MOODY'S
INVESTORS SERVICE

CREDIT OPINION
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Peninsula Clean Energy Authority, CA

Update to key credit considerations

Summary

Peninsula Clean Energy Authority, CA's (PCE: Baa2 stable) credit profile recognizes the economic strength of the service territory as a not-for-profit California community choice aggregator (CCA) serving more than 285,000 customers throughout all communities in San Mateo County (Aaa stable). It considers the inherent strengths of the California CCA model which provides PCE with a captive and arguably sticky customer base capable of delivering reliable revenue and cash flow on a consistent basis. A key strength of the California CCA model is the statutory provisions which enabled PCE to immediately become the default provider of generation services for San Mateo County customers of Pacific Gas and Electric Company (PG&E, Ba2 stable) upon inception. In PCE's case, all twenty of the cities in San Mateo County and the County each voted affirmatively to join PCE, a credit positive.

Moody's view of PCE's credit profile also considers its established provisions for timely, full cost recovery through an independent rate setting authority; conservative management strategy centered exclusively around serving the electric needs of its San Mateo County customers; actively involved board with a broad business background; ability to secure cost competitive renewable resources; and demonstrated ability to generate internal free cash flow on a sustained basis, all credit positives.

PCE has seen roughly 10% load decline in 2020 as a result of COVID-19 shelter-in-place (SIP) orders, with the largest decline in commercial load. Compared to the weeks preceding SIP orders, total PCE load decreased about 10% on average from March - June. Further, unlike other CCAs that we rate, PCE's strategy of pegging its rates at a 5% margin below PG&E means its net revenues and margins are linearly impacted by changes in the Power Charge Indifference Adjustment (PCIA), over which PCE has limited control. Moreover, similar to any CCA, PCE faces the underlying business challenge of managing power procurement volume and price risk from intermittent resources.

The credit quality also considers CA CCAs 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 (RA) requirements, PCIA and Direct Access (DA).

Exhibit 1
PCE Service Area

Source: Moody's Investors Service

Credit strengths

» Statutory business model; sound operational and financial performance for CCAs statewide

» Focused strategy centered around serving the electric needs of San Mateo customers

» Low "opt-out" rate indicating strong customer support for PCE

» Strong and consistently growing liquidity profile composed primarily of cash

» Affluent customer base and low accounts receivable delinquency rates

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

» Continued diversification of energy procurement contracts

» PCE costs are competitive with electric rates below PG&E

» Statutory provision: should a municipality depart, it has to satisfy any power obligations taken out on its behalf

» Moody's estimates the underlying credit quality of the combined municipal participants in PCE is Aa3

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Credit challenges

- Financial forecast indicates downward financial trends for FY 2021-2025
- Sizable energy purchase commitments with surplus energy remarketing risk should customers depart and should surplus energy be at a higher cost than energy market
- PCIA is an ongoing concern for PCE's rate competitiveness
- Clean energy price at times has been higher than the PG&E rate for generation services
- PCE customers can opt out of program
- Notional size of power procurement contracts is material relative to liquidity profile
- Potential for regulatory changes and legislative changes that might impact future PCE business model and operations.

Rating outlook

The stable outlook incorporates the expectation that PCE will continue to maintain a strong liquidity profile with days cash on hand (DCOH) in excess of 250 days, while continuing to progress on its core objective to provide clean energy options for customers in San Mateo County, and maintaining independent board rate-setting as well as appropriately balancing energy purchase commitments relative to demand.

Factors that could lead to an upgrade

- Continued strengthening of liquidity position
- Demonstrated resiliency and flexibility in response to market changes or economic weakness
- Broader statutory acceptance of the CCA business model persists
- Narrowing or de-risking of power related remarketing risk
- 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 PCE's ability to remain competitive and negatively impacting ability to maintain or increase current liquidity level going forward
- Material decline in financial liquidity
- Power procurement market risk increases which results in sustained losses or customer under-collections
- An acceleration of customer opt-out rates
- State policy changes occur which weakens the CCA model from a credit perspective
- Failure to manage exposure to the loss of customer revenues due to “opt-outs” caused by competition from DA
- Technological advances which permanently lowers the load profile leading to a weakening in the current procurement strategy
- Deterioration or dilution of participant credit quality

Key indicators

Exhibit 2
Peninsula Clean Energy Key Financial Indicators

	FY2018	FY2019	FY2020	FY2021E	FY2022	FY2023E	FY2024E	FY2025E
Operating Revenue ($'000)	244,738	259,782	278,100	215,703	232,291	234,248	240,623	245,027
Total Operating Expenses (excluding Depreciation and Interest Expense) ('000)	180,915	206,838	231,400	225,509	235,098	239,009	235,815	247,881
Unrestricted Cash	66,689	127,235	222,446	186,646	184,698	181,379	187,715	186,471
Adjusted Days Liquidity on Hand (incd. Bank Lines) (days)	135	225	292	302	287	277	290	274

FY2021-FY2025 represent management expectations.
PCE's Fiscal year end is June 30.
Source: Moody's Investors Service, PCE Forecast

Profile

Headquartered in Redwood City, CA, Peninsula Clean Energy Authority, CA (PCE) is a California Joint Powers Authority (JPA) formed in 2016 created after 20 communities in San Mateo County and the county unanimously executed the joint powers agreement to participate in clean energy aggregation. PCE provides electric service to more than 285,000 retail customers as a CCA under the CPUC Code Section 366.2.

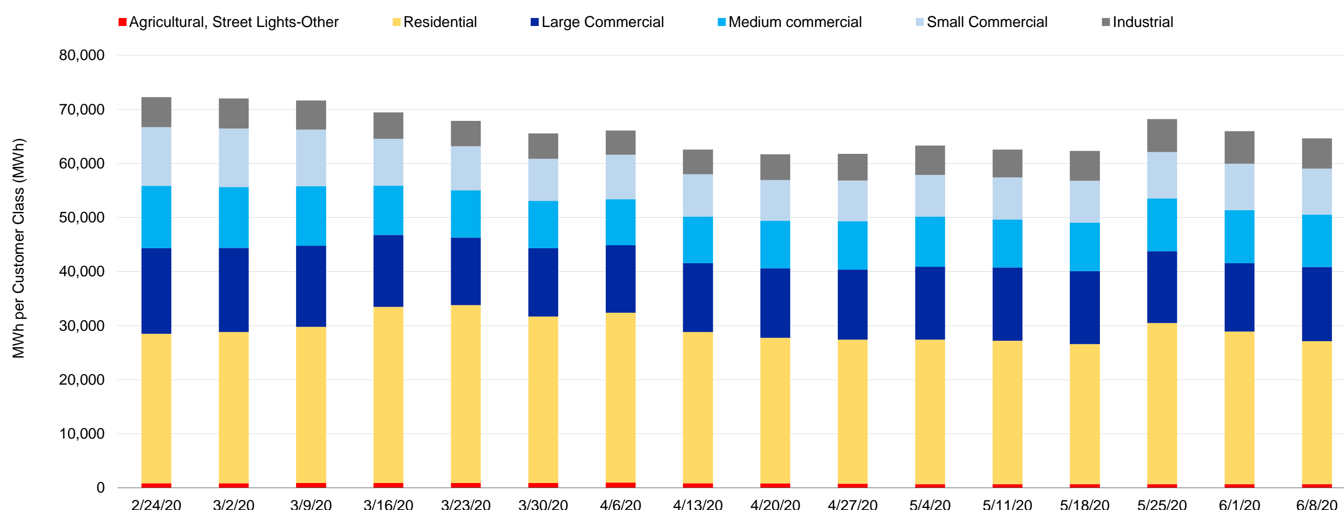
Detailed credit considerations

PCE expects further load declines through FY 2025, driven by COVID-19 related impacts

While PCE has a service area with very strong socio-economic conditions, exposure to commercial customers has resulted in load declines as California assumed SIP orders in a COVID-19 environment. PCE experienced a 9% and 11% decrease in total load in the weeks of June 1 and June 8, respectively, compared to the first two weeks of March. The biggest impact to PCE's load demand has been to commercial load, while residential load has tended to increase slightly.

Residential load has increased about 2.5% from late March to mid-June, while commercial load has declined about 20% on average during the same period. Within the commercial customer category, large commercial load has been on average 17% below what would be expected in a pre-covid environment, while small and medium commercial are below normal levels by about 26% and 21%, respectively.

Exhibit 3
PCE load has declined by about 10% on average compared to pre-covid levels
Weekly load by customer class

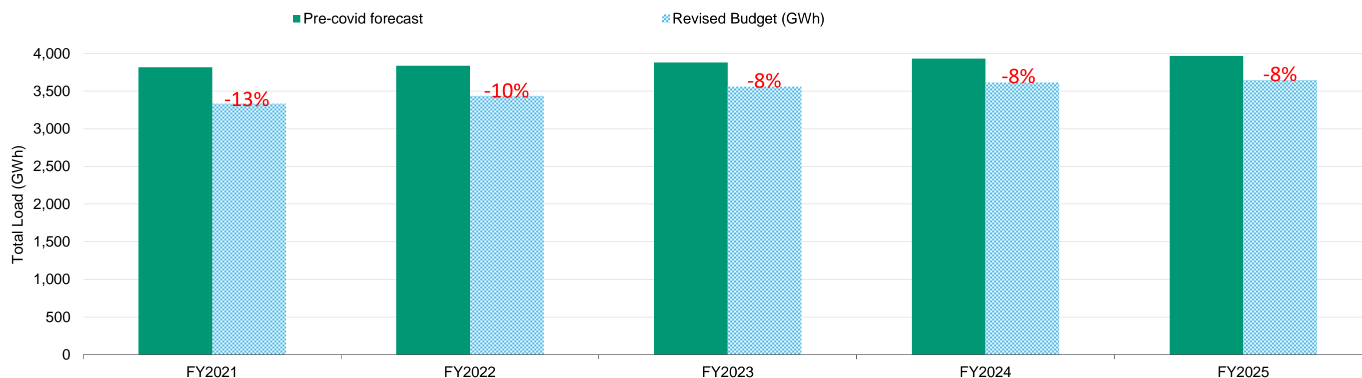


Source: Moody's Investors Service, PCE

Management recently revised their five-year budget to reflect lower total load expectations as a result of impacts from COVID-19. In FY 2021, management forecasts total load to be 13% below their pre-covid forecast, and in FY 2022 they expect load to be 10% below. From FY 2023 - FY 2025, PCE has assumed a permanent 8% loss to load compared to their pre-covid load expectations. The biggest change to load will be to small/medium businesses where PCE has assumed a 30% decrease from pre-covid expectations through June 2021, a 25% decrease in FY 2022, and 20% less load from pre-covid expectations for FY 2023 - FY 2025. For residential load, PCE has assumed a 6% increase through June 2021, a 4% in FY 2022, and then a 2% increase above pre-covid expectations for FY 2023- FY 2025.

Exhibit 4

PCE management's load assumptions do not assume sharp recovery periods over the next five years



Source: Moody's Investors Service, PCE

Increasing net position will be extremely limited under revised 5-year plan

In addition to decreases in load, other updates in PCE's most recent public forecast included a 58% increase to PCIA in October 2020 (which did not take place and is now expected to be implemented January 2021), with no additional PCIA increase that exceed the $0.005 cap thereafter; a 0.5% increase to rates on January 1 each year starting on January 1, 2021; a new solar project commencing in December 2020, two solar and storage 20-year PPAs starting in January 2023 and a third similar PPA starting in January 2023; lower energy costs and an expansion of PCE's EV infrastructure program totaling about $15 million from FY 2021 - FY 2023.

Given the revised assumptions, COVID-19 will have a significant impact on PCE revenues over the next five years, including about a $63 million operating revenue decline in FY 2021 compared to FY 2020 revenues of $278 million, and a $23 million revenue decrease on average compared to the pre-covid forecast for FY 2022- FY 2025. PCE expects to be able mitigate these revenue decreases with lower costs of energy, which will be between $19-$24 million lower each year from previous forecasts during FY 2021 - FY 2025. These revised assumptions will result in negative net revenues for FY 2021, FY 2022, FY 2023, and FY 2025 and will require PCE to dip into their liquidity to cover the losses in these years, a credit negative.

Despite the weaker expectations for the next five years, liquidity is not expected to drop below $180 million staying above 275 days cash on hand each year, which is significantly above their reserve policy that requires at least 180 days of operating expenses. Further, PCE's strategy enables them to retain their competitiveness to PG&E by staying at a 5% discount to PG&E rates which is an important consideration for their commercial customers. Should the PCIA increase exceed their expectations, internal liquidity would decline further if PCE maintained a 5% discount. Conversely, liquidity pressures would reduce if PCE altered its rate strategy such that customers bore more of the annual PCIA changes. Our rating incorporates a view that the challenges facing PCE and other CCAs regarding the PCIA charge will continue to be addressed in subsequent regulatory hearings at the CPUC or through future legislative action, or will, in the future, be structured in a way that is credit neutral to the CCAs.

PCE provides generation services to an economically strong customer base

PCE's credit profile is anchored by the economic strength of the underlying service territory and the size of its customer base of roughly 285,000 customers encompassing all of the communities in San Mateo County (Aaa stable). Moody's estimates the weighted average credit quality for the participating cities is Aa3, including the cities of South San Francisco, Redwood City and San Mateo, who collectively purchase the largest share of power from the JPA. PCE's customer base makes it the fourth largest municipally

governed electric enterprise in California, behind Los Angeles Department of Water and Power (LADWP: Aa2 negative) and Sacramento Municipal Utility District (SMUD: Aa3 stable) and Marin Clean Energy (MCE: Baa2 stable).

San Mateo County is an affluent area where customers strongly support the role that CCA plays to provide carbon-free energy. Fifteen of the 21 communities in the county opted for PCE's 100% clean energy product for their municipal accounts, a more expensive product than the bundled product offered by PG&E. Multiple local commercial firms have also opted for the 100% clean energy product, including Facebook and Visa.

Customer mix is relatively fragmented, with about 40% of PCE's revenues provided by residential customers and the remainder coming principally from large and small commercial customers. Revenues from the large commercial sector can be sensitive to economic cycles and may be exposed to incremental risk if the DA program is expanded. PCE’s ability to maintain a net short position over the long run and its plan to maintain strong liquidity help to mitigate this risk.

Exhibit 5
PCE Member Participants

Member Participants	Voting Share
City of South San Francisco	15.18%
City of Redwood City	14.17%
City of San Mateo	12.98%
City of Menlo Park	7.07%
City of Daly City	6.65%
County of San Mateo(unincorporated)	6.24%
City of Burlingame	5.70%
City of San Carlos	4.76%
City of Foster City	4.68%
City of San Bruno	4.62%
City of Pacifica	2.78%
City of Belmont	2.50%
City of Millbrae	2.36%
City of East Palo Alto	1.92%
Town of Atherton	1.68%
Town of Hillsborough	1.51%
City of Half Moon Bay	1.48%
City of Brisbane	1.45%
Town of Woodside	1.07%
Town of Portola Valley	0.60%
Town of Colma	0.58%

Source: Moody’s Investors Service

PCE business model supported by California state legislation

While the business model that PCE’s CCA program operates under is relatively new, it is supported by key state objectives to lower carbon emissions and to derive clean energy through renewable energy sources. A new bill approved by the state legislature sets the objective to be at 100% renewable energy by 2045. It appears that State and municipal policymakers are on the same page as to wanting to see the success of the CCA model. Also evident is the role of general oversight on various aspects of their business by the CPUC.

A strength of the California CCA model are the statutory provisions which enabled PCE to immediately become the default provider of generation services for San Mateo County customers of PG&E upon inception. In PCE's case, all twenty of the cities in San Mateo County and the county voted affirmatively to join PCE, a credit positive. Once the municipal ordinance was unanimously adopted by all member communities of PCE, all customers were automatically PCE customers until they decide to opt out. The customer can opt out

in 60 days without any penalty; after 60 days, PCE can impose an administrative "exit" fee of $5 for residential customers and $25 for commercial customers. PCE operates with no local tax funds nor is required to pay taxes. From a credit standpoint, this model provides PCE with a captive and arguably sticky customer base capable of delivering reliable revenue and cash flow on a consistent basis.

We recognize the importance of the California Joint Power Agency statute requirement (Title 1, Division 7, Chapter 5, Article 1 (Section 6500)) that PCE municipal members of the JPA must pay any of their remaining cost obligations to PCE if they decide to depart PCE and return to PG&E. The effectiveness of this statue has not been tested in court, however members have been apprised of the ultimate risk prior to entering into the PCE participation agreement. Any municipal member of PCE that chooses to depart would have to give a one-year notice, fund its remaining obligations taken out on their behalf, and receive a super-majority (67%) vote of approval from the PCE board making such a decision challenging if their departure were to adversely affect PCE.

Limited operating experience mitigated by liquidity and cost recovery structure

We view PCE's limited operating experience as a risk given its short four year operating history. This risk is mitigated by its structural provisions for timely, full cost recovery through an independent rate setting authority and growing liquidity position. At fiscal year-end 2019 and 2020, PCE had 225 and 292 days of liquidity on hand, respectively. This metric is projected to increase to 302 days at year-end 2021 with unrestricted cash increasing to about $186 million.

Moreover, PCE's strategy is centered exclusively around serving the electric needs of its San Mateo County customers. A stable customer base makes power procurement risk more manageable. PCE has an actively involved board with a broad business background, has been able to secure cost competitive renewable resources, and has demonstrated the ability to generate internal free cash flow on a sustained basis.

PCE also has a timely local rate-setting process in which its board has authority to raise rates to grow annual revenues, if needed. Rate action by the board can be taken at any time. Additionally, if electricity demand should fall short of the PCE contracted obligations, PCE can increase rates to fund the unrecovered cost. Other strategies PCE can employ include selling excess power into the CAISO day ahead market.

PG&E emerges from bankruptcy; uncertainty remains around central procurement role

PG&E, who acts as the billing and collection agent for northern California CCA's including PCE, recently emerged from bankruptcy, a credit positive for CCAs as it ensures that existing contractual and cash management arrangements between CCAs and PG&E are no longer in question. That said, uncertainty persists around the long-term role that PG&E and other investor-owned utilities will have in power procurement including 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 PCE'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 PCE 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 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.

Power procurement poses significant risk should any imbalance of forward energy and capacity arise

The most significant challenge that PCE faces relates to its ability to manage power procurement risk which can be accompanied by uncertainties concerning resource production and load variability. A particular risk is the potential for PCE to procure more energy under long term contracts than is needed to serve their customers' load requiring them to sell the more expensive excess energy into the wholesale power market at lower market prices. According to PCE's financial statements, PCE has entered into forward purchase commitments expiring in 2045 for delivery of renewable energy on an as-available basis that aggregates $878.3 million at fiscal year-end 2019. In an extreme worst case scenario where there is a sudden decline in customer load, PCE could find itself in an under collected position should contracted power prices paid by PCE under its contractual arrangements exceed wholesale market prices for a sustained period. 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.

PCE has attempted to mitigate its power procurement risk as its current long-term contractual arrangements approximate 20-30% of its expected load with the remainder being satisfied by medium-term, short-term, and market purchases across a very diverse list of energy suppliers with not one provider exceeding 15% of its load requirements. This broad approach around maintaining a net short position will continue even with PCE intending to increase its long-term resources under contract to 50% over the next several years as the CCA meets state-mandated renewable requirements and satisfies its own renewable supply objectives. Prospective changes in load demand and the need for incremental renewable resources will depend upon the growth of the electric vehicles market and any resulting increase in energy demand. In the end, PCE's ability to manage this risk is aided by a conservative approach to liquidity management, its strategy focused exclusively on serving the electric needs of San Mateo County, and by the fact that PCE's long-term commitments were executed within the last several years, providing them with the benefits of low cost renewable resources, giving PCE access to attractively priced long-term generation resources.

The PCE Integrated Resource Plan (IRP) is ambitious given the objective of 100% greenhouse gas free energy by 2021 and 100% renewable energy by 2025. This objective will test the depth of the renewable energy market in California. Uncertainty still exists about California's entry into a regionalized ISO (independent system operator) for the western states. The California State Senate again voted in 2018 not to move forward on a regionalized ISO. PCE has a power supply portfolio with a diverse mix of contracted energy sources including renewable energy from a geographically diverse area with many different suppliers. The IRP is locally decided by PCE's board which asserts local control on power supply decisions but does include several state mandates such as ensuring it meets a state required reserve capacity margin, greenhouse gas standards and energy efficiency requirements. The 2018 IRP lays out PCE's planning requirements for 2018-2027, and a new IRP was submitted to the CPUC in September 2020.

Continued strengthening of financial operations and position

PCE's positive growth from 2017-2020 reflects the successful staging in and retention of customers joining the CCA. While PCE is considering the possibility of adding cities from Merced County as members to the JPA, including the City of Los Banos (Aa3), this would not begin to take place until 2022, and we believe that even with adopting more JPA members, PCE would continue to maintain a stable customer base centered around San Mateo County. We note that Los Banos, CA is home to PCE's largest solar project PPA, Wright Solar, and should this participant be approved by PCE's Board, we do not expect that the 4.8% participation of PCE's load would impact the CCA's participant credit quality as the City of Los Banos is rated Aa3, which is line with PCE's current participant credit quality.

The strong financial performance since inception has led to the ability to build up robust liquidity levels. At the end of fiscal 2020, ended June 30, PCE had net revenues of $46 million, significantly above its budget of $33 million, and below its FY 2019 net revenues of $52 million. Operating revenues were about $6 million lower in FY 2020 compared to FY 2019, and operating expenses were roughly $25 million higher in FY 2020, primarily driven by an increase in cost of electricity of about $22 million from FY 2019 to FY 2020.

FY 2020 revenues were $278 million, which was about $10 million above budget, while operating expenses were slightly under budget by $5 million at about $231 million leaving PCE with a change in net position of $48.9 million at the end of FY 2020. We understand that over the next five years, PCE financial operations will be weaker relative to its performance over the past three years, with PCE expecting negative net revenues in four of the following five fiscal years and utilizing its liquidity to meet any shortfall. It is our view that while financial performance is expected to be weaker over the next five years, PCE has built up sufficient liquidity to be able to sustain lower energy sales and a slow economic recovery over the next few years.

LIQUIDITY

At the end of FYE 2020, PCE had unrestricted cash of about $178 million, an increase of $50 million from fiscal year end 2019 owing to steady monthly internal cash flow generation. It expects to have around $222 million in cash at June 30, 2020, its fiscal year-end. PCE's ability to generate sustained free cash flow serves to mitigate the CCA's limited four-year operating history. PCE also has a timely local rate-setting process in which its board has the authority to raise rates to grow annual revenues, if needed.

At fiscal year-end 2019 and 2020, PCE had 225 and 292 adjusted days of liquidity, respectively. This metric is projected to increase to 302 days at year-end 2021 even with unrestricted cash and cash equivalents expected to decrease by roughly $36 million.

PCE's additional liquidity comes in the form of a $12 million term loan from Barclays that matures in 2021. While the existence of the credit facility is a positive, Moody's does not include the extra liquidity facility in our calculation of adjusted days liquidity for the scorecard with the methodology as the loan documentation for advances under the line of credit has conditions that need to be satisfied before PCE can borrow funds.

Debt and other Liabilities

PCE has no long-term debt. PCE can issue long-term revenue bond debt.

DEBT-RELATED DERIVATIVES

None

PENSIONS AND OPEB

Not a material credit risk.

LEGAL SECURITY

PCE has 21 members to its Joint Powers Agreement representing San Mateo County and its 20 municipalities. When a member joins, all electric retail customers automatically become customers unless they choose within 60 days to “opt out.” Opt-out customers go back to default service and receive generation services from the investor-owned utility. PG&E is required to bill PCE charges on PCE’s behalf and remit revenues to PCE. It receives no financial support from the municipalities or counties it serves. The rate setting process for PCE is in full control of the PCE board of directors and PCE can pass through costs on a monthly basis.

Management and Governance

The 22 member Board of Directors governs PCE which consists of one elected representative from each of the cities and towns served and two elected representatives from San Mateo County.

Rating methodology and scorecard factors

The principal methodology used in this rating is US Municipal Joint Action Agencies All-Requirements published in August 2020.

The actual rating is one notch lower than the scorecard indicated outcome to reflect the newness of the CCA business model, evolving PCIA and regulatory framework, wholesale power market exposure and uncertainties around California's rapidly evolving power markets.

Exhibit 6

Peninsula Clean Energy JPA - Methodology Grid

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.	Aa3	
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	217 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	A	
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:		**Baa1**	

Days liquidity on hand is a three year average for FY 2018-FY 2020.
Source: Moody's Investors Service

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