T&E AGENDA: 12/6/21 ITEM: (d) 4



Memorandum

TO: TRANSPORTATION AND

ENVIRONMENT COMMITTEE

FROM: Lori Mitchell

SUBJECT: SJCE OPERATIONAL UPDATE AND

STRATEGIC FRAMEWORK PLAN

November 17, 2021

Approved

Date

DATE:

11/24/21

RECOMMENDATION

Accept this summary report of (1) San José Clean Energy's performance in 2019 and 2020 as compared to the February 2017 Business Plan, (2) San José Clean Energy's updated financial outlook for the next 18 months, (3) energy industry trends for the next several years, and (4) strategic framework plan for 2023 to 2025.

OUTCOME

The summary report will be accepted at the December 6, 2021, Transportation and Environment Committee meeting.

BACKGROUND

In February 2017, the City commissioned EES Consulting, Inc. to develop a Community Choice Aggregation ("CCA") Business Plan (the "Plan") for SJCE.

On May 16, 2017, the City Council voted unanimously to establish a CCA.

On August 8, 2017, City Council approved an ordinance establishing a CCA program to be named San José Clean Energy ("SJCE") and amending Title 26 of the San José Municipal Code to create the Community Energy Department ("Department") of the City of San José to manage the CCA.

On November 7, 2017, City Council approved an ordinance to add Title 26 to the San José Municipal Code that provides procedures for the operation and management of SJCE. Under Title 26, SJCE may provide any rate designs or programs as approved by the City Council.

On January 30, 2018, the City Council approved revisions to the launch schedules, reducing the number of launches from three to two. Phase I launch (City accounts) began on September 1,

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2018 and Phase II (residential and large and medium commercial accounts) began on February 1, 2019. On November 6, 2018, the City Council approved delaying the enrollment of Phase II small commercial and residential net energy metered customers until SJCE could cost-effectively serve these customers through rates that are lower than PG&E's rates.

On April 16, 2019, the City Council approved enrolling small commercial customers in June 2019.

On December 11, 2019, the City Council approved enrolling residential and small commercial Net Energy Metering customers in four quarterly batches beginning in April 2020 and finishing in January 2021.

On May 11, 2021, the City Council approved SJCE to establish a new low-cost service called GreenValue with rates set at parity with PG&E and a power mix of at least 36% renewable energy and 80% carbon-free energy. Council also approved SJCE to establish the SJ Cares program, which allows customers enrolled in California Alternate Rates for Electricity ("CARE") and Family Electric Rate Assistance ("FERA") state programs to receive GreenSource service but pay GreenValue rates. Finally, Council approved adjusting rates for SJCE's standard service GreenSource to 8% above PG&E standard rates, after accounting for the Power Charge Indifference Adjustment and Franchise Fee Surcharge across all rate classes and setting its renewable energy content to at least 55% and carbon-free content to at least 80%.

On June 22, 2021, the City Council authorized the City of San José Financing Authority to issue no more than \$95 million in Commercial Paper Notes ("CP Notes") to SJCE to finance power purchases and other operating costs. During that meeting, Councilmember Dev Davis directed the Department to provide a status report to the Transportation and Environment Committee on SJCE's business operations, including updated forecasts for program and power costs, the Power Charge Indifference Adjustment ("PCIA"), borrowing, and loan repayments.

ANALYSIS

Examination of 2017 Plan and Comparison to 2019-2020 Conditions and Performance

In fall 2021, SJCE commissioned Deloitte & Touche, LLP ("Deloitte") to examine SJCE's 2017 Plan and compare its assumptions, market conditions, projections, and risks to actual results and performance in 2019 and 2020. The Plan made projections about various aspects of the CCA's business, including revenues, power supply costs, administrative costs, electric loads, future rates, greenhouse gas ("GHG") reductions, and customer participation.

Key Takeaways

Overall, Deloitte concluded that the analysis and recommendations in the Plan were reasonable given the regulatory requirements and market information that was readily available at the time. However, in some cases the Plan underestimated the worst possible outcome. Even in the Plan's

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worst-case scenario, the projected impact was less than what was realized. Despite higher-than-expected customer participation and revenues in 2019 and 2020, SJCE's financial position suffered from high power supply costs and unprecedented increases in the PCIA as SJCE strove to maintain a discount or parity with PG&E. Deloitte recommends that as the City evaluates future business opportunities, it should consider performing rigorous stress testing of all possible risks.

Governance and Operational Structure

The Plan detailed two governance options: single-jurisdiction and joint powers authority. The City opted for the single-jurisdiction model to ensure full control over decision-making. The plan assumed 19 employees would be needed to run SJCE. SJCE currently has 37 positions budgeted, nine of which are vacant. While the overall level of staff was underestimated in the Plan, Deloitte found that SJCE is still not sufficiently staffed to effectively run its operations. Although staffing levels were underestimated the total non-power supply costs are close to what was projected in the Plan.

Electric Load and Customer Participation

The Plan assumed full load starting January 2018, but most customer enrollment did not occur until February 2019 and was not fully complete until January 2021. Once all customers were enrolled, SJCE's annual load has been in line with the Plan's expectations at 4 GWh. SJCE's participation rates far exceeded the Plan's expectations. The Plan assumed 85% and 75% participation for residential and commercial customers, respectively. SJCE currently has a 97% participation rate overall.

Power Supply Costs

The 2017 Plan projected total power supply costs, which included costs for renewable power, GHG-free power, non-renewable (brown) power, and resource adequacy ("RA") as well as other costs related to power supply (ancillary services, congestion, scheduling, staffing, administration, and PG&E billing and metering). The Plan considered four power mix scenarios, two of which were used by Deloitte in their analysis:

- Match PG&E: SJCE will match PG&E on both renewable and GHG-free energy sources
- Exceed PG&E: SJCE will exceed PG&E's renewable and GHG-free generation by 10%

Brown power ("BP"), renewable power (through Renewable Energy Certificates, or RECs), and RA costs per unit have been higher than planned, leading to higher overall power supply costs as depicted in Table 1. BP costs in 2019 and 2020 were moderately higher than projections due to external factors that included a pipeline explosion, increased incidence of and impacts from wildfires, 2020 rolling blackouts, and load shifts caused by the COVID-19 pandemic. RA costs were significantly higher than projected due to the timing of RA purchases in SJCE's first year, implementation of new regulations, and lack of availability of local RA. Renewable energy costs

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grew as SJCE purchased more higher "quality" RECs¹ than contemplated in the 2017 plan to reduce the GHG emissions associated with SJCE service. GHG emissions for lower "quality" RECs (PCC-2 and PCC-3) are higher than that of PCC-1. SJCE's renewable energy costs are expected to decrease per unit and overall beginning in 2022 as two of its long-term power purchase agreements start delivering energy. Market costs for renewable energy are also trending downwards.

Table 1. SJCE's Actual unit power supply costs (vs) Projected unit power supply costs

	Actual costs above projected costs in %		
	Match PG&E	Exceed PG&E	
2018	7	4	
2019	26	23	
2020	23	21	

Power Mix and Greenhouse Gas Reductions

SJCE has delivered significantly more renewable power compared to PG&E, which is the base scenario that the Plan considered for SJCE's power mix. SJCE has reduced more greenhouse gas emissions than projected in the Match PG&E scenario.

Table 2. SJCE's actual power mix compared with PG&E power mix²

PG&E			SJCE	
Calendar Year ("CY")	%RPS	%Carbon-free	%RPS	%Carbon-free
2018	39	85	48	100
2019	29	100	35	64 ³
2020	31	84	45	89

Table 3. Actual Emission factors and Emission reductions

CY	Emission Factor	Total Emissions (MT Co2e)	YOY Emission reduction (MT Co2e)
2019	0.153	529,074	
2020	0.086	345,114	183,960

¹ RECs are categorized into Product Content Categories (PCC) based on the bundling of renewable attributes with power deliveries. The highest quality RECs (PCC-1) come from a renewable resource located within the state of California or, a renewable resource that is directly delivered to California without energy substitution from another resource. PCC-2 RECs come from a renewable resource that is out-of-state and delivered to California, where the RECs are paired with a substitute energy resource imported into the state. For lowest quality RECs (PCC-3), the renewable attribute is delivered without the energy component.

² All data except for PG&E's 2020 power mix comes from <u>Power Content Labels</u> each utility submits annually to the California Energy Commission. PG&E's 2020 power mix is from the <u>PG&E-SJCE Joint Rate Mailer</u>.

³ The amount of carbon-free power in SJCE's 2019 power mix was lower than advertised because SJCE bought lower quality RECs that the California Energy Commission had recently decided not to count as carbon-free power.

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Rates and Customer Savings

SJCE pegs its rates, inclusive of PG&E added fees (the PCIA and Franchise Fee Surcharge), to PG&E standard rates. When the generation portion of PG&E's rates rises or falls, SJCE's rates change accordingly. SJCE launched service by pegging its rates with a built-in discount to PG&E to make it easier for customers to understand their rates and bill impacts under their new provider, SJCE.

The Plan projected lower rates and higher customer savings than what SJCE offered in 2019 and 2020. The Plan estimated that SJCE could give customers 8.25% and 7.45% savings relative to PG&E standard rates under the Match PG&E and Exceed PG&E scenarios, respectively. In reality, SJCE offered customers 1% savings in 2019 and 2020.

The Plan projected PG&E generation rates to increase 2.8% each year for 10 years. Over the last three years, PG&E generation rates have fluctuated but remained relatively stable. Non-SJCE customer bill increases have been primarily due to PG&E delivery rates, which have increased about 15% each year from 2019 to 2021 due to wildfire cost recovery.

Financial Position

The Plan evaluated SJCE's financial position in terms of revenues, power supply costs and other expenses, and financing used. SJCE's revenues were higher than projections by around 11-12% in 2019 and 19-20% for 2020 for both scenarios. The operating margin (Revenues minus Operating Expenses) was projected to be \$15M for 2018 and around \$31M for 2019 and 2020. SJCE underperformed the projections for operating margin by 5% in 2019 and 22% in 2020.

Table 4. SJCE's projected financial position in millions of dollars (Scenario: Match PG&E)

CY	Revenues	Power Supply Costs	Other Expenses	Total Operating Expenses	Reserves
2018	97.9	75.0	7.9	83.0	13.7
2019	259.7	214.2	13.7	227.9	40.2
2020	270.4	225.8	13.9	239.7	65.5

Table 5. SJCE's projected financial position in millions of dollars (Scenario: Exceed PG&E)

CY	Revenues	Power Supply Costs	Other Expenses	Total Operating Expenses	Reserves
2018	99.1	78.5	7.9	86.5	11.5
2019	262.8	223.5	13.8	237.3	31.7
2020	273.7	234.7	14.0	248.6	51.4

Table 6. SJCE's actual financial position in millions of dollars

CY	Revenues	Power Supply	Other Expenses	Total Operating	Reserves
CI	Revenues	Costs	Other Expenses	Expenses	IXESCI VES

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2018	1.8	3.8	2.3	6.0	4.44
2019	290.9	248.5	12.2	260.7	39.0
2020	325.1	283.6	17.6	301.2	31.1

Higher power costs detailed above and large increases in the PCIA⁵ put pressure on SJCE's financial position. In late 2018 (Decision 18-10-019), the California Public Utilities Commission ("CPUC") adopted changes to PCIA calculation methodology that resulted in an unprecedented and unexpected increase in the PCIA (Table 7). Even in the 'high case' sensitivity analysis within the Plan, the PCIA was forecasted to increase by 25% and then decrease by 2% per year in subsequent years.

Table 7. Actual vs Projected and Year-on-Year increase in PCIA for Residential E1

Year	Average of PCIA for Residential E1 (\$/kWh) ⁶	Actual YOY Increase	YOY increase in plan
2018	0.02552		
2019	0.02759	8.1%	-1% to 2%
2020	0.03177	15.2%	-1% to 2%
2021	0.04696	47.8%	-1% to 2%

Actual financing expenses comprise of interest expense, letter of credit fee, and commercial paper fee for each year. Actual financing expenses turned out to be lower than projected debt service in the Plan by 84% in 2019 and 72% in 2020.

Reserves

For the 'Match PG&E' scenario, SJCE's actual reserves were 3% lower than projections in 2019 and 52% lower than projections in 2020. For the 'Exceed PG&E' scenario, SJCE's actual reserves were 23% greater than projections in 2019 and 40% lower than projections in 2020.

SJCE's Updated Financial Outlook for Next 18 Months

In May and June 2021, Council approved two SJCE actions to improve its financial position:

- (a) raising rates for its standard service GreenSource to 8% above PG&E rates and
- (b) borrowing through the City's Commercial Paper program.

⁴ In 2018 reserves were supplemented by a \$10M commercial paper loan to SJCE from the City General Fund.

⁵ California electricity consumers, whether they are served by investor-owned utilities ("IOUs") or CCAs, pay a PCIA fee. The PCIA reflects the difference between the IOU's above-market costs related to legacy power supply commitments, including third-party energy contracts and operating costs for power plants they own, and today's market value for those resources. The CPUC updates each utility's PCIA every year based on updated IOU projected costs and CPUC estimates of IOU portfolio values.

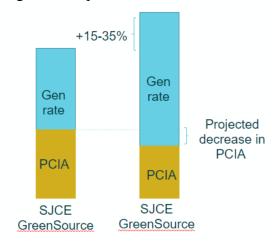
⁶ https://sanjosecleanenergy.org/resources/ (Rate Archive)

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SJCE's unit cost of power has been consistent with what was projected in June. Over the summer, SJCE adopted a prudent hedging strategy. This, along with relatively normal summer temperatures, minimized the frequency of costly price spikes. SJCE expected that it would need to draw \$60.0 M in CP Notes by December 2021 and is on track to draw \$60.2 M by that time.

SJCE's financial outlook for the next 18 months has improved significantly since June. The generation portion of PG&E's rates is expected to increase by 15 to 35% as of January 1, 2022. In addition, the PCIA is expected to decrease by \$0.034 per kWh, a 75% decrease.

Figure 1. Impact of PG&E rate increases and PCIA decreases on SJCE's rates



These two changes alone would increase SJCE's revenue by \$200-\$250 M in CY 2022 compared to CY 2021. Net income in CY 2022 would be \$130-\$215 M. SJCE could finish paying back CP Notes mid to late 2022. At the end of 2023, SJCE expects to have approximately 110-205 days of operating expenses in reserves. Deloitte recommends maintaining a reserve of 180 days of operating expenses given the uncertainty of the PCIA, power market conditions, and other regulatory changes that could negatively impact the CCA operation.

Table 8. Estimated Commercial Paper Payback and 2023 Financials Given Projected PG&E Generation Rate Increase for 2022

PG&E 2022 Generation Rate Increase	Commercial paper payback (start & end)	Date SJCE attains 90 days of Operating Expenses after Commercial Paper Repayment	Dec 2023 Ending Restricted & Unrestricted / Days of Operating Expenses
Low (15%)	August 2022 - October 2022	April 2023	\$135-\$155 M / 110-130 Days
High (35%)	July 2022 - August 2022	Oct 2022	\$220-\$240 M / 185-205 Days

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While forecasts for 2022 appear to be favorable for SJCE financially, forecasts for 2023 again indicate a difficult year (more details below). The year-to-year volatility demonstrates the need for SJCE to build reserves to help SJCE weather unanticipated market impacts and regulatory uncertainty.

Examination of Energy Industry Trends and SJCE's Energy Market Analysis

Deloitte worked with staff to review the Department's projections of and financial impacts from the PCIA and PG&E's generation rate for 2022- 2025 and expected COVID debt relief. Deloitte also assessed certain energy industry trends.

SJCE's Financial Projections Model

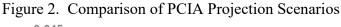
SJCE and consultants rely on market prices – in particular, forward curves ⁷ – to model future PCIA values and PG&E generation rates. Because forward price curves given as-of-date reflect the confluence of influences and inputs on that date, SJCE has adjusted its financial projections model to use a rolling average of a trailing period of trading days. SJCE also utilizes a PCIA model. To evaluate sensitivities to inputs that affect the PCIA, the model applies shifts in the forward curve of twenty percent and forty percent above and below the base assumption for the market price benchmarks ("MPB") for BP and RA. Deloitte recommends that SJCE conduct more comprehensive sensitivity analysis modeling changes in MBPs for BP and RA.

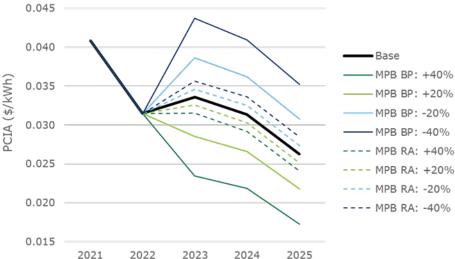
PCIA and Generation Rate Trends for 2022-2025

The PCIA is the highest when the MPB for brown power is at its lowest. The PCIA is expected to decline in the coming years, though it is expected to increase in 2023 compared to 2022 while remaining below 2021 (Figure 2).

⁷ A forward curve is a series of prices transactable on a given date (the as-of-date) for delivery of a commodity at a range of future delivery dates or periods.

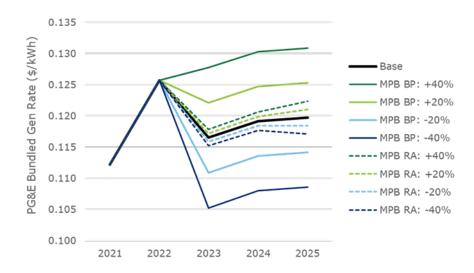
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While the PCIA and market prices move in opposite directions, estimates of PG&E bundled generation rates move in the same direction as shifts in the MPB for BP and for RA. PG&E's generation rate is expected to peak in 2022, decline in 2023, and then grow again in 2024-2025 (Figure 3).

Figure 3. Comparison of PG&E Bundled Generation Rate Projection Scenarios



COVID Debt Relief

SJCE's monthly uncollected accounts from April 2020 to May 2021 averaged approximately \$530,000, up from \$277,000/month before the pandemic. SJCE's uncollected accounts totaled \$9.8 M through June 2021. California Senate Bill 135 established the California Arrearage Payment Program ("CAPP") to allocate federal relief funds to utilities to apply as bill credits for

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customers with past due bills. Through CAPP, SJCE expects to receive approximately \$4.3 M to disperse to residential customers before the end of March 2022.

Power Market Trends

Power prices are expected to be high and volatile from 2022-2025 for several reasons:

- In 2023-2024, 4 gigawatts ("GW") of natural gas are expected to retire; natural gas typically helps meet the evening load peak. Although California will add significant amounts of solar, wind, and energy storage, that capacity may not provide enough power in the late afternoon and early evening.
- NERC and the California Energy Commission are forecasting lower peak demand in 2022 followed by increases in summer peak demand of 0.7-0.9% annually, or about 0.5 GW each year.
- PG&E's Diablo Canyon nuclear facility will shut down each of its reactors in 2024 and 2025.
- The widespread severe drought in the West has lowered hydropower generation, in turn decreasing California's overall generation capacity and flexibility, leading to more natural gas consumption in the summer, and raising natural gas prices.

CCAs' Rates and Products

Most CCAs continue to peg their rates to PG&E; however, two CCAs now set their rates according to their cost of service. Prior to 2021, many CCAs offered 1-4% savings relative to PG&E. MCE, the oldest California CCA, has been in operation since 2010. Over the past 11 years, MCE's rates have fluctuated below and above PG&E, yet in total, MCE delivered \$68 million in customer rate savings and \$81 million in local programs.⁸

New Renewable and Storage Technologies

Deloitte recommends that SJCE continue to actively participate in various stakeholder forums to continue to refine their investment strategies in new technologies:

- Energy storage: Short- and medium-duration lithium-ion storage prices are expected to fall over the next few years. Battery storage capacity is projected to increase to 13.7 GW by 2024 from 5.2 GW in 2021. Other storage technologies SJCE can explore are pumped storage hydropower and compressed-air energy storage. Pending federal legislation could provide tax incentives for renewable energy production and storage.
- **Green Hydrogen**: Green hydrogen can be stored and used on-demand to generate power for grid balancing. Several projects are underway in California, including one that will pilot its usage as long-duration energy storage.
- Offshore wind: Governor Newsom recently signed a law requiring a preliminary assessment of offshore wind by the end of 2022 and development in 2030 to 2045.

⁸ MCE Ten Year Impact Report, 2020

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Trends in Consumer Demand for Renewable Energy

• The Pew Research Center's June 2021 study on clean energy sentiment found that 84 and 77 percent of U.S. adults supported expanding utility-scale solar and wind, respectively.

- A 2020 national Deloitte study found that affordability has remained an impediment to Americans purchasing green energy, even as consumer desire to utilize clean energy sources has risen. Consumers also reported wanting their providers to offer solar systems, energy efficiency services, backup generators, and home energy management systems. However, 76 percent of respondents cited concerns about privacy and security as preventing them from purchasing smart home technologies in the next one to two years.
- In a Deloitte study, 60 percent of businesses reported having some level of onsite generation due to price certainty, cost savings, diversification of energy supply, and energy resiliency.

Additional Regulatory and Compliance Requirements that SJCE should Prepare for in 2022-2025

Deloitte recommends that SJCE continue to advocate its position in various CPUC proceedings related to PCIA, RA, and other rulemakings that impact CCAs, including:

- RA: CAISO is considering a proposal addressing shortcomings and possible improvements to RA with a focus on Maximum Import Capability calculation, allocation, and usage. The CPUC has scheduled workshops to develop an implementation plan for its July decision on RA; Deloitte recommends SJCE follow the 'Resource Counting' component and how renewable resources and storage are considered in the new framework.
- **Central procurement**: The central procurement framework adopted by the CPUC in 2020 has gone into effect this year, with the investor-owned utilities purchasing the entire amount of required local resource adequacy for 2023 on behalf of all LSEs. Continued erosion of procurement authority could significantly impact CCA's autonomy.
- **Direct access**: The CPUC has not recommended further opening up Direct Access at this time, but if it does happen it could represent a significant loss of load for SJCE.
- **Distributed energy resources (DER)**: With Regional Transmission Organizations and Independent System Operators requesting extensions for proposed market changes, it may take several years for SJCE to see full impact from DER integration into the CAISO market.
- **Ancillary Services**: CAISO recently noted that it is pursuing market changes to more efficiently address net load variability using an imbalance reserves product.

Proposed Strategic Framework Plan

Staff is working with Deloitte to develop a Strategic Framework Plan for 2023 to 2025 that will identify actions to ensure SJCE's financial stability, accelerate clean energy goals, and improve organizational effectiveness.

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Ensuring SJCE's Financial Stability

SJCE's goal is to build reserves equal to 180 days of operating expenses, obtain a credit rating, provide competitive stable rates, and deliver customer savings over the long term. Deloitte recommended that SJCE consider prioritizing several actions to enhance financial stability by increasing reserves and adding capabilities in specific areas.

- Cost of service (COS) rates: Deloitte recommends SJCE rates move to COS instead of being pegged to PG&E rates. COS rates would allow SJCE to keep rates aligned to underlying costs, simplify rates (thereby reducing customer confusion), control the timing and magnitude of rate changes, and create custom rate structures to address local goals.
- Risk management related to demand peaks: Due to the local microclimate and customer base, SJCE's load can exhibit demand peaks in response to high temperatures, contributing to a higher RA requirement and exposure to higher short-term energy market prices. If SJCE were to procure more energy in expectation of high temperatures, there will likely be times when such temperatures are not realized, and SJCE must liquidate the excess energy, also often at unfavorable prices. Deloitte recommends SJCE pursue enhanced risk measurement and monitoring tools, including options and other power derivatives, derivatives for other energy types (e.g., natural gas), and weather derivatives. Load shaping through TOU, demand response, battery storage management strategies, and encouraging rooftop solar plus storage can help manage demand peaks.
- Contract pre-payment: SJCE and other CCAs have developed a bond conduit for pre-payment structures to potentially reduce procurement costs in contracting. As a municipal entity, tax-free/tax-advantaged bonds can be issued for commodity purchases such as electricity under the federal and state tax codes. This can lower the effective interest rate thereby reducing the funding costs.

Accelerating Clean Energy Goals

In the near term, SJCE should align with the City's goal of being carbon neutral by 2030⁹ as other potential strategies are evaluated. Through Climate Smart San José, SJCE has a goal of offering 100% renewable energy by 2045. SJCE's current trajectory of renewable energy purchases and investments puts it ahead of schedule on both goals. SJCE can consider other clean energy goals, including intermediate targets for renewable energy on an annual basis or on a 24/7 basis. The latter would mean measuring the amount of clean energy delivered for every hour of operation, with the eventual goal of eliminating all GHG emissions associated with electricity use. SJCE can also adopt a science-based target in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement.

Most IOUs and municipal utilities in California, including PG&E, have pledged to offer 100% carbon-neutral energy by 2045 in compliance with state law. CCAs generally have much more aggressive goals, with two CCAs pledging to offer 100% renewable energy by 2025 and two others by 2030. Some SJCE commercial customers have committed to ambitious emissions reductions and renewable energy goals. eBay and Sprint aim to achieve 100% renewable energy

⁹ Matches annual electricity consumption with renewable or carbon-free energy sources.

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by 2025, while Equinix aims to achieve this by 2030. Federal Realty has Electric Vehicle ("EV") charging stations installed in 12% of their properties and has plans to expand it. Deloitte recommends that SJCE perform further analysis on their commercial customers and their load profiles and work with these customers on achieving their sustainability targets to help SJCE smooth its evening peak and reduce its associated RA costs.

SJCE can also reinvest operational surpluses into community programs that electrify transportation and buildings, further reducing carbon emissions as SJCE's power supply becomes carbon neutral.

Improving Organizational Effectiveness

To improve financial monitoring and reporting, Deloitte recommends that SJCE:

- Document existing financial monitoring mechanisms and reporting as well as City reporting needs, then develop a hierarchy of reporting cadence from the Risk Oversight Committee ("ROC") down through management and staff.
- Add a discussion of commodity market and credit risk topics and a brief overview of power procurement activities, credit risk management activities, and key financial metrics on a regular basis at ROC meetings.

To improve financial modeling, Deloitte recommends that SJCE:

- Consider enhancing its stress testing and scenario modeling capabilities by applying stochastic analysis.
- Continue to develop power procurement scenario analysis using Cquant.
- Get direction from the ROC in terms of risk appetite and coverage ratio objectives and then execute with a clear risk policy.
- Increase staffing and infrastructure in the market risk area to be able to support the evaluation and possible execution of additional risk mitigation or procurement strategies.

In the short term, Deloitte recommends SJCE focus on continuing to build reserves, increase its line of credit to hedge power costs, and pursue its own stand-alone credit rating. SJCE should actively monitor its commercial customer base and explore additional ways to retain them as they may be more sensitive to rate changes than residential customers.

CONCLUSION

In comparison to the 2017 Business Plan, SJCE experienced higher than expected customer participation and revenues in 2019 and 2020. However, SJCE's financial position suffered from high power supply costs and unprecedented increases in the PCIA that caused deeper, negative financial impacts than the Plan's worst-case scenario. In response, SJCE raised rates above PG&E service and borrowed from the City's Commercial Paper program in May-June 2021. SJCE's financial outlook for the next 18 months has improved due to PG&E generation rate increases and PCIA decreases forecast for 2022. However, both are expected to increase in 2023, and power prices are expected to be higher and more volatile from 2022-2025. To

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strengthen financial resiliency, Deloitte recommends SJCE focus on continuing to build reserves, increase its line of credit to add more medium-term contracts, pursue its own stand-alone credit rating, adopt cost of service rates, pursue enhanced risk measurement and monitoring tools for demand peaks, and pursue contract pre-payment.

EVALUATION AND FOLLOW-UP

No additional follow-up is expected.

CLIMATE SMART SAN JOSÉ

The recommendation in this memo aligns with one or more Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the December 6, 2021 Transportation & Environment Committee agenda.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and Budget Office.

COMMISSION RECOMMENDATION/INPUT

The Clean Energy Community Advisory Commission (CECAC) provided the following comments at their November 18, 2021 meeting.

The CECAC appreciated the consultant's report and the staff update on recent business results and outlook. The CECAC commended staff for the emissions reductions achieved, and they also acknowledged the significant challenges and uncertainty that SJCE faces in the coming years. The CECAC would also like to see specific steps, timing, and plan for SJCE to deliver on the goal of being 100% carbon-neutral by 2030.

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CEQA

Not a project, File NO. PP17-009. Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action.

/s/ LORI MITCHELL Director, Community Energy

For questions, please contact Lori Mitchell, Director of Community Energy, at (408) 535-4880.

Attachment

Attachment A: San José Clean Energy Business Plan Assessment prepared by Deloitte