

CREDIT OPINION

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Peninsula Clean Energy Authority, CA

Credit considerations supporting Baa2 issuer rating and stable outlook

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) 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 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.

The credit profile further acknowledges the January 29th bankruptcy filing by PG&E, who acts as the billing and collection agent for PCE and other northern California CCAs. The bankruptcy court approved critical "first-day orders" maintaining preexisting contractual and cash management arrangements between the CCAs and PG&E. Our credit assessment further recognizes the potential long-term market implications that will likely follow given the utility's bankruptcy filing, including possible impacts to the energy landscape and the current role of CCAs in the state. To that end, PCE's rating incorporates our understanding of the current framework for power procurement for CCAs operating in the state, particularly since we believe that the current framework is likely to remain unchanged until PG&E emerges from bankruptcy, which we believe is a several year process. That said, the manner in which PG&E emerges from bankruptcy may change the role of CCAs, which could prospectively affect the direction of their credit profiles.

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 rates for energy 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
- » Financial record and forecast indicate upward financial trends for FY 2019-2023

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Credit challenges

- » Sizable energy purchase commitments with surplus energy remarketing risk should customers depart and should surplus energy be at a higher cost than energy market
- » Power Cost Indifference Adjustment (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; should this occur PCE can charge an exit fee but it has no experience doing so at this point
- » Notional size of power procurement contracts is material relative to liquidity profile
- » PG&E's bankruptcy may result in further impact to California's energy markets
- » Potential for regulatory changes and legislative changes that might impact future PCE business model and operations.

Rating outlook

The stable outlook reflects expectations for a continuation of the current CCA model; PCE's ability to implement its core objective to provide clean energy options for customers in San Mateo County while growing its liquidity profile and maintaining independent board rate-setting as well as appropriately balancing energy purchase commitments relative to demand.

Factors that could lead to an upgrade

In light of the uncertainty that the PG&E bankruptcy is expected to have on the future of the California electric market place, limited near-term prospects exist for the rating to be upgraded. That said, the potential for a higher rating exists should:

- » Trend of strengthening financial operations, including internal liquidity, continues
- » Broader statutory acceptance of the CCA business model persists
- » More favorable outcome concerning the PCIA allocation occurs in the CPUC Phase 2 decision process
- » Narrowing or de-risking of power related remarketing risk

Factors that could lead to a downgrade

- » 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 direct access
- » Technological advances which permanently lowers the load profile leading to a weakening in the current procurement strategy

Key indicators

Exhibit 2

Peninsula Clean Energy Key Financial Indicators

Positive liquidity trend due to growing cash reserves

	FY2017*	FY2018	FY2019**
Unrestricted Cash	18,882	66,689	119,153
Total Operating Expenses (excluding Depreciation and Interest Expense) ('000)	70,100	180,915	187,629
Days Liquidity on Hand (excl. Bank Lines) (days)	98	135	232
Adjusted Days Liquidity on Hand (incl. Bank Lines) (days)	145	159	255

*FY2017 was the first year that PCE started receiving revenues, however, it did not constitute an entire year of a full customer base.

**FY2019 is the estimated annualized figure based on current available data.

Source: Moody's Investors Service

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 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 negative) 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 may be sensitive to economic cycles and may also be exposed to incremental risk if the Direct Access 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 3

PCE Member Participants

Member Participants	Voting Shares
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, Peninsula Clean Energy Joint Exercise of Powers Agreement

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 California Public Utilities Commission (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 exit charge to mitigate any future obligations it took out on the departing customer's behalf. 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 statute 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. Another mitigating factor is that PCE can enact an exit charge on individual customers who choose to opt out of PCE which further could narrow any revenue shortfall. The initial administrative "exit" fee effective for the 2018-2019 fiscal year is \$5.

Limited operating experience mitigated by liquidity and cost recovery structure

We view PCE's limited operating experience as a risk given its short three 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 2017 and 2018, PCE had over 145 and 159 adjusted days of liquidity, respectively, counting both cash on hand and borrowing capacity. This metric is projected to increase to 255 days at year-end 2019 with unrestricted cash increasing by roughly \$50 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. PCE can also impose an exit fee on future departing customers. Other strategies PCE can employ include selling excess power into the CAISO day ahead market.

PG&E in bankruptcy continues to bill for CCA services

PCE's credit profile further acknowledges the January 29th bankruptcy filing by PG&E, who acts as the billing and collection agent for northern California CCA's including PCE, along with the "first-day order" from the bankruptcy judge to maintain existing contractual and cash management arrangements between CCA's and PG&E. Under the CCA business model, PG&E includes charges for generation services provided by PCE on the monthly electricity bill that PG&E sends to its customers. Pursuant to Rule 23 of the CPUC, once a PCE customer pays its utility bill, PG&E transfers collected CCA generation revenues to PCE on a daily basis. In return for PG&E providing billing and collection services, PCE and other CCAs each pay PG&E a fee, a process that has continued while PG&E operates under receivership. The PG&E bankruptcy court "first-day orders" included an acknowledgment that the cash flow collected by PG&E are revenues of the CCA. They are not a part of PG&E's estate and CCA revenues cannot have a lien placed against them by the debtor-in-possession lender.

We also recognize the potential long-term market implications that will likely follow given PG&E's bankruptcy filing, including the current role that CCA's play in the state. While a variety of different proposals have been discussed concerning prospective roles for PG&E, CCA's, and other government entities in the state, our view of PCE's credit quality incorporates our understanding of the current framework for power procurement for CCA's operating in the state, particularly since we believe that the current framework is likely to remain unchanged until such time that PG&E emerges from bankruptcy, which we believe will be a several year process. In the meantime, 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 manner in which PG&E emerges 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 near term 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 \$966 million at fiscal year-end 2018. 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.

Based upon PCE's business plan, PCE's net position is forecast to continue to increase over the next several years. While a recent CPUC decision concerning the allocation of PCIA charges will result in a greater than expected portion of these charges being allocated to CCA customers, PCE's pricing strategy to offer its 50% renewable product at 5% below PG&E's bundled cost for generation remains unchanged and is expected to continue providing flexibility to increase its net position and cash balances while remaining price competitive to PG&E owing to the more competitive profile of its generating resources under short and long-term contracts.

The PCE Integrated Resource Plan (IRP) is ambitious given the objective of 100% reduction of greenhouse gas emissions and 100% renewable energy by 2025. This objective will test the depth of the renewable energy market in California. Uncertainty exists still 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.

Continued strengthening of financial operations and position

PCE's board approves its budget annually. It has no long-term debt but does have a line of credit from Barclays. The positive growth in its three year average 2016-2018 net income reflects the staging in of customers joining PCE. Current plans do not contemplate expanding its service area beyond San Mateo County; hence our expectation for a stable customer base. The budget does factor in incremental revenues from electric vehicle growth increasing energy consumption. Importantly, forecasts indicate strong annual contributions to net position and internal cash.

LIQUIDITY

At the end of March 2019, PCE had unrestricted cash of about \$108 million, an increase of \$42 million from fiscal year end 2018 owing to steady monthly internal cash flow generation. It expects to have around \$125 million in cash at June 30, 2019, its fiscal year-end. PCE's ability to generate sustained free cash flow serves to mitigate the CCA's limited three-year operating history. PCE also has a timely local rate-setting process in which its board has authority to raise rates to grow annual revenues, if needed.

At fiscal year-end 2017 and 2018, PCE had over 145 and 159 adjusted days of liquidity, respectively, counting both cash on hand and borrowing capacity. This metric is projected to increase to 255 days at year-end 2019 with unrestricted cash increasing by roughly \$50 million. Excluding borrowing capacity, PCE had unadjusted days of liquidity (Days Cash on Hand) of 98 days in 2017, 135 Days in 2018 and is forecast to have 232 Days in 2019.

PCE's additional liquidity comes in the form of a \$12 million term loan from Barclays that matures in 2021. Moody's does not include the extra liquidity facility in our calculation of adjusted days liquidity for the scorecard per the terms of the Joint Action Agency methodology's assessment of bank lines with a Material Adverse Event Clause.

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

The principal methodology used in this rating was US Municipal Joint Action Agencies All-Requirements published on October 4, 2016. Please see the Credit Policy page on www.moodys.com for a copy of this methodology.

The actual rating is one notch lower than the scorecard outcome to reflect the new business model PCE operates under, PCE's wholesale power market exposure and the uncertainties about the evolving California power market.

Exhibit 4

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	155 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	

Source: Moody's Investors Service

The grid is a reference tool that can be used to approximate credit profiles for the joint action agencies in the public power sector. However, the grid is a summary that does not include every rating consideration. Please see US Joint Action Agencies Methodology published in US Municipal Joint Action Agencies for more information about the limitations inherent to grids.

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