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CREDIT OPINION
28 July 2020

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Silicon Valley Clean Energy Authority

Credit update following Issuer Rating assignment

Summary

Silicon Valley Clean Energy's (CA) (SVCE: Baa2, stable) credit profile recognizes its economically robust service area territory and its status as a not-for-profit California Community Choice Aggregator (CCA) serving more than 271,000 customers throughout municipalities and communities in Santa Clara County. SVCE's 13 municipal participants located in the silicon valley region of CA have a Aa2 weighted average credit quality, encompassing a customer base with very strong socio-economic conditions. SVCE's credit quality also considers its established provisions for timely, full cost recovery through an independent rate setting authority, the inherent strengths of the CA CCA model which provide SVCE with a captive and arguably sticky customer base, and low annual average opt-out rates since launching service in 2017. Further, since launching operations, SVCE has been able to increase its liquidity position, while maintaining a discount to Pacific Gas & Electric Company (PG&E) (Ba2, stable) rates.

Despite the very strong socio-economic conditions within SVCE's service area, the service territory does include a large commercial and industrial customer base which are disproportionally being negatively impacted by the Shelter in Place (SIP) measures associated with COVID 19. Further, SVCE anticipates a slow recovery of electricity demand and a return to pre-COVID 19 levels only in 2024. We expect SVCE's current strong liquidity position and energy supply procurement flexibility to help it mitigate the impact felt by the load loss, while still enabling it to maintain competitive rates relative to PG&E, albeit at temporarily reduced discounts.

The credit quality also considers CA CCAs and SVCE's limited history of operations, and the lack of tested regulations and provisions regarding municipalities' obligations towards CCAs should they choose to depart. Further, notwithstanding the current economic challenges arising from the coronavirus, the CA CCA model has not gone through different economic cycles, and is still susceptible to changes in the CA energy market with respect to resource adequacy requirements, Power Charge Indifference Adjustment (PCIA) and Direct Access (DA).

Key Indicators

Exhibit 1

SVCE's actual and forecasted financial performance from FY 2018 - FY 2024

SVCE has benefitted from liquidity growth over the past three years which should mitigate financial impact from coronavirus related load loss and slow economic recovery

	FY2018	FY2019	FY2020E	FY2021E	FY2022E	FY2023E	FY2024E
Unrestricted Cash ('000)	58,963	124,048	139,168	144,431	151,783	167,756	220,085
Total Operating Expenses (excl.Depreciation and Interest) ('000)	199,927	228,949	254,390	256,283	261,954	260,914	256,068
Adjusted Days Liquidity on Hand (incl. Bank Lines) (days)	108	198	191	202	208	231	308

FY2020E- FY2024E represent estimates as per management's budget
Source: Moody's Investors Service, Silicon Valley Clean Energy Forecast

Credit strengths

» Statutory business model; sound operational and financial performance statewide for CCAs indicating the business model is working as intended

» Statutory provision requiring a departing member to funds its obligations, although untested.

» Low opt-out rates indicating customer acceptance of the business model

» Participant's credit quality is Aa2

» Full cost recovery of costs through independent rate-setting billed to customers

Credit challenges

» Sizable energy purchase commitments with surplus energy remarketing risk should customers depart and should surplus energy be at a higher cost than Cal ISO energy market

» PCIA implementation risk

» Only 3 full years of operations

» Large commercial and industrial customer base, susceptible to DA competition and ongoing SIP impositions associated with COVID-19

» Potential for regulatory changes and legislative actions that might impact future SVCE business model and operations

Rating outlook

The stable outlook reflects expectations that SVCE will maintain an adequate liquidity profile through FY 2021 despite load demand decline given some flexibility built-into its supply contract positions, while temporarily compressing its discount to PG&E rates. Further, the stable outlook incorporates our expectation the SVCE's economic service territory will remain strong and supportive of a clean energy value proposition offered by SVCE through the CCA model for customers in Santa Clara County.

Factors that could lead to an upgrade

» Significant strengthening of liquidity position, through continued trend of sound financial operations

» Demonstrated resiliency and flexibility in response to market changes or economic weakness

» Narrowing or de-risking of power related remarketing risk

- Broader statutory acceptance of the CCA business model
- Successful in establishing longer term commercial contracts under developing customer retention program
- More favorable future treatment concerning the PCIA allocation that results in less pricing volatility or adequate cost allocation

Factors that could lead to a downgrade

- Significant and permanent load loss, impacting SVCE's ability to remain competitive and negatively impacting ability to maintain or increase current liquidity level going forward
- Reluctance or lack of willingness to raise rates such that liquidity profile weakens below 180 DCOH
- Erosion of cost competitiveness relative to PG&E's generation rates
- Changes to state policies that weaken CCA's competitive position
- Inability to manage power procurement market risk such that cost volatility, financial losses or customer under-collections and an increase in opt-out rates occur

Profile

Headquartered in Sunnyvale, CA, Silicon Valley Clean Energy Authority (SVCE) is a California Joint Powers Authority (JPA) formed in March 2016 and created to provide all customers with carbon-free electricity within Santa Clara County. 12 cities and unincorporated Santa Clara County unanimously executed the joint powers agreement to participate in clean energy aggregation. SVCE provides electric service to more than 271,000 retail customers as a CCA under the CPUC Code Section 366.2. SVCE has the rights and powers to set rates for the electricity it furnishes, incur indebtedness, and issue bonds or other obligations.

SVCE is governed by a board of directors consisting of elected representatives from each jurisdiction. SVCE has a local rate-setting process in which its board has authority to raise rates to grow annual revenues and reserves, if needed.

Detailed credit considerations

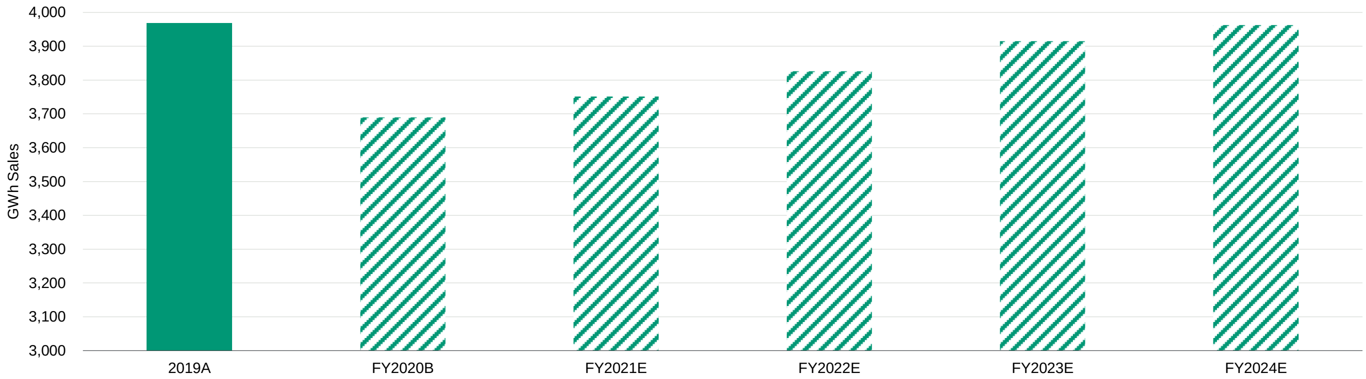
Forecast reflects some resiliency to impacts from COVID-19, but excess cash flow generation will be limited

The biggest impact to SVCE's load demand has come from commercial load decline, while residential load has increased slightly. Residential load has increased on average ~ 9% from March-June 15th, while small and medium commercial load declined by 25% in April, but has improved since to ~ 18% by June 15th. Large load has been impacted but not as much as small and commercial load, where large commercial is about 12-15% below what would be expected in a pre-covid environment. Large commercial load in SVCE's territory consists of high tech company headquarters and tech manufacturers which have been less impacted during the crisis.

SVCE does not anticipate load returning to FY 2019 levels until FY 2024, assuming a conservative slower recovery and possible second wave of cases. At FY 2019 (ended September 30), energy sales were about 3,969 GWh. For FY 2020, SVCE expects energy sales to decrease slightly to about 3,690 GWh, or around 7% for the year. In FY 2021, the load is expected to increase slightly to 3,751 GWh. These load forecasts reflect a sharp decrease in GDP, followed by improvements due to re-openings, and then further declines by a second surge of COVID-19.

Exhibit 2

SVCE load demand not expected to return to FY 2019 levels until FY 2024



Source: Moody;s Investors Service, SVCE Forecast

Though the load losses over the next five fiscal years translate to an average loss of about 2% less GWh energy sales compared to pre-covid expectations, SVCE expects to grow its liquidity over the FY 2020-2022 period, and surpass internal targets of 50% prior years' operating expenses. SVCE expects to achieve these liquidity targets by temporarily diminishing the discount to PG&E rates during 2021 from 4% to 1%. Our view of SVCE's credit profile incorporates an expectation that this strategy is implemented. We note that in the event SVCE did not compress the discount, liquidity would be negatively impacted, in particular for years 2021 and 2022, all of which would be a negative consideration for the credit profile.

Further, in 2022, SVCE anticipates higher energy supply costs, as higher cost PPAs are scheduled to start delivery, prior to declining in 2023 and 2024, as additional energy contracts are signed. Per SVCE's most recent forecast, it anticipates a cumulative addition to reserves over the 2020-2024 period of around $100 million, while maintaining DCOH of around 200 through FY 2023, growing to above 300 days in FY 2024. In a Moody's sensitized case, where operating revenues are slightly below management expectations in FY 2020- FY 2024, cumulative cash generated is $60 million over the same period, with DCOH around 180, and reserve levels are slightly below target reserves in FY 2021 and FY 2022, and beginning to exceed target reserves only in FY 2023 and FY 2024.

Balancing against the load losses and lower expected operating revenues, is the revised assumption for PCIA rate increases for under collection associated with FY 2019 revenues. Further, SVCE had previously assumed a 6% decline in PG&E rates this year which have not surfaced, and as such, SVCE instead of increasing its discount to PG&E, plans to maintain its rates unchanged, mitigating the revenue loss from coronavirus related shutdowns. The estimated revenue loss from load declines of around $18.7 million in 2021 are expected to be more than offset by PG&E's rates being higher in FY 2020, enabling SVCE to maintain steady rates, rather than having to reduce them while still maintaining a discount to PG&E' rates.SVCE assumes a 44% increase in PCIA rates from October-December 2020, associated with under collected charges from the prior year. In the event that the PCIA increase in October 2020 were to be higher than currently anticipated, this could diminish SVCE's flexibility with respect to maintaining a discount to PG&E without dipping into its liquidity, which could lead to negative pressure on the credit profile.

Revenue Generating Base - Underlying Service Territory in Santa Clara County

A core consideration in SVCE's credit profile is the economic strength of the underlying service territory and the size of its customer base encompassing 12 of 15 cities in Santa Clara County and unincorporated Santa Clara County. SVCE's 13 municipal participants located in the silicon valley region of CA include a customer base with very strong socio-economic conditions. Moody's estimates the weighted average credit quality for the participating cities is Aa2, including the unincorporated areas of Santa Clara County.

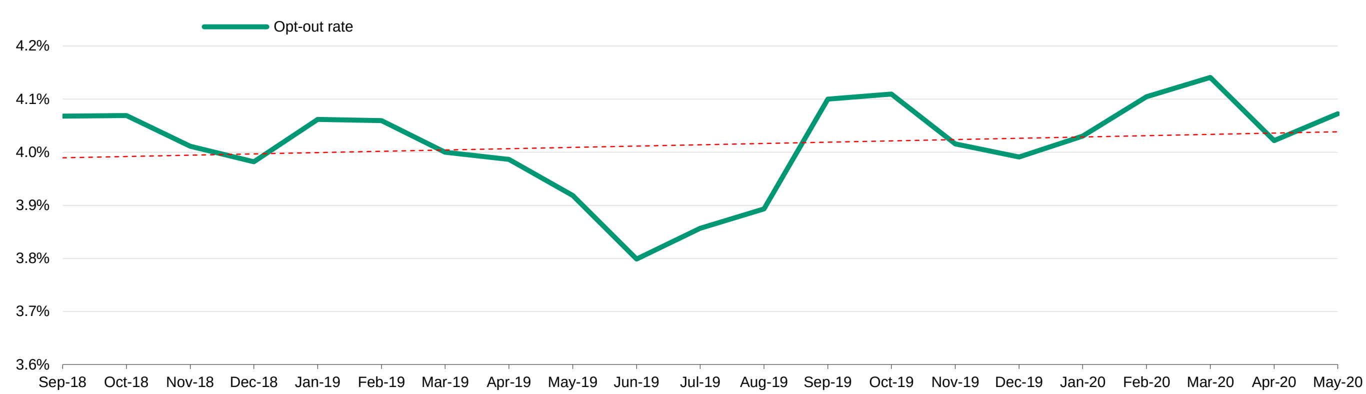
Exhibit 3
SVCE Service Area encompasses a customer base with strong socio-economic conditions

Source: Moody's Investors Service

Santa Clara County's economic strength is underpinned by consistent population and commercial growth, a low unemployment rate, and a high median household income. The county's median household income is about 162% higher than California and 178% higher than the nation. In 2018, the county's population of roughly 1.9 million citizens had a median family income of an estimated $131,554. A significant portion of commercial customers are concentrated in the technology industry, which has been the driving force behind Silicon Valley. SVCE's customer base includes a minimal number of public and agricultural customers.

SVCE's overall participation rate is very stable, with a slight upward trend upward from May 2018 at 95.7% to 95.9% in May 2020. Most of the load served by SVCE is from the commercial and industrial sector, who are the most price sensitive. Maintaining at least the same rate as PG&E combined the CCA commitment to supply carbon-free energy is key to maintaining low opt-out rates.

Exhibit 4
SVCE opt-out rates have stayed within a low, stable band of 3.5% on average since start launch of service in April 2017



Source: Moody's Investors Service; SVCE

CCA Statutory Framework is supportive of credit quality, but still untested

The legislation enabling CCAs in CA has an opt-out provision, meaning all customers automatically become customers of the CCA unless they choose to opt-out in order to remain with their current investor owned utility (IOU) provider. This model provides SVCE with a captive and arguably sticky customer base allowing for reliable revenues and cash flows on a consistent basis, which is helpful for energy procurement planning purposes.

Further, the Joint Power Agency (JPA) agreement between the municipal members and SVCE require that any departing member must pay any of its remaining cost obligations (i.e. energy procurement costs) prior to returning to the investor-owned utility. While this provision has not been tested in the courts, participating members have been apprised of the ultimate risk prior to each of them obtaining their respective approvals to enter into the SVCE participation agreement and join the CCA. Any municipal member of SVCE that chooses to depart would have to give 180 days notice and fund its remaining obligations. The 180 day notice may be waived by two-thirds of the board subject to the member funding its required obligations. Although the requirement to fund its obligations prior to departure is viewed positively, the municipal participant is not responsible for these obligations until it voluntarily chooses to terminate the JPA agreement, similar to other CCAs. An involuntary termination may occur, subject to two-thirds of board approval, in the event a member exhibits material non-compliance with the provisions under the JPA agreement. However, it is uncertain that a large number of non-paying or opting-out customers within a particular municipality, would constitute a member's material non-compliance under the JPA agreement.

Under the California CCA structure, electricity is procured by SVCE and delivered through PG&E's existing infrastructure with the utility continuing to provide transmission, distribution, billing and related collection services to SVCE customers. Once a city ordinance is adopted for a city to join a CCA such as SVCE, all customers in the city automatically become CCA customers unless the customer elects to "opt-out" and return to PG&E in this case. A customer can "opt-out" without penalty in the first 60 days but have to pay a cost recovery charge of $5 for residential and $25 for commercial customers if they opt-out after the 60 day period expires. While SVCE has not yet implemented a charge to departing customers, likely due to the low "opt-out" rates and its continued customer growth, CCAs are legally allowed to collect this fee. Despite having the opt-out provision, retention rates have remained high for rated California CCAs. SVCE has experienced low opt-out rates from its customer base since its September 2016 inception of around 3.5% average annual rates. These opt-out rates have been maintained so far into calendar year 2020.

PCIA rates for CCAs can limit financial flexibility, liquidity and ability to maintain rate competitiveness

SVCE's forecast for FY 2021 show weaker net revenues relative to FY 2019 and budget FY 2020, primarily due to previously discussed anticipated increases in the PCIA during 2020, carried over into 2021. In May 2020, the PCIA rate underwent a 20% increase relative to previous rates, and an additional 44% increase is expected by SVCE in October 2020.

Specifically, as background, in October 2018, the CPUC adopted a new methodology to calculate the PCIA, which included a year-over-year cap on the rate increase of 0.5 cent per kWh (~20% of current rate), as well as a true-up mechanism between forecasted and actual market prices, while also permitting the inclusion of legacy generation on the part of the investor owned utilities (IOUs), and also removing a 10-year limit on cost recovery for post-2002 generation contracts, which all together increased the PCIA. In addition, PG&E has under collected PCIA balances in 2019, mostly because the new methodology was implemented in July of 2019 rather than January 1, and also because actual market power prices during the year were lower than originally forecasted.

Since SVCE's fiscal year ends September 30, the additional increase forecasted would primarily affect FY 2021 results. As such, SVCE's forecast shows a decline in energy margin from $47.5 million in FY 2020 to $24.3 million in FY 2021, primarily impacted by the lower load, as well as some increase in energy supply costs.

While SVCE does not expect having to utilize liquidity reserves from FY 2020 - FY 2024 in their base case, we note that should operating revenues decrease even by 3%, SVCE's net operating margin would become negative and would likely need to dip into liquidity reserves, in order to maintain rate competitiveness for its customers and diminish the risk of opt-out due to a sudden, but temporary bump in PCIA rates. We view the future need to dip into existing internal liquidity as credit negative and reflective of the reliance on large commercial and industrial customers. We balance these factors against SVCE's current liquidity position as well as our view that the change in the PCIA rate is a short-to-medium term development that may reverse itself in subsequent hearings or may be addressed through legislative actions or through proceedings at the CPUC.

Large technology savvy commercial and industrial customer base increase direct access risk

A significant portion of SVCE's load comes from commercial and industrial (C&I) customers, at 48% and 17% respectively, comprising approximately 65% of the total load and revenue, increasing DA risk to SVCE. Moreover, SVCE's top 10 customers account for about 16% of total load, representing some concentration risk but no single customer has concentration of more than 3.5% of total load.

This C&I level of exposure is somewhat higher relative to other rated CCAs in CA and we note that a large portion of the commercial load is from technology savvy customers, some of which have their own energy procurement departments and already have a portion of their load procured under DA. That said, less than 1% of SVCE's commercial load is eligible for DA departure in 2021, and of that, around half of eligible customers have decided to remain with SVCE.

While the California Legislature suspended DA in September 2001 during the California Energy Crisis, DA was reopened in 2010. The re-opening included a phase-in schedule with caps defined by the CPUC.

A decision on re-opening DA which was expected by May 22, 2020 has been postponed indefinitely, and may increase, which could negatively impact SVCE's credit profile. However, our current view anticipates that any change would be gradual, allowing energy service providers to adequately plan for changes in load.

Further, SVCE is being proactive in evaluating several approaches to address the DA threat such as implementing products in order to retain commercial customers, with favorable rates, as well as maintaining a net short position over the long run which would allow for load loss without incurring material stranded power procurement costs. However, in the short-to-medium term, DA exposure remains a risk for all CCAs and particularly for SVCE, since the DA program may ultimately change with future legislative actions.

Power procurement risk management, load stability and rate competitiveness

Managing power procurement risks remain the primary challenge for CCAs, including SVCE, particular given the intermittent nature of their product offering. The ongoing coronavirus' related crisis and effect on energy demand illustrates well this risk, with CCAs and other energy providers having to adjust to load changing quickly and unexpectedly.

In April, SVCE received a $6 million termination payment associated with a wind PPA it had signed previously, due to the developer's inability to meet certain project development milestones. This PPA was expected to meet ~10% of SVCE retail load needs starting in June 2021. Although SVCE also signed onto new long-term PPAs during the past few months, in addition to short-term RPS (index plus REC) contracts, some of the long-term PPAs are at higher cost. As a result, SVCE expects its energy supply costs to increase in FY 2022 by ~ $5 million, prior to decreasing in 2023, as other PPAs start to deliver.

Further, SVCE is currently contracted at a surplus to its needs, by 5% through FY 2020 and a portion of 2021, but it is still within its maximum tolerance band per board approved risk management policy. As such, SVCE is not required to sell off supply ahead of the delivery month (i.e., liquidate positions). It is likely that SVCE will sell its excess supply at a loss given market prices have continued to decline since FY 2019. This position will end at year-end 2019, as SVCE is not fully contracted beyond calendar year 2020.

CCAs in general run the risk of procuring more energy under long term contracts than is needed to serve their customers' load, in the event of sudden load loss, or market changes which negatively impact customer retention. Although SVCE may be able to recuperate a portion of those costs by selling the energy into the wholesale power market, possibly at a loss, it would require some liquidity to potentially absorb those losses in the short term, or pass the costs on to customers which would impact its rate competitiveness. In an extreme worst-case scenario where there is a sudden decline in customer load, SVCE could find itself in an under collected position should contracted power prices paid by SVCE under these long-term arrangements exceed wholesale market prices for a sustained period. In addition to the current coronavirus' impact, this scenario, for example, could emerge should a substantially higher than normal number of customers "opt-out" and return to PG&E for their generation product or through sustained technological advances which permanently limit customer load growth.

SVCE is responsible for the full energy requirement to serve its customers with a major component required to be renewable energy. SVCE has a mix of short-term and long-term power procurement agreements, with a risk policy in place to prohibit locking in 100% of power past 1 year. SVCE has also met its RPS contracting requirements, while still maintaining flexibility with a net open position averaging 61% over the FY 2021-2024 period. As of September 2019, SVCE had $946 million in contractual obligations associated with its power purchase commitments through 2041.

PG&E in Post-Bankruptcy and CPE presents Uncertainty for CCAs

PG&E, who acts as the billing and collection agent for northern California CCA's including SVCE, recent exit from bankruptcy is a credit positive as it ensures that existing contractual and cash management arrangements between CCA's and PG&E are no longer in question.

However, the credit profile recognizes the potential long-term market uncertainty that still remains including the questions surrounding the implementation of PG&E as central procurement entity (CPE) and the overall role that CCAs play in the state. In June 2020, the CPUC adopted a framework designating PG&E as CPE, eliminating SVCE's local RA obligation and shifting all local RA procurement to the CPE starting in compliance year 2023. Resources procured by the CPE will be allocated to all load in the corresponding transmission access charge (TAC) area via a non-by-passable cost allocation mechanism (CAM). Local RA resources in the individual load serving entities portfolios may be offered into the CPE or used to meet its own System RA obligation. CAM costs remain an uncertainty and SVCE has adjusted its RA cost going forward to reflect a potential increase in cost.

The CCA model is a key element in the advancement of the state's objective to lower carbon emissions and transition to renewable energy sources. As a result, both state and local policymakers as well as the CPUC are generally on the same page as to their support of and ultimate success of this model, an important consideration in our view. That said, the steps that follow now that PG&E has emerged from bankruptcy may change the role that CCAs play in the state, which could affect the direction of their credit profile prospectively.

LIQUIDITY

As of its September 30, 2019 fiscal year end, SVCE had $124 million in unrestricted cash, an increase over $65 million from fiscal 2018 owing to steady monthly internal cash flow generation. SVCE expects to maintain over $140 million in unrestricted cash, or around 200 days, through 2021 prior to increasing reserve levels above $150 million in FY 2022 and thereafter. SVCE's forecast does not currently anticipate having to dip into reserves as a result of load declines from coronavirus' related shutdowns, or bad receivables. Its financial policy targets reserves in hand of 180 DCOH.

Having abundant levels of liquidity is a credit positive when procuring electric supply, particularly given the intermittent nature of the California CCA product offering. At year-end 2018 and 2019, SVCE had 108 and 198 DCOH, respectively. As per the latest forecast and factoring in the given load loss, management expects days cash to be maintained around 200 through FY 2023, and then growing to the 270 day maximum per SVCE's reserve policy in FY 2024, as load returns to FY 2019 levels, contracted energy supply costs are expected to decline, and the PCIA charge is expected to decline further as some nuclear generation comes offline, reducing PG&E's cost of generation relative to the market. Moody's case assumes that if operating revenues decline slightly from 2020-2024 days cash would remain at least 180 days, which is in line with SVCE's target reserves.

An additional source of liquidity for SVCE is its $35 million line of credit (LOC) with River City Bank (RCB). The $35 million bank LOC, which has yet to be drawn on, was renewed in October 2019, and expires in October 2021. Moody's does not include this in our liquidity metrics calculation given that RCB is an unrated bank.

DEBT STRUCTURE

SVCE does not have outstanding debt.

DEBT-RELATED DERIVATIVES

Not applicable.

PENSIONS AND OPEB

Not applicable.

Management and Governance

SVCE is governed by a board of directors consisting of 13 elected representatives from each jurisdiction. SVCE has a local rate-setting process in which its board has authority to raise rates to grow annual revenues and reserves, if needed.

Exhibit 5

SVCE's share allocation by voting share

Member Participants	Voting Share
Sunnyvale	29.1%
Milpitas (ICR)	15.0%
Mountain View (ICR)	13.6%
Santa Clara County (Unincorporated)	8.8%
Gilroy (ICR)	6.6%
Cupertino (ICR)	5.3%
Morgan Hill (ICR)	5.1%
Campbell	4.7%
Los Gatos	4.5%
Los Altos	3.1%
Saratoga	2.8%
Los Altos Hills	1.0%
Monte Sereno	0.4%

Source: Moody's Investors Service

Rating methodology and scorecard factors

The principal methodology used in this rating was US Municipal Joint Action Agencies published in August 2019. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

The scorecard used in this rating was the US Municipal Joint Action Agencies Scorecard for All-Requirements Agencies. A detailed scorecard for this rating is provided below.

Exhibit 6

Silicon Valley Clean Energy Indicative Rating Scorecard

Factor	Subfactor/Description	Score	Metric
1. Participant Credit Quality and Cost Recovery Framework	a) Weighted Average participant credit quality. Unregulated rate setting including participants. Cost recovery structure and governance.	Aa2	
2. Resource Risk Management	a) Resource Diversity. Asset quality and complexity. Resource supply contract terms and counterparty credit quality. Wholesale market purchase exposure	Baa	
3. Competitiveness	a) Cost competitiveness relative to regional peers	A	
4. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Aa	166 days
	b) Debt ratio (3-year avg) (%)	Baa	100%
	c) Fixed obligation charge coverage ratio (3-year avg) (x)	Ba	1.0x
5. Willingness to Recover Costs with Sound Financial Metrics	a) Rate Setting Record. Timeliness of rate recovery. Stability and strength of financial metrics	Baa	
Notching Conventions		**Notch**	
	1 - Contractual Structure and Legal Environment	-1	
	2- Participant Diversity and Concentration	0	
	3 - Construction Risk	0	
	4 - Debt Service Reserve, Debt Structure and Financial Engineering	0	
	5 - Unmitigated Exposure to Wholesale Power Markets	-1	
Scorecard Indicated Outcome:		**Baa2**	

Scorecard represents 3-year average including FY 2018, FY 2019 and estimated FY 2020.
Source: Moody's Investors Service

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