link at: <u>https://thecleanenergyalliance.org/agendas-minutes/</u>

or

https://www.youtube.com/channel/UCGXJILzITUJOCZwVGpYoC8Q

This is a view-only live stream. If the You Tube live stream experiences difficulties members of the public should access the meeting via the Zoom link below.

Members of the public can observe and participate in the meeting via Zoom by clicking: https://us06web.zoom.us/j/81376410530

or telephonically by dialing: (253) 215-8782 Meeting ID: 813 7641 0530

Members of the public can provide public comment in writing or orally as follows:

Written Comments: If you are unable to connect by Zoom or phone and you wish to make a comment, you may submit written comments prior to and during the meeting via email to: <u>Secretary@thecleanenergyalliance.org</u>. Written comments received up to an hour prior to the commencement of the meeting will be announced at the meeting and become part of the meeting record. Public comments received in writing will not be read aloud at the meeting.

Oral Comments: You can participate in the meeting by providing oral comments either: (1) online by using the raise hand function and speaking when called upon or (2) using your telephone by pressing *9 to raise your hand and speaking when called upon.

If you are an individual with a disability and need a reasonable modification or accommodation pursuant to the Americans with Disabilities Act ("ADA"), please contact <u>Secretary@thecleanenergyalliance.org</u> prior to the meeting for assistance.



CALL TO ORDER

ROLL CALL

FLAG SALUTE

BOARD COMMENTS & ANNOUNCEMENTS

PRESENTATIONS

PUBLIC COMMENT

Consent Calendar

Item 1:Reconsideration of the Circumstances of the COVID-19 State of Emergency to
Determine Whether the Legislative Bodies of Clean Energy Alliance will Continue to
Hold Meetings Via Teleconferencing and Making Findings Pursuant to Government
Code Section 54943(e)

RECOMMENDATION

To continue meetings by teleconferencing pursuant to Government Code Section 54943(e), finding that: (1) the Board has reconsidered the circumstances of the state of emergency created by the COVID-19 pandemic; and (2) the state of emergency continues to directly impact the ability of the members to meet safely in person.

Item 2: Consideration of Clean Energy Alliance December 17, 2021, Special Meeting for the Purpose of Considering the City of San Marcos Joining Clean Energy Alliance

RECOMMENDATION

Approve December 17, 2021, special meeting for the purpose of considering the City of San Marcos joining Clean Energy Alliance.

New Business

Item 3: Adopt Resolution No. 2021-014 Authorizing the City of Escondido to Become a Party to the Joint Powers Agreement and a Member of the Clean Energy Alliance

RECOMMENDATION

1) Adopt Resolution No. 2021-014 Authorizing the City of Escondido to Become a Party to the Joint Powers Agreement and a Member of the Clean Energy Alliance.





2) Direct staff to prepare an Implementation Plan Amendment reflecting a City of Escondido Launch in 2023 and return to the Board for approval no later than the December 30, 2021, Board Meeting.

3) Direct staff to include the City of San Marcos in the Implementation Plan Amendment contingent on the City of San Marcos adopting an ordinance establishing a community choice aggregation through Clean Energy Alliance.

BOARD MEMBER REQUESTS FOR FUTURE AGENDA ITEMS

ADJOURN

NEXT MEETING: Special Meeting December 17, 2021, 2:00 p.m., Virtual



Staff Report

| DATE: | November 18, 2021 |
|---------|---|
| то: | Clean Energy Alliance Board of Directors |
| FROM: | Barbara Boswell, Chief Executive Officer |
| ITEM 1: | Reconsideration of the circumstances of the COVID-19 state of emergency to determine whether the legislative bodies of Clean Energy Alliance will continue to hold meetings via teleconferencing and making findings pursuant to Government Code Section 54953(e) |

RECOMMENDATION

To continue meetings by teleconferencing pursuant to Government Code Section 54953(e), find that: (1) the Board has reconsidered the circumstances of the state of emergency created by the COVID-19 pandemic; and (2) the state of emergency continues to directly impact the ability of the members to meet safely in person.

BACKGROUND AND DISCUSSION

On September 16, 2021, Governor Newsom signed AB 361 amending the Brown Act to allow local agencies to meet remotely during declared emergencies under certain conditions. AB 361 authorizes local agencies to continue meeting remotely without following the Brown Act's standard teleconferencing provisions, including the requirement that meetings be conducted in physical locations, under specified conditions. Namely, the meeting is held during a state of emergency proclaimed by the Governor and either of the following applies: (1) state or local officials have imposed or recommended measures to promote social distancing; or (2) the agency has already determined or is determining whether, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

The Board of Directors and CEA's other legislative bodies have met using teleconferencing throughout the COVID-19 pandemic to protect the health and safety of the public and staff. On October 28, 2021, the Board of Directors determined that the factual circumstances exist for CEA to continue to hold meetings pursuant to AB 361. Specifically, on March 4, 2020, Governor Newsom declared a State of Emergency in response to the COVID-19 pandemic (the "Emergency"). The Emergency continues to exist. In addition, the Centers for Disease Control and Prevention continue to advise that COVID-19 spreads more easily indoors than outdoors and that people are more likely to be exposed to COVID-19 when they are closer than 6 feet apart from others for longer periods of time. Based on this advice and as a result of the Emergency, the Board determined that meeting in person presents imminent risks to the health or safety of attendees.

To continue meeting remotely pursuant to AB 361, an agency must make periodic findings that: (1) the body has reconsidered the circumstances of the declared emergency; and (2) the emergency impacts the ability of the body's members to meet safely in person, <u>or</u> state or local officials continue to impose or recommend measures to promote social distancing. These findings should be made not later than 30 days after teleconferencing for the first time pursuant to AB 361, and every 30 days thereafter.

Due to the ongoing Emergency, the need to promote social distancing to reduce the likelihood of exposure to COVID-19, and the imminent risks to the health or safety of meeting attendees, staff recommends that the legislative bodies of CEA hold public meetings via teleconferencing pursuant to Government Code Section 54953(e) and make the requisite findings to continue to do so.

FISCAL IMPACT

There is no fiscal impact by this action.

ATTACHMENTS

None.



Staff Report

| DATE: | November 18, 2021 |
|---------|--|
| то: | Clean Energy Alliance Board of Directors |
| FROM: | Barbara Boswell, Chief Executive Officer |
| ITEM 2: | Approve December 17, 2021, Special Meeting for the Purpose of Considering the City of San Marcos Joining Clean Energy Alliance |

RECOMMENDATION

Approve December 17, 2021, special meeting for the purpose of considering the City of San Marcos joining Clean Energy Alliance.

BACKGROUND AND DISCUSSION

The City of San Marcos has been evaluating options related to bringing community choice energy to residents and businesses within San Marcos and through those efforts, San Marcos determined that joining Clean Energy Alliance (CEA) was the best option. At its November 9, 2021 meeting, the San Marcos City Council adopted a resolution to join CEA and introduced and passed to second reading an ordinance to establish a Community Choice Aggregation Program. The second reading and adoption of the ordinance is planned for November 23.

In anticipation of San Marcos joining CEA, staff has analyzed the energy usage within San Marcos and determined that expanding into the new area would have a positive financial benefit to CEA. The proposed CEA special meeting is for CEA to consider adoption of a resolution authorizing the City of San Marcos to become a member of CEA.

FISCAL IMPACT

There is no fiscal impact by this action.

ATTACHMENTS

None.



Staff Report

| DATE: | November 18, 2021 |
|---------|---|
| то: | Clean Energy Alliance Board of Directors |
| FROM: | Barbara Boswell, Chief Executive Officer |
| ITEM 3: | Adopt Resolution 2021-014 Authorizing the City of Escondido to Become a Party to the Joint Powers Agreement and a Member of the Clean Energy Alliance |

RECOMMENDATION

1) Adopt Resolution No. 2021-014 Authorizing the City of Escondido to Become a Party to the Joint Powers Agreement and a Member of the Clean Energy Alliance.

2) Direct staff to prepare an Implementation Plan Amendment reflecting a City of Escondido launch in 2023 and return to the Board for approval no later than the December 30, 2021, Board Meeting.

3) Direct staff to include the City of San Marcos in the Implementation Plan Amendment contingent on the City of San Marcos adopting an ordinance establishing a community choice aggregation through Clean Energy Alliance.

BACKGROUND AND DISCUSSION

The City of Escondido has been evaluating options related to bringing community choice energy to residents and businesses within Escondido and the results of those efforts identified joining Clean Energy Alliance (CEA) was the City's best option.

At its October 27, 2021, meeting, the Escondido City Council adopted a resolution to join CEA and introduced an ordinance to establish a Community Choice Aggregation Program. The second reading and adoption of the ordinance is planned for November 17, with the ordinance effective 30-days after adoption.

As part of CEA's evaluation of Escondido joining, CEA received historical electric usage data from San Diego Gas & Electric (SDG&E) for Escondido load. CEA's technical team at Pacific Energy Advisors analyzed the usage, prepared a financial pro forma utilizing CEA's revenue and expense assumptions, and an assessment report (Attachment B). The assessment report concluded that CEA expansion into Escondido would have a positive financial impact on CEA.

In anticipation of San Marcos City Council consideration of joining CEA and the desire to bring community choice in 2023, CEA also received San Marcos electric usage data and a financial pro forma and assessment report were prepared (Attachment C). The assessment report concluded that CEA expansion into San Marcos would have a positive financial impact on CEA.

Financial Assessment

Using a base assumption of enrolling customers in April 2023, which was determined to be the optimal enrollment date, and serving 90% of eligible customers, the assessment concluded that with the addition of Escondido, CEA's net operating margin would increase by approximately 85% beginning in FYE 2024, which would be the first full fiscal year of service. The projected incremental revenues, costs, and net operating margin are shown in Table 1 below:

| | FYE 2023 ¹ | FYE 2024 | FYE 2025 | |
|----------------------|-----------------------|----------|----------|--|
| Revenue | \$10.3 | \$52.1 | \$52.4 | |
| Power Costs | -\$8.1 | -\$43.6 | -\$41.1 | |
| Other Costs | -\$0.3 | -\$1.2 | -\$1.2 | |
| Reserve Contribution | -\$.52 | -\$2.61 | -\$2.62 | |
| Net Operating Margin | \$1.38 | \$4.69 | \$7.48 | |

Table 1: Incremental Net Margins from Expansion (in \$MM) City of Escondido

Using a base assumption of enrolling customers in April 2023, which was determined to be the optimal enrollment date, and serving 90% of eligible customers, the assessment concluded that with the addition of San Marcos, CEA's net operating margin would increase by approximately 30% beginning in FYE 2024, which would be the first full fiscal year of service. The projected incremental revenues, costs, and net operating margin are shown in Table 1 below

| | FYE 2023 ² | FYE 2024 | FYE 2025 | |
|----------------------|-----------------------|----------|----------|--|
| Revenue | \$6.9 | \$34.1 | \$34.2 | |
| Power Costs | -\$5.4 | -\$28.6 | -\$27.0 | |
| Other Costs | -\$0.2 | -\$0.8 | -\$0.8 | |
| Reserve | -\$.35 | -\$1.71 | -\$1.71 | |
| Net Operating Margin | \$1.05 | \$2.99 | \$4.69 | |

Table 2: Incremental Net Margins from Expansion (in \$MM) City of San Marcos

In addition to evaluating financial impact, the assessment report reviewed impacts to energy product procurements needed to serve the City of Escondido. These products include Renewable Energy (short-term and long-term), Carbon Free Energy, System Energy and Resource Adequacy (RA) capacity.

Accommodating the expansion will require careful consideration of resource availability, particularly for RA and long-term renewable energy products. When Escondido customers transition to CEA service, SDG&E should have surplus RA and long-term renewable energy supply. CEA will need to work closely with SDG&E to acquire the surplus supply SDG&E holds to ensure CEA can meet its new obligations. Staff is confident that SDG&E can work together to reach an agreement for the procurement of power supply

¹ Reflects partial year of service for fiscal year ending June 30, 2023, with enrollments assumed to commence on April 1, 2023.

² Reflects partial year of service for fiscal year ending June 30, 2023, with enrollments assumed to commence on April 1, 2023.

and anticipates beginning this process with SDG&E in early 2022 to allow sufficient time to negotiate the procurements.

Based on the results of the assessments, staff recommends CEA Board approve the addition of Escondido as a new member of CEA and direct staff to prepare the Implementation Plan Amendment reflecting expanding service in 2023. In addition, to ensure service can be offered to San Marcos in 2023, staff recommends CEA Board to direct staff to include San Marcos in the Implementation Plan Amendment, contingent on San Marcos City Council approving its ordinance to establish Community Choice Aggregation service.

FISCAL IMPACT

Pursuant to CEA's policy, the cost of preparation of the Implementation Plan Amendment, up to a not to exceed amount of \$50,000, is to be split between the two cities. Escondido and San Marcos will be eligible for reimbursement of the cost within three years of CCA service commencement.

ATTACHMENTS

Attachment A Resolution 2021-014 Authorizing the City of Escondido to Become a Party to the Joint Powers Agreement and a Member of the Clean Energy Alliance Attachment B Clean Energy Alliance New Membership Assessment, City of Escondido Attachment C Clean Energy Alliance New Membership Assessment, City of San Marcos

RESOLUTION NO. 2021-014

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CLEAN ENERGY ALLIANCE AUTHORIZING THE CITY OF ESCONDIDO TO BECOME A PARTY TO THE JOINT POWERS AGREEMENT AND A MEMBER OF THE CLEAN ENERGY ALLIANCE

THE BOARD OF DIRECTORS OF THE CLEAN ENERGY ALLIANCE DOES HEREBY FIND, RESOLVE AND ORDER AS FOLLOWS:

WHEREAS, on September 24, 2002, the Governor of California signed into law Assembly Bill 117 (Stat. 2002, Ch. 838; see California Public Utilities Code section 366.2; hereinafter referred to as the "Act"), which authorizes any California city or county, whose governing body so elects, to combine the electricity load of its residents and businesses in a community-wide electricity aggregation program known as Community Choice Aggregation ("CCA"); and

WHEREAS, the Act expressly authorizes participation in a CCA program through a joint powers agency; and on November 4, 2019, the Clean Energy Alliance ("CEA" or "the Agency") was formed under the Joint Exercise of Power Act, California Government Code section 6500 *et seq.*, among the Cities of Carlsbad, Solana Beach and Del Mar to work cooperatively to create economies of scale and implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient, and renewable resources in the region for the benefit of all the parties and their constituents, including, but not limited to, establishing and operating a CCA program; and

<u>WHEREAS</u>, on March 16, 2020, the California Public Utilities Commission ("CPUC") certified the "Implementation Plan" of CEA, confirming CEA's compliance with the requirements of the Act; and

WHEREAS, Section 2.4 of the CEA Joint Powers Agreement ("Agreement") sets forth the procedures for the addition of new member jurisdictions; and

<u>WHEREAS</u>, including new member jurisdictions within CEA's Joint Powers Authority can benefit CEA communities, customers, and the general public by 1) expanding access to competitively-priced renewable and carbon-free energy; 2) achieving greater economies of scale while accelerating the reduction of greenhouse gas emissions; 3) enhancing CEA's financial strength through increased revenues and reserves; 4) expanding the opportunities for local renewable energy and decarbonization projects and programs and the creation of local jobs; and 5) empowering local stakeholders with more direct representation before State-level regulators and elected officials; and

<u>WHEREAS</u>, on October 27, 2021, through a unanimous vote of its City Council, the City of Escondido adopted Resolution No. 2021-169 authorizing the execution of the Joint Exercise of Powers Agreement of the Clean Energy Alliance and authorizing staff to take other actions

necessary for the City of Escondido to join CEA, and introduced Ordinance No. 2021-12 ordaining the City Council's decision, pursuant to Public Utilities Code Section 366.2 to implement a CCA program within the jurisdiction of the City of Escondido by participating in CEA, under the terms and conditions of its Joint Powers Agreement; and

<u>WHEREAS</u>, on November 17, 2021, the City of Escondido conducted a second reading and adopted ordinance No. 2021-12 ordaining the City Council's decision, pursuant to Public Utilities Code Section 366.2 to implement a CCA program within the jurisdiction of the City of Escondido by participating in CEA, under the terms and conditions of its Joint Powers Agreement; and

<u>WHEREAS</u>, Pacific Energy Advisors on behalf of CEA conducted an assessment of the financial and resource planning impacts of adding Escondido as a member of CEA and concluded that there would be an overall positive financial effect; and

<u>WHEREAS</u>, per CPUC rules, prospective member jurisdictions must join CEA before the end of calendar year 2021 in order to begin customer enrollments in CEA's service options by 2023; and

WHEREAS, Section 2.4 of the Agreement requires the Board of Directors to adopt a resolution by a two-thirds vote of the entire Board authorizing the membership of additional member jurisdictions, and specifying the conditions for membership, if any.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE CLEAN ENERGY ALLIANCE DOES HEREBY RESOLVE AS FOLLOWS:

<u>Section 1</u>. The City of Escondido is hereby authorized to become a party to the Agreement and a member of CEA, subject to the following conditions:

(a) The Community Choice Aggregation ordinance adopted by the City of Escondido becoming effective.

(b) The execution of the Agreement by the duly authorized official of the City of Escondido.

(c) Reimbursement to CEA by City of Escondido of CEA costs incurred in connection with adding a new agency, including, but not limited to, the cost of analysis of historical usage data using CEA's financial pro forma model to determine impact to CEA of the proposed member; and preparation of an Amended Implementation Plan and related activities of the expansion.

PASSED AND ADOPTED by the Board of Directors of the Clean Energy Alliance this 18th day of November 2021, by the following vote:

AYES:

NOES:

ABSENT:

Kristi Becker, Chair

ATTEST:

Sheila Cobian, Interim Board Secretary

Clean Energy Alliance New Membership Assessment

City of Escondido

November 2021

SUMMARY

The City of Escondido ("City") has engaged with the Clean Energy Alliance ("CEA") to explore the possibility of joining CEA. On behalf of CEA, Pacific Energy Advisors, Inc. ("PEA") conducted an assessment of the financial and resource planning implications associated with extending CEA service to electric customers within the City (which are currently receiving bundled electric service from the incumbent utility, San Diego Gas & Electric, or "SDG&E"). The assessment involved a study to understand the potential increase in electric load and the additional energy resources that would be needed to serve the City. The study also estimated the incremental revenues that would be derived from electricity sales to City customers, as well as the incremental costs associated with energy resource procurement and other items/services that would be necessary to support CCA service expansion to City customers. These factors were jointly evaluated to determine whether any operating surpluses could be generated, on a projected basis, for the benefit of CEA and its customers.

In consideration of the prospective timing associated with amended implementation plan submittal and in accordance with existing regulatory rules, the earliest possible enrollment date for City customers would be January 1, 2023.¹ For this assessment, PEA modeled various enrollment start times in 2023 and found that April 2023 would be optimal from a financial perspective. Thus, enrollment would be expected to occur toward the end of CEA's fiscal year ending 2023; the first full year reflecting City load would be CEA's fiscal year ending 2024.

Under base case assumptions, the analysis indicates that expansion would yield a positive financial impact for CEA: the expansion would be expected to increase CEA net operating margin by approximately 85% per year, beginning in FYE 2024. The projected incremental revenues, costs, and net operating margin (i.e., surplus or contribution to reserves) is shown in Table 1.

| | FYE 2023 ² | FYE 2024 | FYE 2025 |
|----------------------|-----------------------|----------|----------|
| Revenue | \$10.3 | \$52.1 | \$52.4 |
| Power Costs | -\$8.1 | -\$43.6 | -\$41.1 |
| Other Costs | -\$0.3 | -\$1.2 | -\$1.2 |
| Reserves | -\$.52 | -\$2.61 | -\$2.62 |
| Net Operating Margin | \$1.38 | \$4.69 | \$7.48 |

Table 1: Incremental Net Margins from Expansion (in \$MM)

¹ Achieving the prospective early enrollment date for City customers would require submittal of an amended CCA implementation plan no later than December 31, 2021.

² Reflects partial year of service for fiscal year ending June 30, 2023, with enrollments assumed to commence on April 1, 2023.

Electric resource requirements associated with the expansion would be significant, and close coordination between CEA and SDG&E would be important to achieve an appropriate allocation of resources needed to serve the transferred load. Such coordination and cooperation would be especially important for resource adequacy and long-term renewable energy supply. Without cooperation from SDG&E to sell excess resources, or alternatively, a regulatory mechanism to ensure transfer of resources as load shifts from SDG&E to CEA, it may not be possible for CEA to obtain the necessary resources in the near term to meet its resource adequacy and long-term Renewable Portfolio Standards ("RPS") obligations.

ANALYSIS

PEA conducted an analysis of the City's prospective electric accounts to estimate the revenues and costs associated with extending CEA service to the City. The analysis incorporated historical monthly electric usage data provided by SDG&E for all current electric accounts located within the City. PEA reviewed load data from 2017 and 2018 to formulate its load projections.

Table 2 summarizes the account and electric usage data for the major customer classifications represented within the City. Available data indicate the potential to serve 56,348 new CEA customer accounts, which are expected to use approximately 538,388 MWh of electric energy per year. This would be an approximate 80% increase in size for CEA, relative to the anticipated retail sales volume associated with CEA's current membership. The aggregate peak demand of these prospective accounts is estimated at 125 MW.³

| Classification | Accounts | Annual Energy (MWh) | Monthly Per Account (kWh) |
|--------------------------------|----------|---------------------|---------------------------|
| Residential | 48,933 | 237,823 | 405 |
| Small Commercial | 6,277 | 92,109 | 1,223 |
| Medium and Large Commercial | 745 | 197,847 | 22,131 |
| Agricultural | 154 | 4,688 | 2,537 |
| Street Lighting | 239 | 5,922 | 2,065 |
| Total | 56,348 | 538,388 | 796 |
| *Peak Demand (MW) | | | 125 |

Table 2: 2018 City Electric Data

*Estimate based on CEA customer hourly usage profiles.

As compared to the current CEA customer base, summarized in Table 3 below, the City has a proportionately larger residential sector and a smaller commercial sector. City residential customers tend to be somewhat larger users of energy than those in CEA's current service area, with 9% greater average

³ These figures reflect bundled electricity customers of SDG&E and exclude customers taking service from non-utility energy providers (namely, direct access service providers) as well as certain accounts on generation service contracts that are not expected to transition to CEA service. These figures are unadjusted for expected customer attrition (customer elections to "opt-out").

monthly consumption. However, due to the smaller commercial sector, the average usage of all customers in the City is below that of the current CEA area.

| Classification | Accounts | Annual Energy (MWh) | Monthly Per Account (kWh) |
|------------------|----------|---------------------|---------------------------|
| | | | |
| Residential | 50,339 | 224,061 | 371 |
| Small Commercial | 7,401 | 105,282 | 1,185 |
| Medium and Large | 871 | 281,830 | 26,964 |
| Commercial | | | |
| Agricultural | 59 | 9,410 | 13,291 |
| Street Lighting | 189 | 3,225 | 1,422 |
| | | | |
| Total | 58,859 | 623,808 | 883 |
| | | | |
| Peak Demand (MW) | | | 127 |

Table 3: Projected Annual CEA Electricity Data – Current Membership

As illustrated in Figures 1 and 2 below, electricity usage within the City shows greater seasonality relative to the current SDCP customer base, with elevated summer peak consumption. These usage characteristics are likely due to cooling loads driven by climate differences between the two geographic areas.

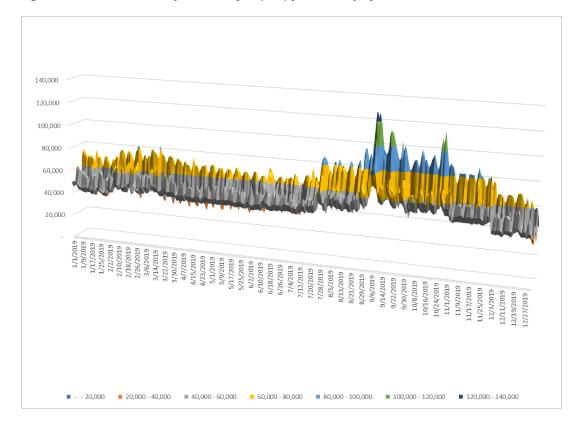


Figure 1: 12-Month Hourly Load Profile (kW) for the City of Escondido

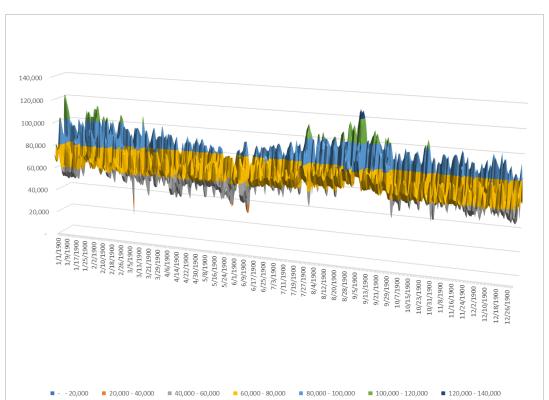


Figure 2: 12-Month Hourly Load Profile (kW) of CEA's Current Customer Base

FISCAL IMPACTS

For purposes of the fiscal impact analysis, it was assumed that service would be initiated to the City in April 2023 and that 90% of eligible accounts would choose to participate (with the remaining 10% electing to opt-out, continuing to receive bundled electric service from the incumbent utility). This would equate to an increase in annual CEA electricity sales of 500 GWh, or approximately 80% relative to pre-expansion sales. In order to quantify anticipated financial impacts to CEA, the incremental revenues and costs associated with the prospective service expansion were examined. More specifically, the year of enrollment and the next two fiscal years following expanded service, i.e., the period beginning April 1, 2023 through June 30, 2025, were analyzed to determine likely fiscal impacts over a multi-year planning period.

The incremental revenue surplus - based on the difference between projected revenues and costs directly related to the addition of City accounts - represents the expected fiscal benefit related to expansion. Incremental revenues were projected based on forecasted electricity sales and projected CEA rates. The incremental cost analysis accounts for requisite power supplies that would be required to serve accounts within the City, increased customer billing charges, customer service support (call center), SDG&E service fees, and required customer notices associated with serving additional customers.

Table 4 reflects the estimated incremental fiscal impact during each of the first three fiscal years commencing with (and immediately following) enrollment of City accounts.

| | FYE 2023 ⁴ | FYE 2024 | FYE 2025 |
|-----------------------------------|-----------------------|----------|----------|
| Revenue (\$MM) | \$10.3 | \$52.1 | \$52.4 |
| Power Costs (\$MM) | -\$8.1 | -\$43.6 | -\$41.1 |
| Other Costs (\$MM) | -\$0.3 | -\$1.2 | -\$1.2 |
| Reserves | -\$.52 | -\$2.61 | -\$2.62 |
| Net Operating Margin (\$MM) | \$1.38 | \$4.69 | \$7.48 |
| Incremental Sales Volume (MWh) | 108,316 | 497,908 | 500,397 |

Table 4: Incremental Fiscal Impact Related to Prospective City Expansion

In consideration of current market conditions, the incremental fiscal impact analysis indicates that adding the City accounts to CEA's current customer base would provide benefits to CEA in the form or incremental surplus revenues that could be used to augment reserves or be applied to other uses. It is estimated that expanding CEA service to the City would increase net program margins by approximately \$4.69 million and \$7.48 million in FYE 2024 and FYE 2025, respectively. This benefit accrues due to the margins generated by increased retail electricity sales relative to anticipated costs, including certain economies of scale that will result from various fixed administrative cost components (that will be spread over a larger sales base). It is worth noting that power supply costs may change over time, and to the extent such changes occur, actual net revenues could materially differ from the net revenue projections reflected in Table 4 (above).

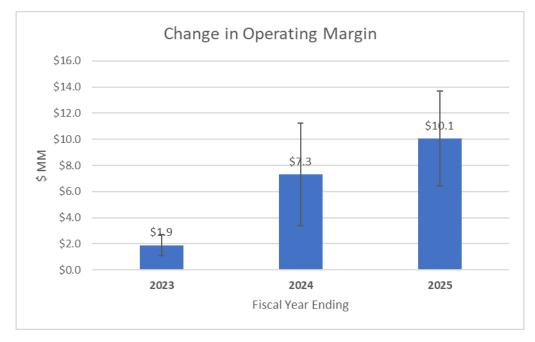
WHOLESALE POWER PRICE SENSITIVITY

Changes in market prices for electricity represent the single greatest uncertainty that could impact the projected benefits related to expansion. Electricity is a commodity, traded in a highly volatile market, and prices could materially change before CEA is ready to contract for the power supply needed to serve anticipated City electric loads. Commodity price risk is inherent in the electric utility industry and is not unique to expansion, but expansion imposes challenges with respect to the timing of electricity purchases as well as the timing associated with a final/definitive determination regarding the expansion itself. This is not unlike the challenges CEA (or any Community Choice Aggregator) faced during its initial startup period. CEA utilizes professional risk management approaches and forward hedging contracts to mitigate commodity price risk for its existing customers; however, adverse price movements that may occur before CEA initiates power purchases for the City load could drive up costs and result in negative margins.

Utilizing historical volatility in wholesale power market prices, a likely range of potential power supply costs and resulting net margins can be calculated. Figure 3 shows the base case operating margins and error bars representing one standard deviation in power supply costs, assuming CEA does not initiate procurement until March 2022, the month during which the CPUC would be expected to certify CEA's

⁴ Reflects partial year of service for fiscal year ending June 20, 2023, with enrollments assumed to commence on April 1, 2023.

Implementation Plan amendment addressing expansion to the City. Over this four-month period (between the date of this Expansion Assessment and March 2022), the estimated change in market prices at one standard deviation of variation is approximately 10% relative to base case assumptions. As reflected in Figure 3 (below), the likely range of net margin outcomes is wide, but consistently positive under this range of power price variability.





RESOURCE IMPACTS

Similar to the procurement approach used to support CEA's current customers, CEA would need to acquire various energy products to serve the City – it is assumed that the proportionate acquisition of such resources would occur over time through the application of a laddered hedging strategy, as followed under CEA's risk management program. These energy products include Renewable Energy, Other Carbon Free Energy (e.g., large hydro-electric), System Energy, and Resource Adequacy capacity. The quantities will vary over time and are summarized in Table 5 below for a representative year.

| Product | Quantity | Units | Notes |
|-----------|----------|-----------|---|
| Renewable | 320 | GWh Per | Approx. half must be from long-term commitments (>= 10 |
| Energy | GWh | Year | years) per RPS rules |
| Other | 50 to 90 | GWh Per | Higher end of range would be needed to offset emissions |
| Carbon | GWh | Year | attributed to PCC2 renewable energy products; lower use |
| Free | | | of PCC2 products will reduce need for Other Carbon Free |
| | | | volumes |
| Resource | 105 MW | MW per | |
| Adequacy, | | Month, | |
| System | | September | |
| | | Peak | |

| Product | Quantity | Units | Notes |
|--------------------|----------|--------|-------|
| Resource | 90 MW | MW Per | |
| Adequacy, Local | | Month | |

Put into more concrete terms, the 320 GWh of annual renewable energy shown above is generally equivalent to the energy produced by a 120 MW solar or wind generation facility or a 40 MW Geothermal facility.

Under California's RPS rules, a significant portion of renewable energy purchases must be secured through contractual commitments of at least ten years in duration. Compliance with the RPS program is measured over multi-year compliance periods, and the expansion would occur during Compliance Period 4 (2021-2024). As shown below, RPS compliance would require an increase in renewable energy purchases during Compliance Period 4 of 376 GWh, of which 245 GWh would have to be associated with long-term commitments. Note that CEA has voluntarily adopted higher renewable energy targets than required by the RPS program, so the total renewable energy needed to meet CEA policy is greater than the figures shown below.

| Current CEA Me | mbership | | | | |
|------------------------|----------|-------|-------|-------|-------|
| Compliance Period 4 | 2021 | 2022 | 2023 | 2024 | Total |
| Retail Sales (GWh) | 394 | 624 | 624 | 627 | 2,268 |
| Gross RPS % | 35.8% | 38.5% | 41.3% | 44.0% | 40.8% |
| Required RPS (GWh) | 141 | 240 | 258 | 276 | 915 |
| Gross RPS LT % | 65.0% | 65.0% | 65.0% | 65.0% | 65.0% |
| Gross LT RPS | 92 | 156 | 167 | 179 | 594 |

| Compliance Period 4 | 2021 | 2022 | 2023 | 2024 | Total |
|------------------------|-------|-------|-------|-------|-------|
| Retail Sales (GWh) | 394 | 624 | 1,004 | 1,126 | 3,148 |
| Gross RPS % | 35.8% | 38.5% | 41.3% | 44.0% | 40.8% |
| Required RPS (GWh) | 141 | 240 | 415 | 496 | 1,291 |
| Gross RPS LT % | 65.0% | 65.0% | 65.0% | 65.0% | 65.0% |
| Gross LT RPS | 92 | 156 | 270 | 322 | 839 |

RESOURCE AVAILABILITY

Accommodating City expansion will require careful consideration of resource availability, particularly for resource adequacy and long-term renewable energy products. An important element of resource procurement will be the ability to access resources currently held by SDG&E for the benefit of City customers. When City customers transition to CEA service, SDG&E should have surplus resource adequacy and long-term renewable energy supply, so CEA will need to arrange for the acquisition of such supply to facilitate applicable compliance mandates. If no transfer of resources occurs, either by sale or some form of allocation, CEA would risk being unable to meet its regulatory obligations associated with the increased load associated with City expansion.

Under existing regulation, SDG&E is required to have 100% of the local resource adequacy capacity associated with its current customer base two years forward and 50% in the third year. With the well-known shortages of local resource adequacy capacity in the San Diego/Imperial Valley area, this virtually assures that accessing local RA resources held by SDG&E will be required if CEA is to meet its increased local RA obligations associated with the City load.

With respect to renewable energy availability, the resource constraint would primarily relate to the longterm renewable energy requirement for Compliance Period 4. PEA understands that CEA will soon have an opportunity to pursue an allocation of SDG&E's existing RPS portfolio, as described in Commission Decision 21-05-030, which was adopted on May 20, 2021. Participation in this allocation process is voluntary and certain volumes would be eligible to satisfy long-term renewable energy procurement mandates pertaining to CEA. Additional details related to this process are forthcoming with initial allocations expected to occur during the 2023 calendar year. To the extent that CEA can arrange such an allocation to address the increased renewable energy requirements relating to City expansion, incremental procurement obligations would be somewhat diminished. If CEA chooses to forgo the aforementioned allocation opportunity, CEA would need to enter into long-term contracts for renewable energy starting in 2023, coincident with (or shortly after) the enrollment of City customers. Development timelines for new renewable generating projects, however, would likely extend a minimum of 24 to 36 months following the administration of a related solicitation for such supply. Depending on how early CEA begins its procurement efforts, this could mean that new-build renewable projects may not commence operation until the 2024 or 2025 calendar years (if CEA waited until it received the CPUC's implementation plan certification before pursuing long-term renewable energy solicitation efforts related to City expansion). If long-term renewable deliveries were to commence in 2024, CEA would require the full 245 GWh incremental Compliance Period 4 long-term renewable energy obligation to be delivered in that year, and that commitment would extend for the next nine (or more) years. This may result in a higher proportion of renewable energy under long-term contracts than CEA would normally desire; it is generally beneficial to have a mix of short-, medium-, and long-term contract commitments to diversify risk. Of course, if the earliest delivery for new long-term contracts occurs after 2024, associated renewable energy deliveries could not be used in Compliance Period 4. The RPS program makes no accommodations for significant load increases, and there are severe penalties for not meeting the long-term contracting obligation.

In light of the resource availability issues described above, it would be advisable to engage with SDG&E early in the process to ensure that appropriate resource transfers and/or the previously described renewable energy allocation process can be timely accommodated.

CAPITAL AND LIQUIDITY IMPACTS

Although relatively minimal, additional costs related to the prospective expansion would be incurred during the fiscal year preceding enrollment of City accounts. These costs would relate to marketing and outreach activities, customer noticing, regulatory and legal representation, internal operations, resource planning and electric procurement activities that would be necessary to successfully integrate the City and its customers in CEA's organization. There would also be increased working capital requirements to address changes in cash flow. CEA is projected to have sufficient cash liquidity to internally fund pertinent activities related to the prospective expansion.

CONCLUSIONS

This assessment concludes that under base case assumptions extending service to the City would have an overall positive financial benefit to CEA in the form of additional net surpluses that could be used to augment reserves or applied to other purposes. Due to wholesale market volatility, the likely range of outcomes is wide, but margins are expected to be positive for scenarios reflecting typical power price variability. Extending service to the City would increase CEA's sales volume by approximately 80% and would require a meaningful increase in CEA resource acquisition. Advance coordination with SDG&E for resource adequacy and long-term renewable energy resource transfers would be strongly advised to ensure CEA has the resources necessary to meet its regulatory obligations associated with an increase in load. Among other resource implications, the expansion would increase CEA's long-term RPS compliance obligations, and meeting these heightened obligations during Compliance Period 4, which spans 2021-2024, would be of immediate importance. It is highly likely that local resource adequacy and long-term renewable energy volut need to be obtained from SDG&E to facilitate the transfer of customers to CEA.

Clean Energy Alliance New Membership Assessment

City of San Marcos

November 2021

SUMMARY

The City of San Marcos ("City") has engaged with the Clean Energy Alliance ("CEA") to explore the possibility of joining CEA. On behalf of CEA, Pacific Energy Advisors, Inc. ("PEA") conducted an assessment of the financial and resource planning implications associated with extending CEA service to electric customers within the City (which are currently receiving bundled electric service from the incumbent utility, San Diego Gas & Electric, or "SDG&E"). The assessment involved a study to understand the potential increase in electric load and the additional energy resources that would be needed to serve the City. The study also estimated the incremental revenues that would be derived from electricity sales to City customers, as well as the incremental costs associated with energy resource procurement and other items/services that would be necessary to support CCA service expansion to City customers. These factors were jointly evaluated to determine whether any operating surpluses could be generated, on a projected basis, for the benefit of CEA and its customers.

In consideration of the prospective timing associated with amended implementation plan submittal and in accordance with existing regulatory rules, the earliest possible enrollment date for City customers would be January 1, 2023.¹ For this assessment, PEA modeled various enrollment start times in 2023 and found that April 2023 would be optimal from a financial perspective. Thus, enrollment would be expected to occur toward the end of CEA's fiscal year ending 2023; the first full year reflecting City load would be CEA's fiscal year ending 2024.

Under base case assumptions, the analysis indicates that expansion would yield a positive financial impact for CEA: the expansion would be expected to increase CEA net operating margin by approximately 30% per year, beginning in FYE 2024. The projected incremental revenues, costs, and net operating margin (i.e., surplus or contribution to reserves) is shown in Table 1.

| | FYE 2023 ² | FYE 2024 | FYE 2025 |
|----------------------|-----------------------|----------|----------|
| Revenue | \$6.9 | \$34.1 | \$34.2 |
| Power Costs | -\$5.4 | -\$28.6 | -\$27.0 |
| Other Costs | -\$0.2 | -\$0.8 | -\$0.8 |
| Reserve | -\$.35 | -\$1.71 | -\$1.71 |
| Net Operating Margin | \$1.05 | \$2.99 | \$4.69 |

Table 1: Incremental Net Margins from Expansion (in \$MM)

¹ Achieving the prospective early enrollment date for City customers would require submittal of an amended CCA implementation plan no later than December 31, 2021.

² Reflects partial year of service for fiscal year ending June 30, 2023, with enrollments assumed to commence on April 1, 2023.

Electric resource requirements associated with the expansion would be significant, and close coordination between CEA and SDG&E would be important to achieve an appropriate allocation of resources needed to serve the transferred load. Such coordination and cooperation would be especially important for resource adequacy and long-term renewable energy supply. Without cooperation from SDG&E to sell excess resources, or alternatively, a regulatory mechanism to ensure transfer of resources as load shifts from SDG&E to CEA, it may not be possible for CEA to obtain the necessary resources in the near term to meet its resource adequacy and long-term Renewable Portfolio Standards ("RPS") obligations.

ANALYSIS

PEA conducted an analysis of the City's prospective electric accounts to estimate the revenues and costs associated with extending CEA service to the City. The analysis incorporated historical monthly electric usage data provided by SDG&E for all current electric accounts located within the City. PEA reviewed load data from 2017 and 2018 to formulate its load projections.

Table 2 summarizes the account and electric usage data for the major customer classifications represented within the City. Available data indicate the potential to serve 36,820 new CEA customer accounts, which are expected to use approximately 352,773 MWh of electric energy per year. This would be an approximate 52% increase in size for CEA, relative to the anticipated retail sales volume associated with CEA's current membership. The aggregate peak demand of these prospective accounts is estimated at 80 MW.³

| Classification | Accounts | Annual Energy (MWh) | Monthly Per Account (kWh) |
|-------------------|----------|---------------------|---------------------------|
| Residential | 31,708 | 163,320 | 429 |
| Small Commercial | 4,480 | 62,809 | 1,168 |
| Medium and Large | 433 | 120,580 | 23,215 |
| Commercial | | | |
| Agricultural | 83 | 4,682 | 4,690 |
| Street Lighting | 117 | 1,382 | 988 |
| Total | 36,820 | 352,773 | 798 |
| *Peak Demand (MW) | | | 80 |

Table 2: 2018 City Electric Data

*Estimate based on CEA customer hourly usage profiles.

As compared to the current CEA customer base, summarized in Table 3 below, the City has a proportionately larger residential sector and a smaller commercial sector. City residential customers tend to be somewhat larger users of energy than those in CEA's current service area, with 15% greater average

³ The figures inf Table 2 reflect bundled electricity customers of SDG&E and exclude customers taking service from non-utility energy providers (namely, direct access service providers) as well as certain accounts on generation service contracts that are not expected to transition to CEA service. These figures are unadjusted for expected customer attrition (customer elections to "opt-out").

monthly consumption. However, due to the smaller commercial sector, the average usage of all customers in the City is below that of the current CEA area.

| Classification | Accounts | Annual Energy (MWh) | Monthly Per Account (kWh) |
|------------------|----------|---------------------|---------------------------|
| | | | |
| Residential | 50,339 | 224,061 | 371 |
| Small Commercial | 7,401 | 105,282 | 1,185 |
| Medium and Large | 871 | 281,830 | 26,964 |
| Commercial | | | |
| Agricultural | 59 | 9,410 | 13,291 |
| Street Lighting | 189 | 3,225 | 1,422 |
| | | | |
| Total | 58,859 | 623,808 | 883 |
| | | | |
| Peak Demand (MW) | | | 127 |

Table 3: Projected Annual CEA Electricity Data – Current Membership

As illustrated in Figures 1 and 2 below, electricity usage within the City shows greater seasonality relative to the current SDCP customer base, with elevated summer peak consumption. These usage characteristics are likely due to cooling loads driven by climate differences between the two geographic areas.

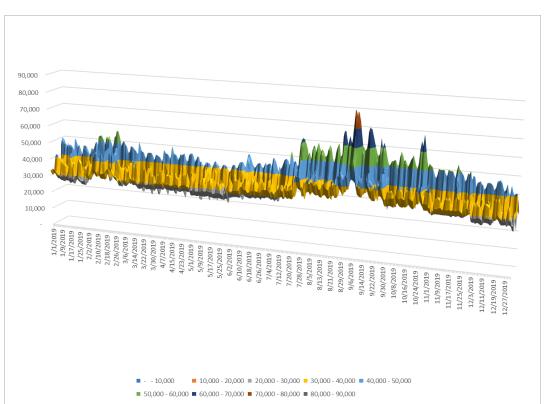
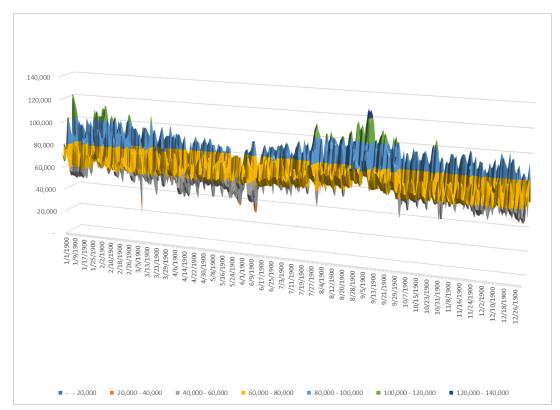


Figure 1: 12-Month Hourly Load Profile (kW) for the City of San Marcos

Figure 2: 12-Month Hourly Load Profile (kW) of CEA's Current Customer Base



FISCAL IMPACTS

For purposes of the fiscal impact analysis, it was assumed that service would be initiated to the City in April 2023 and that 90% of eligible accounts would choose to participate (with the remaining 10% electing to opt-out, continuing to receive bundled electric service from the incumbent utility). This would equate to an increase in annual CEA electricity sales of 325 GWh, or approximately 52% relative to pre-expansion sales. In order to quantify anticipated financial impacts to CEA, the incremental revenues and costs associated with the prospective service expansion were examined. More specifically, the year of enrollment and the next two fiscal years following expanded service, i.e., the period beginning April 1, 2023 through June 30, 2025, were analyzed to determine likely fiscal impacts over a multi-year planning period.

The incremental revenue surplus - based on the difference between projected revenues and costs directly related to the addition of City accounts - represents the expected fiscal benefit related to expansion. Incremental revenues were projected based on forecasted electricity sales and projected CEA rates. The incremental cost analysis accounts for requisite power supplies that would be required to serve accounts within the City, increased customer billing charges, customer service support (call center), SDG&E service fees, and required customer notices associated with serving additional customers.

Table 4 reflects the estimated incremental fiscal impact during each of the first three fiscal years commencing with (and immediately following) enrollment of City accounts.

| | FYE 2023 ⁴ | FYE 2024 | FYE 2025 |
|-----------------------------------|-----------------------|----------|----------|
| Revenue (\$MM) | \$6.9 | \$34.1 | \$34.2 |
| Power Costs (\$MM) | -\$5.4 | -\$28.6 | -\$27.0 |
| Other Costs (\$MM) | -\$0.2 | -\$0.8 | -\$0.8 |
| Reserves | -\$.35 | -\$1.71 | -\$1.71 |
| Net Operating Margin (\$MM) | \$1.05 | \$2.99 | \$4.69 |
| Incremental Sales Volume (MWh) | 71,901 | 326,255 | 327,886 |

Table 4: Incremental Fiscal Impact Related to Prospective City Expansion

In consideration of current market conditions, the incremental fiscal impact analysis indicates that adding the City accounts to CEA's current customer base would provide benefits to CEA in the form or incremental surplus revenues that could be used to augment reserves or be applied to other uses. It is estimated that expanding CEA service to the City would increase net program margins by approximately \$4.7 million and \$6.4 million in FYE 2024 and FYE 2025, respectively. This benefit accrues due to the margins generated by increased retail electricity sales relative to anticipated costs, including certain economies of scale that will result from various fixed administrative cost components (that will be spread over a larger sales base). It is worth noting that power supply costs may change over time, and to the extent such changes occur, actual net revenues could materially differ from the net revenue projections reflected in Table 4 (above).

WHOLESALE POWER PRICE SENSITIVITY

Changes in market prices for electricity represent the single greatest uncertainty that could impact the projected benefits related to expansion. Electricity is a commodity, traded in a highly volatile market, and prices could materially change before CEA is ready to contract for the power supply needed to serve anticipated City electric loads. Commodity price risk is inherent in the electric utility industry and is not unique to expansion, but expansion imposes challenges with respect to the timing of electricity purchases as well as the timing associated with a final/definitive determination regarding the expansion itself. This is not unlike the challenges CEA (or any Community Choice Aggregator) faced during its initial startup period. CEA utilizes professional risk management approaches and forward hedging contracts to mitigate commodity price risk for its existing customers; however, adverse price movements that may occur before CEA initiates power purchases for the City load could drive up costs and result in negative margins.

Utilizing historical volatility in wholesale power market prices, a likely range of potential power supply costs and resulting net margins can be calculated. Figure 3 shows the base case operating margins and error bars representing one standard deviation in power supply costs, assuming CEA does not initiate procurement until March 2022, the month during which the CPUC would be expected to certify CEA's Implementation Plan amendment addressing expansion to the City. Over this four-month period

⁴ Reflects partial year of service for fiscal year ending June 20, 2023, with enrollments assumed to commence on April 1, 2023.

(between the date of this Expansion Assessment and March 2022), the estimated change in market prices at one standard deviation of variation is approximately 10% relative to base case assumptions. As reflected in Figure 3 (below), the likely range of net margin outcomes is wide, but consistently positive under this range of power price variability.

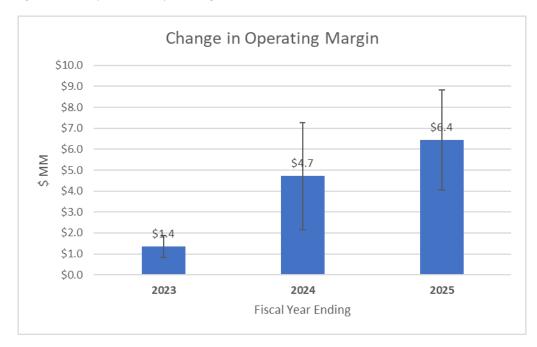


Figure 3: Net Surplus Sensitivity to Changes is Power Prices

RESOURCE IMPACTS

Similar to the procurement approach used to support CEA's current customers, CEA would need to acquire various energy products to serve the City – it is assumed that the proportionate acquisition of such resources would occur over time through the application of a laddered hedging strategy, as followed under CEA's risk management program. These energy products include Renewable Energy, Other Carbon Free Energy (e.g., large hydro-electric), System Energy, and Resource Adequacy capacity. The quantities will vary over time and are summarized in Table 5 below for a representative year.

| Product | Quantity | Units | Notes |
|-----------|----------|-----------|---|
| Renewable | 200 | GWh Per | Approx. half must be from long-term commitments (>= 10 |
| Energy | GWh | Year | years) per RPS rules |
| Other | 45 to 85 | GWh Per | Higher end of range would be needed to offset emissions |
| Carbon | GWh | Year | attributed to PCC2 renewable energy products; lower use |
| Free | | | of PCC2 products will reduce need for Other Carbon Free |
| | | | volumes |
| Resource | 70 MW | MW per | |
| Adequacy, | | Month, | |
| System | | September | |
| | | Peak | |

| Product | Quantity | Units | Notes |
|--------------------|----------|--------|-------|
| Resource | 65 MW | MW Per | |
| Adequacy, Local | | Month | |

Put into more concrete terms, the 200 GWh of annual renewable energy shown above is generally equivalent to the energy produced by a 75 MW solar or wind generation facility or a 25 MW Geothermal facility.

Under California's RPS rules, a significant portion of renewable energy purchases must be secured through contractual commitments of at least ten years in duration. Compliance with the RPS program is measured over multi-year compliance periods, and the expansion would occur during Compliance Period 4 (2021-2024). As shown below, RPS compliance would require an increase in renewable energy purchases during Compliance Period 4 of 246 GWh, of which 161 GWh would have to be associated with long-term commitments. Note that CEA has voluntarily adopted higher renewable energy targets than required by the RPS program, so the total renewable energy needed to meet CEA policy is greater than the figures shown below.

| Current CEA Membership | | | | | | |
|------------------------|-------|-------|-------|-------|-------|--|
| Compliance Period 4 | 2021 | 2022 | 2023 | 2024 | Total | |
| Retail Sales (GWh) | 394 | 624 | 624 | 627 | 2,268 | |
| Gross RPS % | 35.8% | 38.5% | 41.3% | 44.0% | 40.8% | |
| Required RPS (GWh) | 141 | 240 | 258 | 276 | 915 | |
| Gross RPS LT % | 65.0% | 65.0% | 65.0% | 65.0% | 65.0% | |
| Gross LT RPS | 92 | 156 | 167 | 179 | 594 | |

| Compliance Period 4 | 2021 | 2022 | 2023 | 2024 | Total |
|------------------------|-------|-------|-------|-------|-------|
| Retail Sales (GWh) | 394 | 624 | 873 | 954 | 2,844 |
| Gross RPS % | 35.8% | 38.5% | 41.3% | 44.0% | 40.8% |
| Required RPS (GWh) | 141 | 240 | 360 | 420 | 1,161 |
| Gross RPS LT % | 65.0% | 65.0% | 65.0% | 65.0% | 65.0% |
| Gross LT RPS | 92 | 156 | 234 | 273 | 755 |

RESOURCE AVAILABILITY

Accommodating City expansion will require careful consideration of resource availability, particularly for resource adequacy and long-term renewable energy products. An important element of resource procurement will be the ability to access resources currently held by SDG&E for the benefit of City customers. When City customers transition to CEA service, SDG&E should have surplus resource adequacy and long-term renewable energy supply, so CEA will need to arrange for the acquisition of such supply to facilitate applicable compliance mandates. If no transfer of resources occurs, either by sale or some form of allocation, CEA would risk being unable to meet its regulatory obligations associated with the increased load associated with City expansion.

Under existing regulation, SDG&E is required to have 100% of the local resource adequacy capacity associated with its current customer base two years forward and 50% in the third year. With the well-known shortages of local resource adequacy capacity in the San Diego/Imperial Valley area, this virtually assures that accessing local RA resources held by SDG&E will be required if CEA is to meet its increased local RA obligations associated with the City load.

With respect to renewable energy availability, the resource constraint would primarily relate to the longterm renewable energy requirement for Compliance Period 4. PEA understands that CEA will soon have an opportunity to pursue an allocation of SDG&E's existing RPS portfolio, as described in Commission Decision 21-05-030, which was adopted on May 20, 2021. Participation in this allocation process is voluntary and certain volumes would be eligible to satisfy long-term renewable energy procurement mandates pertaining to CEA. Additional details related to this process are forthcoming with initial allocations expected to occur during the 2023 calendar year. To the extent that CEA can arrange such an allocation to address the increased renewable energy requirements relating to City expansion, incremental procurement obligations would be somewhat diminished. If CEA chooses to forgo the aforementioned allocation opportunity, CEA would need to enter into long-term contracts for renewable energy starting in 2023, coincident with (or shortly after) the enrollment of City customers. Development timelines for new renewable generating projects, however, would likely extend a minimum of 24 to 36 months following the administration of a related solicitation for such supply. Depending on how early CEA begins its procurement efforts, this could mean that new-build renewable projects may not commence operation until the 2024 or 2025 calendar years (if CEA waited until it received the CPUC's implementation plan certification before pursuing long-term renewable energy solicitation efforts related to City expansion). If long-term renewable deliveries were to commence in 2024, CEA would require the full 161 GWh incremental Compliance Period 4 long-term renewable energy obligation to be delivered in that year, and that commitment would extend for the next nine (or more) years. This may result in a higher proportion of renewable energy under long-term contracts than CEA would normally desire; it is generally beneficial to have a mix of short-, medium-, and long-term contract commitments to diversify risk. Of course, if the earliest delivery for new long-term contracts occurs after 2024, associated renewable energy deliveries could not be used in Compliance Period 4. The RPS program makes no accommodations for significant load increases, and there are severe penalties for not meeting the long-term contracting obligation.

In light of the resource availability issues described above, it would be advisable to engage with SDG&E early in the process to ensure that appropriate resource transfers and/or the previously described renewable energy allocation process can be timely accommodated.

CAPITAL AND LIQUIDITY IMPACTS

Although relatively minimal, additional costs related to the prospective expansion would be incurred during the fiscal year preceding enrollment of City accounts. These costs would relate to marketing and outreach activities, customer noticing, regulatory and legal representation, internal operations, resource planning and electric procurement activities that would be necessary to successfully integrate the City and its customers in CEA's organization. There would also be increased working capital requirements to address changes in cash flow. CEA is projected to have sufficient cash liquidity to internally fund pertinent activities related to the prospective expansion.

CONCLUSIONS

This assessment concludes that under base case assumptions extending service to the City would have an overall positive financial benefit to CEA in the form of additional net surpluses that could be used to augment reserves or applied to other purposes. Due to wholesale market volatility, the likely range of outcomes is wide, but margins are expected to be positive for scenarios reflecting typical power price variability. Extending service to the City would increase CEA's sales volume by approximately 52% and would require a meaningful increase in CEA resource acquisition. Advance coordination with SDG&E for resource adequacy and long-term renewable energy resource transfers would be strongly advised to ensure CEA has the resources necessary to meet its regulatory obligations associated with an increase in load. Among other resource implications, the expansion would increase CEA's long-term RPS compliance obligations, and meeting these heightened obligations during Compliance Period 4, which spans 2021-2024, would be of immediate importance. It is highly likely that local resource adequacy and long-term renewable energy to form the spanse of the