REGULAR MEETING of the Board of Directors of the  
Peninsula Clean Energy Authority (PCEA)  
Thursday, January 25, 2018  
Peninsula Clean Energy, 2075 Woodside Road,  
Redwood City, CA 94061  
6:30 p.m.  

Meetings are accessible to people with disabilities. Individuals who need special assistance or a disability-related modification or accommodation (including auxiliary aids or services) to participate in this meeting, or who have a disability and wish to request an alternative format for the agenda, meeting notice, agenda packet or other writings that may be distributed at the meeting, should contact Anne Bartoletti, Board Clerk, at least 2 working days before the meeting at abartoletti@peninsulacleanenergy.com. Notification in advance of the meeting will enable the PCEA to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it. Attendees to this meeting are reminded that other attendees may be sensitive to various chemical based products.

If you wish to speak to the Board, please fill out a speaker’s slip located on the tables as you enter the Board meeting room. If you have anything that you wish to be distributed to the Board and included in the official record, please hand it to a member of PCEA staff who will distribute the information to the Board members and other staff.

CALL TO ORDER / ROLL CALL

PUBLIC COMMENT
This item is reserved for persons wishing to address the Board on any PCEA-related matters that are as follows: 1) Not otherwise on this meeting agenda; 2) Listed on the Consent Agenda and/or Closed Session Agenda; 3) Chief Executive Officer’s or Staff Report on the Regular Agenda; or 4) Board Members’ Reports on the Regular Agenda. Public comments on matters not listed above shall be heard at the time the matter is called.

As with all public comment, members of the public who wish to address the Board are requested to complete a speaker’s slip and provide it to PCEA staff. Speakers are customarily limited to two minutes, but an extension can be provided to you at the discretion of the Board Chair.

ACTION TO SET AGENDA and TO APPROVE CONSENT AGENDA ITEMS
This item is to set the final consent and regular agenda, and for the approval of the items listed or the consent agenda. All items on the consent agenda are approved by one action.
CLOSED SESSION

1. PUBLIC EMPLOYEE PERFORMANCE EVALUATION

Title: Chief Executive Officer

2. RECONVENE OPEN SESSION AND REPORT OUT OF CLOSED SESSION

REGULAR AGENDA

3. Chair Report (Discussion)

4. CEO Report (Discussion)

5. Citizens Advisory Committee Report (Discussion)

6. Audit and Finance Committee Report (Discussion)

7. Marketing and Outreach Report (Discussion)

8. Market Research Results (Discussion)

9. Regulatory and Legislative Report (Discussion)

10. Receive Mid-Year Budget Update (Discussion)

11. Authorize the Chief Executive Officer to execute Amendment 1 to Power Purchase Agreement, and any necessary ancillary documents, with:

   11.1 Mega Renewables, a California general partnership (Hatchet) – Hatchet Creek Hydroelectric Project. Contract Term: 20 years. Not to Exceed $17,000,000. (Action)

   11.2 Mega Renewables, a California general partnership (Roaring) – Roaring Creek Hydroelectric Project. Contract Term: 17 years. Not to Exceed $5,000,000. (Action)

   11.3 Mega Renewables, a California general partnership (Bidwell) – Bidwell Ditch Hydroelectric Project. Contract Term: 17 years. Not to Exceed $10,000,000. (Action)

12. Authorize the Chief Executive Officer to execute a Power Purchase Agreement and ancillary documents for renewable supply with Hydro Partners, a California general partnership (Clover) – Clover Creek Hydroelectric project. Contract term: 15 years. Not to exceed: $3,000,000. (Action)
13. Adopt policy on the selection of the Chair and Vice Chair and appointment to the Executive Committee and other standing Board Committees (Action)

14. Board Members’ Reports (Discussion)

CONSENT AGENDA

15. Authorize the CEO to execute an amendment to the agreement with Barclays Bank PLC that reduces the interest rate, converts the line from a term loan to a revolving loan, and makes other minor changes in a form approved by the General Counsel (Action)

16. Approval of the Minutes for the December 14, 2017 Meeting (Action)

17. Receive Mid-Year Financial Statements (Information Only)

Public records that relate to any item on the open session agenda for a regular board meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all members, or a majority of the members of the Board. The Board has designated the Peninsula Clean Energy office, located at 2075 Woodside Road, Redwood City, CA 94061, for the purpose of making those public records available for inspection. The documents are also available on the PCEA’s Internet Web site. The website is located at: http://www.peninsulacleanenergy.com.
Peninsula Clean Energy and Local Programs

By Michael Clossen and Ted Howard

Approved by Peninsula Clean Energy Citizens Advisory Committee on January 18th, 2018
Introduction

During the launch phase (the first year or two), Community Choice Energy (CCE) programs concentrate upon hiring staff, and acquiring electricity, both renewable and non-renewable, from remote locations via long-distance transmission lines. This stage, sometimes referred to as CCE 1.0, is a time for a program to become established operationally and financially.

Once a CCE organization is underway however, it can move into a second stage, sometimes called CCE 2.0. In this stage, CCEs can start developing local programs that further reduce their service areas’ carbon emissions, create new local jobs, increase their visibility and generate new revenue. The technical name for such programs is “Distributed Energy Resources.” DERs include a variety of energy generating and energy saving services and technologies that can be provided locally by a CCE program and its member jurisdictions. In addition to directly benefiting a CCE program, DERs can also benefit the overall energy system by reducing pressure on the electricity grid thereby helping avoid costly upgrades to grid infrastructure.

DERs are often located close to demand centers, to minimize impacts from broader power outages. Also, DERs typically are more flexible, and have faster response times, than traditional generation facilities. The diversity of these numerous smaller and distributed resources can provide greater grid reliability and stability than centralized fossil-fuel power plants. Furthermore, one study indicates DERs can reduce the cost of electricity by up to 50%.¹

Primary types of DER

- **Distributed Generation** — renewable energy generated in or nearby a CCE’s service area — e.g. residential rooftop, community-scale installations, or utility-scale solar installations.²
  - For example, Marin Clean Energy has six local solar projects on line or under construction.
- **Energy Storage deployment** — employing batteries, including electric vehicles, and other devices.³
- **Local Micro-Grid development** — e.g. to increase resilience at hospitals, community service centers, and other institutions⁴
- **Energy Efficiency measures** — for homes, commercial buildings and industrial facilities.
  - Marin Clean Energy has a proposal before the California Public Utilities Commission (CPUC) to become the Program Administrator (replacing PG&E as the default provider) of energy efficiency programs in its service territory.

¹ Megan Geuss, *“Distributed energy sources can reduce cost of electricity up to 50%, study says*”, article in ars technica, citing study published in Nature, *“Data-driven planning of distributed energy resources amidst socio-technical complexities*”, July 17, 2017.
² A CCE program may choose to purchase some of this electricity using Feed-in Tariffs or through its standard power procurement process.
³ Energy storage in increasingly being deployed in conjunction with distributed generation.
⁴ Often done in tandem with distributed generation and energy storage.
- **Demand Response programs** — utilizing both hardware and software, that enable utilities (and CCEs) to efficiently manage electricity flows to take advantage of when prices are lowest or to reduce grid congestion, using home and business energy management systems.

- **Cogeneration**—also known as combined heat and power, enables the heat normally lost in power generation to be recovered for heating or cooling.

**One cogent strategy involving DERs is fuel switching**, which typically involves shifting from gas power to electric power in homes and businesses, and also replacing gasoline-powered vehicles with EVs.  
  o For example, Sonoma Clean Power recently teamed with Nissan and BMW to offer rebates on EV purchases.
  o Another example being considered by a number of CCEs is heat pumps, which have great potential in California.

There are a lot of DER options to choose from so it is important for a CCE to develop some criteria to help it select the local programs that are best for it. As DER aggregation from different points of interconnection to the distribution grid (sold in the wholesale market in aggregate) becomes widespread, a single virtual point of interconnection will enable even greater DER integration for larger and more diverse local programs.

Also, government policy-makers at the California Public Utilities Commission (CPUC), California Energy Commission (CEC), and the California Independent System Operator (CAISO) are focusing on determining the locational and temporal net benefits of DERs, which will (along with several other regulatory proceedings) be utilized to establish DER guidelines directly impacting CCE programs.

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5 This activity is often called “electrification.”

6 A DER Provider, as defined by the California Independent System Operator (CAISO), is a market participant that aggregates one or more small distribution-connected energy resources totaling at least 0.5 MW, from either in front of, or behind, the customer meter.
DER Projects in Existing Community Choice Energy programs

Partial List

Marin Clean Energy

- Net Energy Metering — Pays premium rates (1 cent per kWh above MCE retail rate) for production exceeding usage and rolls over excess credits every month. MCE’s approximately 3,000 customers received over $1 million in 2015-16.
- Energy and Water Efficiency — Partners with Rising Sun Energy to offer no-cost (valued at $3,000-$5,000) energy and water assessments, no-cost technical assistance, and installations for residents of selected cities in MCE’s service area.
- Local Renewable Energy generation — 19 MW of renewable energy is online or under construction in service area including:
  o 10.5 MW solar farm in Richmond (Solar One Project) on Chevron brownfield site. Projected to power 3,400 homes, with 340 jobs created including youth trainees from Richmond Build
  o 2 MW FIT solar project at Freethy Industrial Park in Richmond to power 600 homes in partnership with Richmond Build; estimated 20-year revenue of $10+ million
  o 1 MW solar carport in Novato constructed by 25 IBEW workers employed by Cupertino Electric to power 300 homes
  o 1 MW solar project at Novato Cooley Quarry to power 300 homes.
  o 1 MW solar project at San Rafael Airport to power 300 homes.
  o 265 KW FIT solar project at Cost Plus Plaza roof in Larkspur — 90 homes; estimated 20 year revenue of $1+ million
  o 3.9 MW landfill gas conversion project (methane to electricity) at Redwood Landfill in Novato (partner with Waste Management) to power 5,000 homes
- Smart Electric Vehicle Charging program
  o Partners with eMotorWerks to increase affordable renewable EV charging options to accelerate EV adoption
    ▪ Provides discounts on smart grid-enabled charging stations
    ▪ Offers cash-back rewards for EV charging at times when electricity demand is high
- Feed-In Tariff
  o Fixed price per kWh for 20 years for local small developers
  o Prices gradually decline as capacity approaches MCE Board’s 15 MW cap
  o Three price categories: Peak, Baseload, and Intermittent
• Building Energy Efficiency Optimization
  o CEC “Local Government Challenge Grant” for $1.7 million
  o Various DER technologies being installed, including high-efficiency heat-pump water heaters, LED lighting, energy storage, solar, insulation upgrades, methane gas capture/anaerobic digestion, & electric vehicle charging.
  o Partners include Center for Climate Protection, Association for Energy Affordability, TerraVerde Renewable Partners, & Pathion

• Demand Response Pilot: “My Energy Insight” field trial
  o Remote management of home and business electricity loads
  o Uses AutoGrid’s Flex Demand Response Optimization and Management System (DROMS)
  o Reducing load during peak periods via DROMS for smart thermostats, pool pumps, water heaters, EV chargers, & energy storage

Sonoma Clean Power
  o Drive Evergreen [2016 program] — partnered with eMotorWerks to accelerate EV adoption
    o Provided 1,000 free smart EV charging stations to SCP customers
    o Nissan and BMW offered $10,000 rebates on EV purchases – including a higher rebate for low income customers
    o Offered over 500 customers two levels of discounts: $5,000 for customers participating in California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) and $2,500 for other applicants to purchase EVs
    o 206 EV’s were sold or leased
    o Budgeted $1.2 million for program but spent only $630,000 on incentives
  o Drive Evergreen [2017 program]
    o EV purchase or lease of nine models from seven dealerships (BMW, Chevrolet, Ford, Kia, Mercedes Benz, Nissan and Tesla)
    o In addition to dealer and manufacturer credits, SCE offers incentives up to $3,500 for new vehicles and $2,500 for used vehicles
    o Also an additional $2,000 rebate for low/moderate income buyers. For instance, the e-Golf hatchback with a 124 mile range lists for $28,995 but the full incentive/rebate/tax credit package of $19,000 cuts the (low income consumer) price to $9,995
    o Incentive provided to Transportation Network Company drivers (e.g. Uber, Lyft) for number of “fare miles” driven in their EV.
    o SCE’s budget for this year’s program is $1.5 million.
EV Charging equipment for homes
  o Free replacement of home chargers lost in recent fires in service area
  o Up to 1,000 free smart chargers (from partner eMotorWerks) — customer pays for shipping and installation
  o $150 rebate for customers signing up for “Clean Charge Program” software that enables SCP to charge EVs at times when electricity is less expensive
  o Customers can participate in JuiceNet Rewards Program — for customers who avoid charging during peak periods.

Net Green
  o A NEM program that allows customers to install solar panels (or other renewable energy system) on their homes
  o Customers receive compensation at retail rate plus 1¢/kWh (like PCE & MCE)

ProFIT Program (FIT)
  o Promotes the development of small-scale renewable energy and enables the developers to sell the electricity to SCP.
  o Projects must be less than 1 MW, located in service area and locally permitted
  o SCP pays participants $95/mWh
  o Ten and twenty year contracts
  o Includes three FIT projects, one near Cloverdale and two near Petaluma, which can supply electricity for 1,000 homes over 20 years
  o Issues: People with small solar systems often have little experience, and they are often on county land, requiring adjustments in zoning.

DIY Toolkits
  o SCP provides supplies and equipment that help to measure & reduce residential and commercial electricity and water consumption
  o Equipment (e.g. Kill-a-Watt meters and infrared thermometers) is available for loan at local libraries (must be returned after use)

Lancaster Choice Energy (City of Lancaster)

  Local Renewable Energy
    o 10 MW solar farm at Western Antelope Dry Ranch using solar tracking mounts - completed in December 2016 in partnership with sPower

Streetlight Electric Vehicle (EV) Charging demonstration
  o Streetlights on City’s main boulevard equipped with ebee smart chargers
  o Grant from the Antelope Valley Air Quality Management District (AVAQMD) for 80% of the total project cost
  o Remaining 20% of costs covered by private sponsors, including EasyCharge and eluminocity

Zero Net Energy Home Ordinance
  o Approved by CEC and goes into effect on January 1, 2018
  o Mandates the installation of a solar system equivalent to two watts per square foot on each new home built in the city.
Selected Distributed Energy Resources Projects at Major California Municipal and Investor-Owned Utilities

City of Palo Alto Utilities

Green Living Resources
- One-stop catalog of residential programs, rebates, & resources
  1. Whole-Home Comfort
     --Home Efficiency Genie
     --Smart Powerstrip Rebate
     --Attic Insulation Rebate
     --Whole House Fan Rebate
     --Workshops
  2. Kitchen & Bathroom
     --Free Water-wise Indoor Survey kit
     --Heat Pump Water Heater Rebate
  3. Yard & Landscaping
     --Landscape Efficiency
     --Pool Pump Rebate
     --Stormwater Rebates
  4. Renewable Energy
     --Carbon Neutral Electricity & Gas
     --Solar PV Net Metering
     --Solar Water Heating Rebate
  5. Transportation
     --EV Chargers for Organizations Rebate
  6. Bill Pay Assistance
     --Residential Energy Assistance Program
     --Project PLEDGE

Distributed Generation
- Feed-in Tariff—Palo Alto CLEAN
  1. Standardized long-term fixed rate Power Purchase Agreement (PPA)

EV Charging
- Solar Canopies on top of public parking garages
  1. About 100 Level-2 EV charging ports

Electrification
- Examining electrification of space heating and water heating using heat pumps. Title 24 2019 code updates (effective 1/1/20) should improve the cost effectiveness of heat pumps vs. natural gas

Sacramento Municipal Utility District

Local Renewable Energy Generation — built and operates:
- Solano Wind Farm — three 660 KW wind turbines
- South Fork Powerhouse (American River) — up to 400 KW hydro
Community Solar Development
- Assists non-profit organizations in service area install rooftop solar
- Provides solar panels for installation on selected low income housing developments in service area

Electric Vehicle Promotion
- Provides an online "Estimator Tool" that compares the cost to buy and drive an EV vs. a gas powered vehicle
- Provides a $599 incentive for new EV owners to charge free for two years or an additional 1.5¢ kWh credit for charging an EV between midnight and 6 am.
- Provides free high powered EV chargers for residents who purchase or lease EVs
- Provides solar powered fast charging stations at six locations

Energy Efficiency — offers rebates on:
- Installing reflective "cool roofs" on homes
- HVAC replacement (central air conditioning and/or heat pumps)
- Room air conditioners
- Whole house fans
- Smart thermostats

SMUD Energy Store (on line) — discounted products
- Nest thermostats
- Rechargeable devices
- LED lights — large selection
- Advanced power strips

Solar Regatta
- Annual event at which students design and race solar powered boats

Los Angeles Department of Water & Power (LADWP)

- Solar Incentive Program
  1. Over $305 million incentives paid, $12 million remains
  2. Over 27,000 LADWP customers participating, totaling over 214 MW of net metered solar capacity

- Feed-in Tariff
  1. LADWP buys 100% of mostly solar energy through 20-year PPA
  2. SB 1332 required minimum of 75 MW, LADWP offering 150 MW

- Community Solar Program
  1. LADWP will install 2-4 kW system on 1,000 rooftops
  2. Customer receives $360 per year
  3. Expected program launch in 2018

- Energy Storage
1. In compliance with AB 2514, 44 MW at distribution level, 178 MW total by 2021
2. Several distributed energy storage projects at various facilities are in the planning stage

PG&E

Distributed Generation
- Feed-in Tariff
  1. Renewable Market Adjusting Tariff (ReMAT—up to 3 MW)
  2. Bioenergy Market Adjusting Tariff (BioMAT—up to 3 MW)
- Renewable Auction Mechanism (3 MW+)
  1. Streamlines procurement process by:
     -- Allowing project bidders to set own price
     -- Providing simple standard contract for each utility
     -- Expedited regulatory review process
- Bioenergy Renewable Auction Mechanism (BioRAM)
  1. Bioenergy from forest fuel from High Hazard Zones (HHZ) to mitigate the threat of wildfires
- Net Energy Metering
  1. Bill credit for excess generation exported to grid, compensated at retail rate in real time, & trued-up every 12 months at Default Load Aggregation Point (DLAP), approximately 3-4 cents per kWh
  2. Virtual Net Metering (VNM) available to multitenant properties, allocating solar system production credits proportionally to each tenant at percentage of system capacity owned
  3. NEM Aggregation (NEMA) allows a customer-generator to aggregate electrical load from multiple meters, & the NEM credits are shared among all property attached or adjacent to the generation facility
  4. Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) enables local governments & universities to share generation credits from a system located on one government property with billing accounts on other government properties.
  5. NEM Fuel Cell (NEMFC) permits fuel cells using non-renewable fuels, but meeting CPUC GHG standard, to receive credits
- Green Tariff Shared Renewables (AKA Community Solar)
  1. PG&E "Renewable Choice" & "Solar Choice“ (just 22 MW)
- California Solar Initiative (now closed)
- Self Generation Incentive Program offers rebates to residential, commercial, industrial, government, and non-profit customers for qualifying DG

Energy Efficiency
- Residential Pay-for-Performance Pilot Program (2017)
  1. Utilizing smart meters & CalTRACK to determine payable energy savings, instead of post-evaluation estimated average savings
  2. Aggregators pay incentives to users, & PG&E pays aggregators for measured savings
3. Encourages innovative solutions based on actual savings instead of relying on average savings for given asset (calculated by Evaluation, Measurement, & Verification) regardless of users' actions

- Rebates
  1. Often under-subscribed, due to time-consuming complex processes
  2. Now, combining metered energy data with on-bill financing
  3. Current rebates include electric water heaters ($300), gas water heaters ($125), smart thermostats ($50), and pool pumps ($100)

- SmartRate Program
  1. Reduced rates in exchange for minimizing usage up to 15 days per year

- SmartAC Program
  1. SmartAC device installed on AC unit enables PG&E to reduce AC usage during critical peak periods between May 1 – October 31
  2. Customer paid $50 as incentive

- AC Quality Care Program
  1. Participating contractor assesses customer AC system, and customer chooses which repairs, if any, to be undertaken
  2. Customer receives up to $450 rebate

- Energy Savings Assistance Program
  1. Limited income customers living in residence at least 5 years qualify for financial assistance for energy efficiency products and programs

- Home Upgrade Options
  1. Develop overall plan for EE upgrade projects, with input from Energy Upgrade California, and receive up to $5,500 in rebates

- Zero Net Energy Buildings
  1. California Advanced Homes Program (CAHP), California Multifamily New Homes Program, & CAHP Master Builder initiative provide support for residential builders
  2. Incentives, design assistance, verification support, and recognition for constructing buildings beyond code requirements & on pathway to ZNE
  3. PG&E ZNE outreach activities include workshops and education
  4. Technical research including community-level DER to achieve ZNE

  Including OPOWER, Bidgely, Greenely Go, Home Energy Analytics

**Demand Response**

- Shape, Shift, Shimmy, & Shed: California’s New Demand Response Strategy
- Demand Response Auction Mechanism (DRAM)
  1. DRAM enables DER aggregators to offer services to LSEs & grid market
  2. DR offered as kW-months of capacity, or ability to reduce/add energy for up to 4 contiguous hours during peak period
  3. Pay-as-bid auction: each vendor receiving their bid rather than a single clearing price, which discourages underpricing & reveals true DER costs
  4. First customer-based Virtual Power Plants in USA
  5. Winning PG&E bidders included OhmConnect, AutoGrid, EnerNOC, Tesla, and Sunrun, for total capacity of about 80 MW in 2018 & 90 MW in 2019
- Click-through authorization processes streamlining customers’ ability to authorize utility to share energy use data with 3rd-party DR providers
- Standard DR Programs
1. Peak Day Pricing
2. Base Interruptible Program
3. Scheduled Load Reduction Program
4. Optional Binding Mandatory Curtailment Program
5. Capacity Bidding Program
6. Automated Demand Response Incentive
7. Permanent Load Shift
8. Third Party Offers—Rule 24 (3rd party DR providers solicit PG&E customers to participate in DR programs for wholesale market)

Energy Storage
- Three storage DER demonstration projects located in San Jose including 150 residential and 10 commercial customers, were expected to end by 1/1/18
  1. Funded by CPUC Electric Program Investment Charge (EPIC)
  2. Partners include: Tesla, residential battery system and software; Enphase, smart inverters at customer sites enabling grid optimization aggregation service; Green Charge, energy storage to store energy during off-peak and supply to grid during peak; and GE, Distributed Energy Resource Management System (DERMS) software using Smart Energy Profile 2.0 to enable monitoring & coordination of DERs with DER aggregators
- New (12/6/17) DER storage contract with EDF (France) for 40 MWh
  1. EDF will build, own, & operate behind-the-meter batteries for PG&E commercial & industrial customers
  2. Lower customer bills by demand charge reductions, maximizing off-peak consumption, & collecting revenue from wholesale market participation

Electric Vehicles
- PG&E authorized (Phase 1) by CPUC to build infrastructure for multi-unit dwellings, workplaces, and public interest destinations, with $130 million budget
  1. “EV Charge Network” expected in 2018, with 7,500 charging stations
  2. Minimum of 15% charging stations in disadvantaged communities
- Low Carbon Fuel Standard Rebates for PG&E customers using plug-in EVs
- Time-of-use rates for residential customers with EVs
- Plug-in EV (PEV) Submetering pilot uses energy meters to save on fuel costs and avoid paying for new PEV meter, currently in Phase 2 through 4/18
- Demand Response Pilot: PG&E BMW iChargeForward Pilot
  1. Customers shift use off-peak in response to incentives & price signals
- PG&E now proposing (Phase 2) $20 million for “priority reviews” and $233 million for two five-year EV charging infrastructure construction programs
  1. Focused on medium & heavy duty vehicles (MHDVs) and direct current fast chargers
  2. Priority reviews would include converting MHDVs to EVs; school buses charging at mid-day during excess solar power supply; online resource to serve EV customers; and transportation electrification projects
  3. EV charging infrastructure program, Fleet Ready, would build 700 make-ready EV stations for MHDVs
  4. Fast Charge program would build up to 234 direct current fast chargers at 52 public sites
Southern California Edison (SCE)

Grid Modernization for DER
  1. Requesting $2.1 Billion to modernize grid & integrate DERs
  2. Advanced distribution automation; DER performance validation; DER market design & development

Distributed Generation
- Feed-in Tariff
  1. Renewable Market Adjusting Tariff (ReMAT—up to 3 MW)
  2. Bioenergy Market Adjusting Tariff (BioMAT—up to 3 MW)
- Renewable Auction Mechanism (3 MW+)
  1. Streamlines procurement process by:
     -- Allowing project bidders to set own price
     -- Providing simple standard contract for each utility
     -- Expedited regulatory review process
- Bioenergy Renewable Auction Mechanism (BioRAM)
  1. Bioenergy from forest fuel from High Hazard Zones (HHZ) to mitigate the threat of wildfires.

Net Energy Metering
1. Bill credit for excess generation exported to grid, compensated at retail rate in real time, & trued-up every 12 months at Default Load Aggregation Point (DLAP), approximately 3-4 cents per kWh
2. Virtual Net Metering (VNM) available to multitenant properties, allocating solar system production credits proportionally to each tenant at percentage of system capacity owned
3. NEM Aggregation (NEMA) allows a customer-generator to aggregate electrical load from multiple meters, & the NEM credits are shared among all property attached or adjacent to the generation facility
4. Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) enables local governments & universities to share generation credits from a system located on one government property with billing accounts on other government properties
5. NEM Fuel Cell (NEMFC) permits fuel cells using non-renewable fuels, but meeting CPUC GHG standard, to receive credits

Green Tariff Shared Renewables (AKA Community Solar)
1. SCE Green Rate (just 7.05 MW)

Energy Efficiency
- Energy Upgrade California
  1. Incentive funds depleted as of 9/29/17; new funds as of 1/18
  2. Home Upgrade Package: up to $3,000
  3. Advanced Home Upgrade Package: up to $5,500
- Other EE Incentives & Rebates
1. Rebates include smart thermostat ($125), air conditioner ($750), variable speed pool pump & motor ($200), evaporative cooler ($400), hybrid electric heat pump water heater ($200), window evaporative cooler ($200)

- Business Energy Advisor
  1. Free consulting service: "Continuous Energy Improvement"
  2. Monitor energy use with "Energy Benchmarking" & "SCE EnergyManager"

- Express Solutions
  1. Upgrades of existing equipment to more efficient options available to all business customers, up to 100% of project’s cost

- Customized Solutions
  1. Tailored equipment upgrades with incentives based on energy use over 12 months, up to 50% of project’s cost

- New Construction
  1. Savings By Design: financial incentives, detailed analysis, & design support for high performance non-residential building design
  2. California Advanced Home Program (oversubscribed in 2016 & closed)

- On-Bill Financing for energy efficient projects: Zero interest & no fees

**Demand Response**
- Demand Response Auction Mechanism (DRAM)
  1. SCE winning bidders in 2018 & 2019 include OhmConnect (60 MW), Enerwise (35 MW), Ecofactor (500 kW), Green Charge (500 kW), and Tesla (340 kW)
  2. 500 kW is minimum size to participate in CAISO Reliability Demand Response Resource project
  3. Prices paid by CAISO for day-ahead market, but in future may be based on real-time prices too
  4. DRAM enables new types of DR (e.g. energy storage) from grid’s edge, and allows grid operators to test performance of an aggregation of a variety of customers and products

- Click-through authorization processes streamlining customers’ ability to authorize utility to share energy use data with 3rd-party DR providers

- Standard DR Programs
  1. Critical Peak Pricing
  2. Agricultural & Pumping Interruptible Program
  3. Automated Demand Response
  4. Permanent Load Shifting
  5. Time-of-Use Base Interruptible Program
  6. Capacity Bidding Program
  7. Demand Bidding Program

**Energy Storage**
- SCE has over 400 MW of energy storage under contract in 2017, but mostly in front of meter and for utility scale

- Preferred Resource Pilot includes 75 MW of battery energy storage as part of 136 MW to meet electricity demand in Orange County with reliability of a power plant, from following developers:
  1. Advanced Microgrid Solutions: 40 MW of DR from energy conservation & battery storage
  2. Convergent: 35 MW of battery storage
3. Hecate: 15 MW of battery storage
4. NextEra: 10 MW of battery storage & 10 MW of DR from energy conservation & battery storage
5. NRG: 10 MW of solar plus battery storage
6. Swell: 5 MW of DR from battery storage, provides and installs storage packages for about 3,000 residential consumers. Combination of lithium-ion battery and software system for the home.

**Electric Vehicles**
- SCE authorized (Phase 1) to build infrastructure for multi-unit dwellings, workplaces, and public interest destinations, with $22 million budget
  1. “Charge Ready” network began in 2017, with 1,500 charging stations
  2. At least 10% of charging stations in disadvantaged communities
- Low Carbon Fuel Standard Rebates for SCE customers using plug-in EVs
- Time-of-use rates for residential & commercial customers with EVs
- Plug-in EV (PEV) Submetering pilot uses energy meters to save on fuel costs and avoid paying for new PEV meter, currently in Phase 2 through 4/18
- Demand Response Pilot: SCE “Smart Charging Pilot”
  1. Customers shift use off-peak in response to incentives & price signals
- Department of Defense Vehicle-to-Grid Pilot
  1. SCE partnering with Los Angeles Air Force Base in pilot allowing EV2G
  2. EVs as storage: charging when prices are low, discharging during supply constraints
  3. SCE will install 34 EVs and hybrids. Project continued through 9/17
- SCE now proposing (Phase 2) $19.45 million on six “priority review” pilots & $553.8 million on a five-year charging infrastructure project
  1. Priority review projects include “make-readies” for cranes, tractors, buses; ride share pilot; residential customers and light duty EVs
  2. Standard review projects include charging infrastructure for medium and heavy duty vehicles (MHDVs) and small pilot for direct current fast chargers (DCFCs)

**San Diego Gas & Electric**

**Distributed Generation**
- Feed-in Tariff
  1. Renewable Market Adjusting Tariff (ReMAT—up to 3 MW)
  2. Bioenergy Market Adjusting Tariff (BioMAT—up to 3 MW)
- Renewable Auction Mechanism (3 MW+)
  1. Streamlines procurement process by:
     - Allowing project bidders to set own price
     - Providing simple standard contract for each utility
     - Expedited regulatory review process
- Bioenergy Renewable Auction Mechanism (BioRAM)
  1. Bioenergy from forest fuel from High Hazard Zones (HHZ) to mitigate the threat of wildfires.
- Net Energy Metering
1. Bill credit for excess generation exported to grid, compensated at retail rate in real time, & trued-up every 12 months at Default Load Aggregation Point (DLAP), approximately 3-4 cents per kWh
2. Virtual Net Metering (VNM) available to multitenant properties, allocating solar system production credits proportionally to each tenant at percentage of system capacity owned
3. NEM Aggregation (NEMA) allows a customer-generator to aggregate electrical load from multiple meters, & the NEM credits are shared among all property attached or adjacent to the generation facility
4. Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) enables local governments & universities to share generation credits from a system located on one government property with billing accounts on other government properties
5. NEM Fuel Cell (NEMFC) permits fuel cells using non-renewable fuels, but meeting CPUC GHG standard, to receive credits
   - Green Tariff Shared Renewables (AKA Community Solar)
     1. SDG&E Green Tariff Program (only 4.3 MW)
     2. California Solar Initiative (now closed)
     3. Self Generation Incentive Program offers rebates to residential, commercial, industrial, government, and non-profit customers for qualifying DG

Energy Efficiency
- Residential Programs
  1. Energy Upgrade California offers energy efficiency assistance & incentives for home improvement
  2. Energy Management: Green Button programs for energy & cost alerts
  3. Rebates: include lighting, washers ($25), electric heat pump & water heaters ($350), gas water heaters ($100), pool pumps ($200), & smart thermostats ($75)
  4. Increase energy efficiency of heating & cooling systems: initial assessment of HVAC and guidance for new installation & retrofits, with rebates up to $1,250
  5. Residential Energy Efficiency Loan Assistance Program
- Business Programs
  1. Instant Lighting Rebates
  2. Other rebates include: foodservice equipment
  3. Business Energy Solutions offers rebates for customers with demand less than 200 kW
  4. On-bill Financing: repay loans via utility bill with no interest or fees
  5. 3rd Party Financing: innovative options with increased access to credit

Demand Response
- Demand Response Auction Mechanism (DRAM)
  1. DRAM contracts with OhmConnect (4 MW), AutoGrid (1.7 MW), Green Charge (1 MW), NRG (6 MW), Stem (1.2 MW)
  2. Contract with OhmConnect is unprecedented aggregated behavioral demand response project, providing electricity from homeowners within 20 minutes, for resource adequacy
- Click-through authorization processes streamlining customers’ ability to authorize utility to share energy use data with 3rd-party DR providers
- Standard DR Programs
1. Base Interruptible Program
2. Capacity Bidding Program
3. Critical Peak Pricing
4. Small Business Real-Time Energy Manager
5. Permanent Load Shifting

Energy Storage
- Sempra Energy (SDG&E parent) partnering with OSIsoft and UC San Diego to pilot DER management software
  1. Includes battery-backed wind farm, solar, EVs, and DR
- SDG&E has over 100 MW of energy storage, but just getting started with distributed energy storage

Electric Vehicles
- SDG&E authorized (Phase 1) to build infrastructure for multi-unit dwellings, workplaces, and public interest destinations, with $45 million budget
  1. “Power Your Drive” network began in 2017, with 3,500 charging stations
  2. At least 10% of charging stations in disadvantaged communities
- Low Carbon Fuel Standard Rebates for SDG&E customers using plug-in EVs
- Time-of-use rates for residential & commercial customers with EVs
- Plug-in EV (PEV) Submetering pilot uses energy meters to save on fuel costs and avoid paying for new PEV meter.
- SDG&E now proposing (Phase 2) six “priority review” projects for $18.19 million and another $225.9 million for residential charging.
  1. Six priority projects include charging infrastructure at San Diego airport and San Diego port, as well as infrastructure and smart charging for a vehicle fleet owner, and numerous Level 2 and direct charge fast chargers.
  2. The “standard review” projects of $225.9 million include extending the previous public charger installation program to 90,000 Level 2 chargers for single-family homes

Microgrid
- Borrego Springs Microgrid
  1. Unbundled utility microgrid, in which distribution assets owned by SDG&E, but DERs are owned by customers
  2. Purpose is to demonstrate “proof-of-concept” for integration of information technologies and DERs to increase grid efficiency and reliability
  3. Partners include Lockheed Martin, IBM, Advanced Energy Storage, Horizon Energy, Oracle, Motorola, Northwest National Labs, and UC San Diego
  4. Total grid capacity of about 4 MW, including 1.8 MWE diesel generators, 500 kW/1500 kWh battery, three 50 kWh batteries, six 4 kW/8kWh energy storage units, 700 kW PV rooftop solar, and 125 residential home area network systems

DER Providers (DERP)
- CAISO’s new market for wholesale distributed energy aggregation
1. Allows DERPs to propose aggregations of 500 kW to 10 MW that can meet day-ahead and hourly energy markets, or faster-responding ancillary services markets.

2. At least four companies applying:
   a. SDG&E: proposed 3-4 MW aggregation of energy storage sites in 2018
   b. Apparent Energy: partnering with Silicon Valley Power and Palo Alto municipal utility for two aggregations of 1-1.5 MW each, in 2017, but business case in SVP territory not feasible
   c. Galt Power: discussing partnership with several entities to aggregate renewables and small-scale storage
   d. Olivine: possible partnership with CCAs, munis, and resource owners
Criteria used to choose among various DER options

Here are the criteria tentatively identified by Peninsula Clean Energy staff:

Proposals would be required to address these criteria:
- Reduces GHG emissions
- Cost effectiveness (to keep ECO plus rates lower than PG&E)
- Number of customers served
- Geographic diversity in San Mateo County communities served
- Supports PCE’s workforce policy (that has multiple sub-criteria including prevailing wage, working with local companies, and more)
- Helps PCE match supply to load, e.g. addresses duck curve
- PCE Implementation Requirements (for example, staff time needed)

Proposals could add points by addressing these criteria:
- Contributes toward goal of creating 20 MW of new local power by 2025
- Contributes toward goal of 100% GHG-free power for 2021
- Contributes toward goal of 100% renewable energy by 2025
- Benefits disadvantaged communities
- Helps inform customers about PCE
- Innovative, scalable, and replicable
- Supports community resilience
- Fills a gap in current utility offerings

Here are the criteria tentatively identified by Silicon Valley Clean Energy staff:

- GHG reduction — directly measurable and attributable carbon reduction (and addressable potential)
- Unit Cost — SVCE unit cost of GHG reductions, after leverage of third party resources
- Time to Value — speed, level and likelihood of achieved customer value
- Grid Performance — improved grid resources and demand alignment to optimize use of clean energy
- Community Engagement — local stakeholder sponsorship, beneficial visibility within the community
- Market Transformation — uniquely addresses critical need(s) in development of essential new markets
Appendix

Silicon Valley Clean Energy’s suggested local programs using the above criteria:

- Greenhouse Gas Inventory — Collect GHG data (energy and transportation emissions) in service area to document 2015 baseline and establish targets for further reductions.

- Connected Homes Energy and Demand Management — Reduce GHG emissions through home energy management by curtailing electric load during summer peaks and reducing gas heating during winter to reduce natural gas consumption. Using rebates and automated home thermostats.

- Commercial Demand Management — Mirror existing PG&E demand response program, called Peak Day Pricing, including penalties for using more electricity on peak event days and rewards for minimizing usage when grid is congested.

- Multiple Unit Dwelling (MUD)/Workplace EV Charging Assistance — Implement 100 charging points at ten sites vetted for meter location, parking location, ADA, and feasibility.

- EV Pilot Program — Work with dealers to provide rebates for EVs and develop a user-friendly platform for customers to purchase or lease EVs.

- EV Seed Program — Place ten used EVs plus charging stations and ride share app in mobile home parks and MUDs across SVCE’s service area.

- Heat Pump Water Heaters — Increase the adoption of HPWHs by providing cash incentives and technical guidance to developers and installers. (Focus on new construction?)

- eBike Share Pilot — Collaborate with manufacturers and bike share companies on this. Locate bike sharing/charge points on corporate campuses.

- Commercial vs. Utility Scale Battery Storage Study — Commission a study to compare battery storage facilities at large commercial customers versus a utility-scale storage system.

- Direct Access Local Customer Pilot — Attract Direct Access customers to SVCE by offering comparable rates but a higher clean energy content.

- Model Ordinances — Draft template ordinances focused on electrification and decarbonization for SVCE’s member communities to more easily adopt.

- Decarbonization Workshop Series — Four times per year on new technologies to improve energy efficiency, demand management, and fuel switching, etc.

- Residential Education Program — Classes on energy and energy saving.
TO: Honorable Peninsula Clean Energy Authority (PCE) Board of Directors

FROM: Kirsten Andrews-Schwind, Communications and Outreach Manager, and Leslie Brown, Manager of Customer Care

SUBJECT: Update on PCE’s November Marketing and Outreach Activities

BACKGROUND: The marketing team has been busy doing outreach, managing our online presence, responding to customer requests, and preparing future campaigns.
DISCUSSION:

Recent and Upcoming Outreach Events

PCE’s outreach team continues to expand its activities, including more presentations in Spanish. If you are aware of an event that would benefit from a PCE presence, please let us know.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-Dec</td>
<td>Tabling at Frosty Fest in Daly City</td>
</tr>
<tr>
<td>17-Dec</td>
<td>Tabling at Hanukkah Event in Redwood City</td>
</tr>
<tr>
<td>4-Jan</td>
<td>Presentation at EPA Rotary Club</td>
</tr>
<tr>
<td>9-Jan</td>
<td>Presentation in Spanish at Moonbridge Apartments in Half Moon Bay</td>
</tr>
<tr>
<td>9-Jan</td>
<td>Networking at San Bruno Chamber annual meeting Tuesday 9th</td>
</tr>
<tr>
<td>10-Jan</td>
<td>Presentation at Puente de la Costa Sur staff meeting in Pescadero</td>
</tr>
<tr>
<td>11-Jan</td>
<td>Half Moon Bay Community Presentation</td>
</tr>
<tr>
<td>18-Jan</td>
<td>Networking at Burlingame Chamber annual meeting</td>
</tr>
<tr>
<td>18-Jan</td>
<td>Meeting with South San Francisco Chamber</td>
</tr>
<tr>
<td>18-Jan</td>
<td>Networking at Pacifica Chamber annual meeting</td>
</tr>
<tr>
<td>20-Jan</td>
<td>Tabling at Senior Fair in Millbrae</td>
</tr>
<tr>
<td>25-Jan</td>
<td>Presentation at Samaritan House</td>
</tr>
<tr>
<td>26-Jan</td>
<td>Networking at San Mateo Chamber State of the City Address Breakfast</td>
</tr>
<tr>
<td>3-Feb</td>
<td>Tabling at Daly City Farmers Market*</td>
</tr>
<tr>
<td>8-Feb</td>
<td>Networking at South San Francisco Chamber New Members Breakfast</td>
</tr>
<tr>
<td>13-Feb</td>
<td>Networking at Millbrae Chamber of Commerce Business Awards</td>
</tr>
<tr>
<td>13-Feb</td>
<td>Networking at Pacifica Chamber of Commerce Valentine's Mixer</td>
</tr>
<tr>
<td>17-Feb</td>
<td>Tabling at Senior Fair in San Carlos</td>
</tr>
<tr>
<td>18-Feb</td>
<td>Tabling at Foster City Lunar New Year Celebration</td>
</tr>
<tr>
<td>21-Feb</td>
<td>PCE Networking event with Burlingame Chamber</td>
</tr>
<tr>
<td>24-Feb</td>
<td>Tabling at Redwood City Lunar New Year</td>
</tr>
<tr>
<td>9-Mar</td>
<td>Networking at Millbrae Lunar New Year*</td>
</tr>
<tr>
<td>15-Mar</td>
<td>Presentation at Career Day, Taylor Middle School in Millbrae</td>
</tr>
<tr>
<td>16-Mar</td>
<td>Tabling at South San Francisco Senior Fair*</td>
</tr>
<tr>
<td>23-Mar</td>
<td>Tabling at Belmont Senior Fair*</td>
</tr>
<tr>
<td>27-Mar</td>
<td>Hold for PCE Volunteer Appreciation and Earth Day Outreach Training*</td>
</tr>
<tr>
<td>29-Mar</td>
<td>Sustainable San Mateo County Award Ceremony, College of San Mateo</td>
</tr>
<tr>
<td>14-Apr</td>
<td>Tabling at Marine Science Earth Day*</td>
</tr>
<tr>
<td>21-Apr</td>
<td>Pacifica Earth Day</td>
</tr>
</tbody>
</table>

*Pending registration
Enrollment Statistics

Weekly opt-outs have continued to stay below our “steady state” goal of <35 opt-outs per week for 12 weeks in a row. Four cities had “0” opt-outs during December: Brisbane, Colma, Portola Valley, and Woodside. Our overall opt-out rate is 2.22%

<table>
<thead>
<tr>
<th>CITY</th>
<th>Eligible Accts</th>
<th>Total</th>
<th>TOTAL OPT OUT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORTOLA VALLEY INC</td>
<td>1,675</td>
<td>91</td>
<td>5.43%</td>
</tr>
<tr>
<td>SAN BRUNO INC</td>
<td>16,338</td>
<td>527</td>
<td>3.23%</td>
</tr>
<tr>
<td>PACIFICA INC</td>
<td>15,391</td>
<td>444</td>
<td>2.88%</td>
</tr>
<tr>
<td>SO SAN FRANCISCO INC</td>
<td>24,688</td>
<td>711</td>
<td>2.88%</td>
</tr>
<tr>
<td>DALY CITY INC</td>
<td>33,806</td>
<td>866</td>
<td>2.56%</td>
</tr>
<tr>
<td>HALF MOON BAY INC</td>
<td>4,926</td>
<td>120</td>
<td>2.44%</td>
</tr>
<tr>
<td>MILLBRAE INC</td>
<td>9,338</td>
<td>223</td>
<td>2.39%</td>
</tr>
<tr>
<td>UNINC SAN MATEO CO</td>
<td>24,366</td>
<td>570</td>
<td>2.34%</td>
</tr>
<tr>
<td>SAN CARLOS INC</td>
<td>14,358</td>
<td>303</td>
<td>2.11%</td>
</tr>
<tr>
<td>BELMONT INC</td>
<td>11,827</td>
<td>249</td>
<td>2.11%</td>
</tr>
<tr>
<td>SAN MATEO INC</td>
<td>43,748</td>
<td>901</td>
<td>2.06%</td>
</tr>
<tr>
<td>BRISBANE INC</td>
<td>2,471</td>
<td>48</td>
<td>1.94%</td>
</tr>
<tr>
<td>HILLSBOROUGH INC</td>
<td>4,033</td>
<td>76</td>
<td>1.88%</td>
</tr>
<tr>
<td>EAST PALO ALTO INC</td>
<td>7,753</td>
<td>144</td>
<td>1.86%</td>
</tr>
<tr>
<td>BURLINGAME INC</td>
<td>15,361</td>
<td>271</td>
<td>1.76%</td>
</tr>
<tr>
<td>REDWOOD CITY INC</td>
<td>34,481</td>
<td>595</td>
<td>1.73%</td>
</tr>
<tr>
<td>FOSTER CITY INC</td>
<td>14,571</td>
<td>235</td>
<td>1.61%</td>
</tr>
<tr>
<td>WOODSIDE INC</td>
<td>2,273</td>
<td>36</td>
<td>1.58%</td>
</tr>
<tr>
<td>ATHERTON INC</td>
<td>2,689</td>
<td>41</td>
<td>1.52%</td>
</tr>
<tr>
<td>COLMA INC</td>
<td>789</td>
<td></td>
<td>1.39%</td>
</tr>
<tr>
<td>MENLO PARK INC</td>
<td>15,481</td>
<td>202</td>
<td>1.30%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>300,363</td>
<td>6,664</td>
<td>2.22%</td>
</tr>
</tbody>
</table>

There are now over 4,800 accounts in ECO100, with a total number of ECO100 cities at 14 (plus the County).
Web and Social Media

PCE has chosen not to renew its contract with communications vendor CirclePoint, which until now managed our website. In December we transferred our website to a DNS owned and managed directly by PCE, a process which went smoothly. PCE now also owns “.org” and “.net” domain names in addition to “.com”. The website will redirect from any of those in the URL. Website maintenance and updates are now being accomplished in-house by PCE’s Outreach Fellow Charlsie Chang with assistance from Marketing Associate TJ Carter.

Thank you again to board members, city staff, and community supporters who share PCE’s social media posts, which is a big help in getting the word out. PCE’s Twitter account garnered more than 15,300 views from early December to early January.

Staffing

The marketing team is happy to announce that we are bringing on two new members of our team:

- Michael Totah, Key Accounts Executive
- Mary Gamboa of ThreeInk Creative, Creative Content Designer (contractor)
Certifications

Green-e
PCE’s ECO100 product is now Green-e certified (as of January 1, 2018).

Environmental Protection Agency Green Power Partnership (GPP)
The GPP is a voluntary program supporting the increased use of green power to reduce the environmental impacts associated with conventional electricity use. Partnership-eligible organizations include:
- Publicly- and privately-held corporations
- Federal, state, and local government agencies
- Nonprofits
- Educational institutions

ECO100 is Green-e certified starting on January 1, 2018 which presents an excellent opportunity for each of the 14 communities that have opted-up to ECO100 to be recognized as a Green Power Community. The EPA GPP strongly recommends buying green power that has been third-party certified and verified to nationally-accepted standards for product quality and content, which Green-e satisfies.

PCE Community Outreach Small Grant Pilot Proposal

Peninsula Clean Energy Community Outreach Small Grant Pilot Program will launch applications in January 2018.

The Pilot will fund nonprofits in San Mateo County to partner with PCE to increase our communication capacity with key residential customers. The primary goals of the pilot small grant program are to increase customer familiarity with PCE and how it appears on energy bills among key price-sensitive and difficult-to-reach customers in San Mateo County, and begin to build long-term relationships with these communities for future collaboration.

The marketing team proposes to re-allocate $50K from our existing FY 2017-2018 marketing budget to fund this pilot. This would be offered in small grants of up to $10K for pilot outreach efforts to be implemented between February and June 2018. This short timeline ensures quick action to help PCE communicate about rate changes and Earth Day, and to align with our fiscal year. If successful, another grant cycle may be launched in FY 2018-2019, potentially for a longer period.
PENINSULA CLEAN ENERGY AUTHORITY
Board Correspondence

DATE: January 19, 2018
BOARD MEETING DATE: January 25, 2018
SPECIAL NOTICE/HEARING: None
VOTE REQUIRED: None

TO: Honorable Peninsula Clean Energy Authority (PCE) Board of Directors
FROM: Leslie Brown, Manager of Customer Care
SUBJECT: Update on PCE Customer Survey and Market Research Results

BACKGROUND:
PCE Staff contracted with Nichols Research to perform telephone surveys of 600 current PCE customers and 50 opt-out customers throughout the County to measure general PCE brand awareness customer insights. Calls were conducted during the end of November and beginning of December of 2017.

Some of the key highlights from the research were as follows:

• When the caller initially asked the customer “When you think of energy companies from whom you could purchase electricity in your area, which companies come to mind?”, only 3% of customers could name PCE; 98% named PG&E; 2% said didn’t know.
• 56% of customers were not aware that they were automatically enrolled in PCE.
• When the caller asked the customer, “Had you heard of Peninsula Clean Energy before I mentioned it just now?”, 41% of current customers said they had heard of PCE.
• A majority of customers who were familiar with PCE initially indicated that they did not know enough about PCE to have an opinion. However, if they were read a description of PCE, most shifted from “don’t know” to viewing it favorably or very favorably.
• Of those with an opinion of PCE, 77% were favorable.
DISCUSSION:

A comprehensive PowerPoint presentation with additional findings will be presented at the Board Meeting.
TO: Honorable Peninsula Clean Energy Authority (PCE) Board of Directors

FROM: Joseph Wiedman, Director of Regulatory and Legislative Affairs

SUBJECT: Update on PCE’s December and January Regulatory and Legislative Activities

BACKGROUND:

The end of December and early January were very busy with a number developments that are impactful to PCE and CCAs coming to the fore. As discussed in more detail below, PCE, as part of various coalitions and on its own behalf, submitted seven pleadings at the California Public Utilities Commission (CPUC). PCE staff attended seven other stakeholder meetings during this period also.
DISCUSSION:

Regulatory Outreach

On Friday, December 15th, Joe Wiedman met with Stephanie Chen, Energy & Telecommunications Director at the Greenlining Institute, to introduce PCE, discuss the growth of CCAs, and discuss ideas around serving disadvantaged communities and opportunities to work together on areas of common interest.

On Friday, January 5th, Joe Wiedman attended an event at the Emerson Collective in Palo Alto to discuss ways energy and workforce development and training policies can better serve disadvantaged communities. A wide variety of stakeholders including politicians, various state-level agency Commissioners and staff, and nongovernmental organizations attended the event.

On January 8th, Joe Wiedman, and members of the Smart Charging Coalition, met with staff for CEC Commissioners Scott and Hochschild to discuss our view that CCAs, as LSEs, should receive at least some portion of LCFS credits given we are supplying the actual energy that charges electric vehicles in our service territories. SCP and PCE also generally updated staff on CCAs efforts to support for vehicle and building electrification.

On Friday, January 12th, Joe Wiedman met with Danny Kennedy, Managing Director at the California Clean Energy Fund (CalCEF) to introduce PCE and discuss opportunities to collaborate in the future. CalCEF is an state-supported organization that supports early stage start-ups in the cleantech space.

On Tuesday, January 16th, Jan Pepper, Joe Wiedman, Jeremy Waen, John Keener, Jeff Aalfs, Daniel Yost, and Carole Groom met with CPUC Commissioner Rechtschaffen and members of his staff to provide the Commissioner with an update on PCE’s first year and our future activities.

Regulatory Advocacy

R.17-06-026 – PCIA Order Instituting Rulemaking – On January 16th and 17th, the CPUC hosted two days of workshops to discuss ideas around reforming the PCIA or other ideas/solutions to exit fees based on the work that various parties have done through Winter 2017. A wide variety of parties presented ideas to address the topic. Generally, the investor-owned utilities focused on continuing to advocate for the Portfolio Allocation Mechanism with no significant changes. Other parties, including CalCCA, discussed ideas on 1) how to address costs overall through securitization and other methods; 2) opportunities to bring resources from the IOU portfolios to load-serving entities that are serving load and need resources; and 3) ideas around making any future exit fee more accurate and stable. The conversation was extremely productive. Next steps are a status update to the administrative law judge regarding the need for evidentiary hearings. Testimony in the docket is due March 12, 2018.

R.16-02-007 – Integrated Resource Plans (IRP) - On December 18th, the Commission
released a Proposed Decision in the IRP docket. The Proposed Decision is very problematic for CCAs on a number of fronts: (1) it broadly rejects CalCCA’s arguments concerning the CPUC’s oversight of CCA IRPs and instead finds that the Commission has broad jurisdiction to oversee planning related to the IRP and if necessary order procurement within the IRP context for renewables integration; (2) it requires specific procedures and policies as part of the IRP process – some of which do not encompass PCE as we are a new CCA; and (3) it adopts PG&E’s net clean short proposal which was advanced at the CEC regarding AB 1110 implementation. If adopted, the net clean short proposal would drastically undermine the use of PCC2 resources for RPS compliance by attributing greenhouse gas emissions to those resources based on systemwide greenhouse gas estimates. On January 17th, PCE submitted comments contesting each of these issues, which are attached to this report. CalCCA filed comments aggressively contesting each of these issues also. Reply comments were due January 22nd.

A.16-08-006 – Diablo Canyon Closure Application – On January 11th, the CPUC approved a decision authorizing the closure of Diablo Canyon. All procurement issues are reserved for discussion in the Integrated Resource Plan docket. The decision closes the docket. The final written decision, reflecting the Commission’s vote, has not been released.

A.17-06-005 – PG&E Energy Resource and Recovery Account (ERRA) Docket – On January 11th, the CPUC approved a decision approving PG&E’s 2018 ERRA Application with only very modest changes to the application despite demonstrated flaws in PG&E’s application based on analysis of the application by Sonoma Clean Power (SCP) with support from PCE. On January 2nd, PCE and SCP filed opening comments on the proposed decision discussing numerous evidentiary and due process issues with the proposed decision. On January 5th, PCE and SCP filed reply comments on the proposed decision responding to PG&E’s comments in support of the proposed decision and providing guidance on how to move forward given the docket is far behind schedule. We anticipate PG&E filing an advice letter on February 15th with proposed rates and the PUC approving those rates by March 1st.

Resolution E-4907 – (no docket) – On December 8th, the CPUC issued a draft resolution proposing unilateral changes to the process of review for CCA implementation plans and processes to avoid an asserted cost shift from departing CCA load due to gaps in procurement of resource adequacy. The upshot of the proposed changes is that CCAs who are currently forming or expanding, and therefore submitting implementation plans, would be paused for about a year. Going forward, implementation plans would only be able to be submitted once per year. CalCCA has been very active on the topic to coordinate informal and formal responses to the resolution. On January 11th, numerous parties, including CalCCA, filed comments on the resolution pointing out procedural and substantive due process concerns with the resolution and various other legal and factual infirmities. The only parties who generally supported the resolution were the three IOUs and California Utility Employees. Reply comments were filed on January 18th. The CPUC is set to rule on the resolution at the Commission’s February 8th Voting Meeting.
Resolution E-4909 – (no docket) – On December 8th, the CPUC issued a draft resolution ordering PG&E to procure resources to replace three reliability-must-run contracts between Calpine and the ISO. The contracts run through 2019 and the resources must be online to avoid an extension of the contracts. The resolution does not address CCA procurement. CCA Parties (including PCE) filed comments on the Resolution on December 29th arguing that the resolution was defective insofar as it did not establish a clear need for the resources and did provide sufficient guidance for PG&E to engage in the procurement. CCA Parties’ comments also argued that CCAs should be given an opportunity to procure resources if a need is found for such resources. On January 11th, the PUC approved the resolution with virtually no changes. The final resolution did not address any of the CCA Parties’ concerns.

Implementation of AB 2868 – (no docket) – AB 2868 authorizes the IOUs to procure up to 500 MW of energy storage in addition to the 1325 MW already authorized for procurement to accelerate deployment of energy storage in CA. The statute requires that any programs submitted by the IOUs do not harm the storage market. Through this fall, the PUC has held a series of three workshops to discuss the legislation and IOU’s plans coming out of the legislation. The CCAs have attended all of the workshops advocating for the PUC to take formal comments on the legislation so that any applications submitted by the IOUs in 2018 can be informed by findings on a variety of topics such as 1. what does the market need to "accelerate" deployment (i.e. what are the barriers to storage deployment), 2. what types of activities would impair the market, 3. role of and coordination with CCAs, etc. Commission staff was sympathetic to CCA concerns. However, staff decided that those issues should be dealt with once applications are filed by the IOUs on any storage they seek to procure based on the statute. On January 11th, the PUC closed the docket where discussions regarding implementation of AB 2868 was being discussed via a workshop process. Applications are due March 1st.

Legislative Advocacy

On December 12th, Jan Pepper, Joe Wiedman, Rick DeGolia, Wayne Lee, and Pradeep Gupta met with Assemblymember Kevin Mullin, District 22, to provide the Assemblymember with an update on PCE’s progress and to discuss the upcoming legislative session.

On December 14th, Jan Pepper, Joe Wiedman, John Keener, Jeff Aalfs, and Wayne Lee met with Assemblymember Phil Ting, District 19, to provide the Assemblymember with an update on PCE’s progress and to discuss the upcoming legislative session.

On December 14th, Jan Pepper, Joe Wiedman, John Keener, Jeff Aalfs, Wayne Lee, and Pradeep Gupta, met with Senator Scott Wiener, District 11, to provide the Senator with an update on PCE’s progress and to discuss the upcoming legislative session.
FISCAL IMPACT:
Not applicable.
BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop
an Electricity Integrated Resource
Planning Framework and to Coordinate
and Refine Long-Term Procurement
Planning Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

COMMENTS OF PENINSULA CLEAN ENERGY AUTHORITY
ON PROPOSED DECISION SETTING REQUIREMENTS FOR LOAD SERVING
ENTITIES FILING INTEGRATED RESOURCE PLANS

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January 17, 2018

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements. Rulemaking 16-02-007 (Filed February 11, 2016)

COMMENTS OF PENINSULA CLEAN ENERGY AUTHORITY ON PROPOSED DECISION SETTING REQUIREMENTS FOR LOAD SERVING ENTITIES FILING INTEGRATED RESOURCE PLANS

I. INTRODUCTION


PCE, a joint powers authority, is the fifth Community Choice Aggregator (“CCA”) program formed in California and supplies electricity to almost 300,000 customer accounts, serving a population of over 765,000 in the County of San Mateo and all of the twenty incorporated cities therein. Each of the twenty unincorporated cities and the County of San Mateo voted unanimously to join PCE as a means to combat climate change in partnership with the State. This type of voluntary action is specifically envisioned within Assembly Bill (“AB”) 32’s framework. PCE commenced service in October 2016 and completed rollout to its customer base in April 2017. PCE’s default product is 50% renewable and 80% greenhouse gas (“GHG”) -free and priced 5% below Pacific Gas and Electric Company’s (“PG&E’s”) generation rate; with PCE’s low opt-out rate of approximately 2%, San Mateo County residents and businesses are not only saving money on their electricity bills, but are over 12 years ahead of the state’s goal to procure 50% eligible renewable energy by 2030.
To meet local climate action goals, PCE’s Board of Directors has implemented a number of strategic goals that directly impact PCE’s procurement. Among those goals are to design a portfolio that (1) is 100% GHG-free by 2021, (2) sources from 100% Renewables Portfolio Standard (“RPS”)-eligible energy by 2025, and (3) creates a minimum of 20 MW of new local power by 2025. Rather than seeing the state’s GHG goals as a ceiling to meet, PCE views the state’s GHG goals as a floor to exceed; PCE’s goals to be 100% GHG-free by 2021 and 100% renewable by 2025 far exceed the state’s timetable. PCE’s recently completed integrated resource plan (“IRP”) contains a number of additional procurement goals and policies, including goals for additionality, contract term length, project size and ownership, resource and technology mix, and location and procurement methods. Collectively, these goals and policies are designed to ensure PCE develops a cost-effective, diverse, and balanced portfolio while also supporting aggressive decarbonization based on the local preferences of communities in the County of San Mateo as expressed through its elected Board of Directors. PCE’s IRP, approved by its Board of Directors, achieves the benefits and performance characteristics consistent with the eight criteria of paragraph (1) of subdivision (a) of Public Utilities Code Section 454.52.

In addition to these procurement-related goals and policies, PCE also strives to offer rates that are at parity or lower than PG&E’s rates, demonstrate economic benefits to the County of San Mateo and region, prioritize local workforce development and training, maintain a commitment to environmental justice, and implement innovative programs that further its drive to reduce GHG emissions through transportation and building electrification and other means. All of these goals and policies set by its Board of Directors will be reflected in PCE’s

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procurement and programs going forward. Because each Load Serving Entity (“LSE”) will have
diverse but often aligned priorities for the customers and regions they serve, it is particularly
important that the Commission’s IRP process maintain the flexibility necessary to accommodate
the diverse goals and policies of each LSE while remaining focused on assisting all LSEs in
planning for an optimized grid. Additionally, it is critical that the Commission’s IRP process
recognize and give full credit to entities that have taken early action to meet the state’s goals, and
not inadvertently penalize such entities like PCE.

Based on PCE’s review of the Proposed Decision, the comments below focus on four
main issues. First, the Proposed Decision should be revised to acknowledge and include PCE as
an operational CCA and to recognize its unique attributes. Second, the Proposed Decision
should be revised to recognize that while the Commission’s jurisdiction and authority over the
CCA IRPs is much more meaningful than to be characterized as just a “rubber stamp,”3 the
Commission’s jurisdiction and authority does not extend as far as the Proposed Decision
recommends. Third, the Proposed Decision should be revised to reject the Clean Net Short
method of calculating GHG emissions intensity because it contradicts California law and is
impracticable. Finally, the Proposed Decision should be revised to include language regarding
the potential of the IRP process for minimizing or eliminating cost allocation mechanism
(“CAM”) procurement. PCE’s proposed revisions to the Findings of Fact, Conclusions of Law,
and Ordering Paragraphs are included in Appendix A.

II. THE PROPOSED DECISION SHOULD NOT OVERLOOK PCE AS AN
OPERATIONAL LSE AND PCE’S UNIQUE ATTRIBUTES

PCE appreciates the enormous collective effort over the last 18 months that has gone into
producing the Proposed Decision. Unfortunately, the Proposed Decision appears to consistently

3 Proposed Decision, at 21.
overlook PCE as an operational CCA and does not include it in any of the LSE-specific tables or findings. For example, the Proposed Decision fails to calculate an individual LSE-specific GHG emissions benchmark for PCE to use as an alternative to the GHG Planning Price in developing its IRP.\(^4\) PCE is working with Commission staff to provide them with information necessary to include PCE in relevant LSE-related charts and figures. Accordingly, PCE requests that the Commission revise the Proposed Decision to appropriately include PCE among all of the other LSEs with its LSE-specific tables and findings, including by calculating a specific GHG emissions benchmark for PCE.

In addition, the Proposed Decision should be revised to be more flexible and allow PCE to address PCE’s unique attributes within the overall IRP process. The Proposed Decision does currently provide the flexibility to allow PCE to address additional disadvantaged communities that PCE identifies in the County of San Mateo. The Proposed Decision defines disadvantaged communities as those that score at or above the 75\(^{th}\) percentile in the CalEPA’s CalEnviroScreen 3.0 on a statewide basis, but also importantly recognizes that “LSEs may choose to address communities they are concerned about beyond those included in this definition [but are not required to do so].”\(^5\) The County of San Mateo has developed a Community Vulnerability Index ("CVI") as a granular and County-specific means of identifying vulnerable communities within San Mateo County due to intrastate variations in cost of living and other factors.\(^6\) The current flexibility of the Proposed Decision with regard to addressing disadvantaged communities will allow PCE to use the CVI to identify a more expansive set of communities than would be

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4. See Proposed Decision, at 103 (Table 7. Load Projections and GHG Emissions Benchmarks by LSE); Attachment A, at 5, Table B.
5. Proposed Decision, at 55.
identified by CalEnviroScreen 3.0 and better develop programs to assist the disadvantaged communities in San Mateo County.

However, other aspects of the Proposed Decision must be revised to ensure that PCE can address PCE’s unique attributes within the overall IRP process. First, section 3(b)(ii) of the “Standard LSE Plan” included in Attachment A discusses Cost and Rate Analysis. In the section labeled “All LSEs”, the first sentence states: “In addition to the above specifications for IOUs, all LSEs …” and implies that the requirements discussed in that section apply to CCAs. The Commission does not have jurisdiction over the costs or rates of CCA service. Thus, applying the information requested in Section 3(b)(ii) to CCAs is not consistent with the law. The Proposed Decision should be accordingly revised to reflect PCE’s statutory authority to solely determine the costs and rates of its CCA service.

Second, the “Standard LSE Plan” included in Attachment A appears to be largely developed with the state’s three large investor-owned utilities (“IOUs”) in mind. The Commission needs to define a process that clarifies, following issuance of a final decision, how non-IOU LSEs can deviate from the “Standard LSE Plan” where necessary because requested data is unavailable or unexpected variations occur. For example, certain forms in Attachment A ask for contract data that assumes LSEs use only resource-specific contracts. However, PCE has several short-term interim contracts that are not resource-specific and use a suite of resources to meet PCE’s load. As a result, PCE does not have resource-specific data to provide in response to the data requests within Attachment A. To address this and similar concerns regarding the development of LSE-specific plans that can be addressed following the issuance of a final

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8 See Decision 05-12-041, mimeo at 3–5 (describing the Commission’s limited jurisdiction over certain CCA matters, which does not include jurisdiction over the costs or rates of CCA service).
decision, the Commission should plan a series of workshops for all LSEs to raise additional questions related to the development of LSE-specific IRPs.

III. BOTH THE COMMISSION AND LOCAL CCA GOVERNING BOARDS HAVE MEANINGFUL, BUT DISTINCT, ROLES TO PLAY IN THE IRP PROCESS FOR CCAS

The Proposed Decision summarizes CCA arguments regarding the Commission’s jurisdiction and authority over a CCA’s IRP as reducing the Commission’s jurisdiction and authority “to only a rubber stamp.”9 Further, the Proposed Decision characterizes the CCAs as attempting to “subjugate the Commission’s authority to that of the CCA governing boards.”10 However, recognizing the important statutory role that CCA governing boards have regarding procurement and in the IRP process neither subjugates the Commission’s authority to that of an individual CCA governing board, nor reduces the Commission’s role to that of “only a rubber stamp.” The Commission has significant authority to affect CCA planning and procurement activities through its statutorily-defined role to ensure that the continued development of the entire California electric system is coordinated and efficient.

Similar to a municipal utility, the CCA governing board alone directs a CCA’s actual procurement activities, except in limited circumstances expressly authorized in statute.11 The Proposed Decision should be revised to recognize how the distinct authority of the Commission and the CCA governing boards complement one another to ensure that the overall IRP process achieves its intended result — “to ensure a safe, reliable and cost-effective electricity supply in California”12 — while respecting that only an individual CCA governing board has the authority to direct an individual CCA’s procurement. Recognizing that the CCA governing board directs a

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9 Proposed Decision, at 21.
10 Id., at 22.
11 See Public Utilities Code section 366.2(a)(5).
12 Order Instituting Rulemaking, R.16-02-007, at 2 (Filed February 11, 2016).

4815-8615-4330v.1 0108287-000003
CCA’s procurement activities and harmonizing Commission activities with that reality does not diminish the Commission’s role in effectuating State policy. Rather, it clarifies the respective activities of each regulatory body and, thereby, strengthens State efforts to decarbonize.

**A. Section 454.51 Provides the Commission With the Means to Impact CCA Planning and Procurement, But Does Not Provide the Commission With Authority to Direct CCA Procurement**

Section 454.51(a) provides the Commission with the directive to “[i]dentify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner.” This directive is aimed at ensuring the collective portfolio of resources of all LSEs within the State meets this goal. If any gaps must be filled after the Commission’s analysis of the proposed collective portfolio of resources within the State of all LSEs, section 454.51(b) provides the Commission with the authority to fill that gap.

Specifically, under section 454.51(b), the Commission may direct an electrical corporation (i.e., those LSEs over which the Commission has specific procurement authority, which do not include CCAs) to provide a strategy to procure the resources needed to fill any gap the Commission identifies. Sections 454.51(c) and (e) then provide the Commission with the authority to allocate the appropriate amount of the costs associated with filling any identified gap to the individual CCAs that contributed to creating the gap; however, in lieu of paying those allocated costs, section 454.51(d) allows an individual CCA to self-supply (i.e., procure on its own) its portion of the gap, rather than accept an allocation of costs associated with Commission-directed procurement by electrical corporations to fill the gap.

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13 All further statutory references in these comments are to the Public Utilities Code unless otherwise specified.
While nothing in section 454.51 provides the Commission with any authority to specifically direct procurement by a CCA, the Commission’s review of CCA contributions to the collective portfolio of resources within the State through its certification of CCA IRPs provides the means for the Commission to safeguard that the CCAs do their part to ensure the State has the diverse and balanced portfolio of resources needed.

B. **Section 454.52 Sets Up a Process to Allow the Commission to Meet its Section 454.51 Goals, But Does Not Provide the Commission with Procurement Authority Over CCAs**

To determine if individual LSE portfolios, when aggregated, will collectively meet the State-wide goal identified in section 454.51, the Commission must receive all of the individual LSE IRPs to analyze the collective result. Section 454.52 provides the process by which the Commission receives and reviews each individual LSE IRP. Through the certification process in section 454.52(b)(3), the Commission may determine (i) that an individual CCA IRP is deficient;¹⁴ (ii) that this deficiency will cause a gap in the resources needed for the State which must be filled, and (iii) that the costs of filling such gap will (under section 454.51) either be allocated to the individual CCA or the CCA may devise a self-supply strategy to fill its portion of the gap. However, the certification process does not give the Commission the authority to approve or disapprove a CCA IRP because having the ability to approve or disapprove a CCA IRP would mean the Commission has the authority to direct CCA procurement.

Section 366.2(a)(5) specifies that “[a] community choice aggregator shall be solely responsible for all generation procurement activities on behalf of the community choice

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¹⁴ The Legislature also recently added section 454.54 which requires each LSE’s IRP to achieve three goals: (1) “contribute to a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy resources in a cost-effective manner,” (2) “meet[] the emissions reduction targets for greenhouse gases described in [Section 454.52(a)(1)(A)]” and (3) “prevent[] cost shifting among load-serving entities.” If a CCA IRP fails to achieve these goals, the Commission may deem it deficient. Similarly, the CCA governing board should not approve it.
aggregator’s customers, except where other generation procurement arrangements are expressly authorized by statute.” Nothing in sections 454.51 or 454.52 directs CCA procurement. Since a CCA’s IRP is equivalent to its procurement plan, the authority to approve or reject a CCA IRP would give the Commission the ability to direct the CCA’s procurement activities on behalf of a CCA’s customers and contravene section 366.2(a)(5).

Section 454.52(b)(1) does direct that “[e]ach load-serving entity shall prepare and file an integrated resource plan… on a time schedule directed by the commission and subject to commission review.” However, specific only to CCAs, section 454.52(b)(3) qualifies what the Commission’s “review” will entail for CCAs. Specifically, section 454.52(b)(3) requires that while the CCA IRP plan “[is] submitted to its governing board for approval”, the CCA IRP plan must be “provided to the commission for certification.” (emphasis added). Under the rules of statutory construction, if a more specific clause overlaps with a broader one, then the specific one should control.15 Accordingly, section 454.52(b)(3) explicitly designates the CCA governing board as the sole entity that will approve or reject a CCA IRP.

While the certification process specified in section 454.52(b)(3) does not provide the Commission with approval authority over the IRP, lack of approval authority does not somehow render the Commission into a rubber stamp. Instead, the certification process preserves the autonomy of a CCA and its governing board to choose to not alter its procurement activities or its IRP16 and instead accept the cost allocation imposed by the Commission.

15 See Fourco Glass Co. v. Transmirra Products Corp., 353 U.S. 222, 228 (1957) (“However inclusive may be the general language of a statute, it will not be held to apply to a matter specifically dealt with in another part of the same enactment.”)

16 Importantly, section 454.52(b)(3)(A) explicitly requires that the CCA governing board approve an IRP plan that is consistent with the same goals set forth in section 454.52(a)(1) that are used in the Commission’s certification process. Thus, it is highly unlikely that the Commission would find an IRP that was approved by a CCA governing board to be deficient. But as stated above, the Commission does
The Legislature explicitly created the distinction between a CCA governing board having approval authority versus the Commission only having certification authority to preserve the sole procurement authority of the CCA governing board under section 366.2. The Commission should recognize this Legislative requirement. Despite its inability to direct CCA procurement under sections 454.51 or 454.52, the Commission still has significant ability to impact a CCA’s procurement activities by ensuring that the State meets its reliability and renewable integration goals under section 454.51. The Proposed Decision should be revised to recognize that the authority of the Commission and the CCA governing boards complement one another in the IRP process.

IV. **THE COMMISSION SHOULD REJECT THE CLEAN NET SHORT METHOD FOR CALCULATING GHG EMISSIONS INTENSITY BECAUSE IT IS BOTH INCONSISTENT WITH CALIFORNIA LAW AND IMPRACTICAL TO IMPLEMENT**

The Proposed Decision would adopt the Clean Net Short (“CNS”) method that assigns system-wide GHG emissions, calculated on an hourly basis, to individual LSEs. The Commission should reject the CNS method because it contradicts California law and is impractical.

*First*, adoption of the CNS method by the Commission would improperly usurp the statutory authority of the California Energy Commission (“CEC”), in consultation with the California Air Resources Board (“CARB”), to set the GHG emissions intensity calculation methodology under Assembly Bill (“AB”) 1110. The CEC has an open rulemaking in which have the authority to make such a determination and take appropriate actions to meet its statutory role to ensure that the resources needed by the State are procured without directing CCA procurement.

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19 See California Energy Commission Docket No.16-OIR-05.
it is amending its Power Source Disclosure Program under AB 1110 to report GHG emissions intensity associated with the electricity serving retail customers.

Second, the CNS method requires the use of hourly generation source data for each LSE. However, California’s GHG emission intensity reporting requirement under AB 1110 does not require LSEs to report their purchased generation on an hourly basis and instead requires GHG emissions intensity reporting annually. Governor Brown recently vetoed legislation that would have required CARB to study the feasibility of developing a methodology of calculating hourly GHG emissions. The Governor’s rationale for vetoing the “unnecessary” legislation was to avoid interference with AB 1110 and the ongoing CEC rulemaking. Similarly, the Commission should not adopt a methodology that would interfere with existing law and regulatory proceedings.

Third, the CNS method further contradicts AB 1110 because it assigns system-wide hourly emissions to individual LSEs instead of having GHG emissions intensity be based on a specific generation source. In AB 1110, the Legislature expressed its intent that GHG emissions intensity be derived based on a specific generation source by:

1) defining “[GHG] emissions intensity” as “the sum of all annual emissions of [GHGs] associated with a generation source divided by the annual production of electricity from the generation source.”

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21 See Pub. Util. Code § 398.2(a) (defining “Greenhouse gas emissions intensity” as “the sum of all annual emissions of greenhouse gases associated with a generation source divided by the annual production of electricity from the generation source.”) (emphasis added); §398.4(a) (“Every retail supplier that makes an offering to sell electricity that is consumed in California shall disclose its electricity sources and the associated greenhouse gases emissions intensity for the previous calendar year.”) (emphasis added).
23 Id.
2) requiring each applicable retail supplier to disclose “its electricity sources and the associated [GHG] emissions intensity for the previous calendar year.”\textsuperscript{25}

3) requiring the CEC to adopt a methodology for the calculation of GHG emissions intensity “for each purchase of electricity by a retail supplier to serve its retail customers.”\textsuperscript{26}

\textit{Fourth}, it is unreasonable and inaccurate to attribute system-wide emissions to individual LSEs because such entities are serving loads in different locations and use specific resources to serve their load. For instance, a peaking plant operating in one region serving local grid operations should not impact GHG emissions reporting by an LSE in another region. By aggregating system impacts without regional distinctions, the CNS method would inaccurately assign GHG emissions to LSEs.

\textit{Fifth}, and most importantly, adopting the CNS method unfairly penalizes LSEs that currently provide GHG-free energy as system power on California’s electric grid. Under the CNS method, a LSE can only claim the generation that perfectly matches its load profile — thus, for example, a LSE with a 100% GHG-free solar portfolio would be severely penalized and the surplus that the LSE is unable to claim would actually be used to reduce the GHG-intensity of fossil-based unspecified energy purchases. LSEs, like PCE, that have made significant investments in renewable and GHG-free energy should not be penalized in this manner, especially while LSEs that rely extensively on unspecified system-wide power are rewarded. Ironically, by adopting the CNS method, the Commission would penalize those LSEs that have already reduced their GHG emissions by making it harder for them to meet the IRP goals. For the reasons described above, the Proposed Decision should be revised to reject the use of the CNS method.

\textsuperscript{25} \textit{Pub. Util. Code} § 398.4(a) (emphasis added)

V. **THE PROPOSED DECISION SHOULD INCLUDE LANGUAGE REGARDING THE POTENTIAL OF THE IRP PROCESS FOR MINIMIZING OR ELIMINATING CAM PROCUREMENT**

The Staff Proposal recommended that if a CCA presented a Standard LSE Plan that meets the Commission’s reliability and GHG reduction requirements at the LSE level, then that CCA program would be exempt from non-bypassable charges for IOU procurement authorized in the IRP process — presumably resources subject to CAM.\(^{27}\) The Proposed Decision does not include this recommendation. While recognizing that specific cost allocation and cost recovery mechanisms will be finalized later in the proceeding, the Proposed Decision should include the prior language in the Staff Proposal regarding the continued potential of the IRP process to minimize or eliminate the need for CAM procurement by the IOUs.

The currently-removed recommendation from the Staff Proposal did nothing more than state the logical inverse of the statutory requirement of section 454.51(e) — i.e., if a CCA did not contribute to any need for renewable integration in the overall collective portfolio of all LSE resources, then it should not be allocated any costs that the Commission determines are necessary to meet the renewable integration need. Thus, the Proposed Decision should include the prior language in the Staff Proposal.

\(^{27}\) See Staff Proposal, at 65 (“If the CCAs and ESPs submit plans that meet reliability and GHG reduction requirements at the LSE level, and the CPUC has identified a reasonable approach to allocating responsibility for any deficiencies in the aggregated LSE Plans ... then staff recommends that only IOU bundled ratepayers cover the costs of additional IOU procurement identified in the individual IOU plans.”) See also Staff Proposal, at 75.
January 17, 2018
Appendix A
Proposed Revisions to the Proposed Decision

Findings of Fact

The following Findings of Fact should be revised as follows:

2. Section 454.51 creates a responsibility for the Commission to require, review, and approve IRP from all load-serving entities, except for CCAs. For CCAs, Section 454.51 creates a responsibility for the Commission to require, review, and certify IRPs.

17. LSE-specific GHG emissions accounting should be required to follow the specific requirements in Attachment A of this decision related to the “clean net short” method proposed by PG&E.

Conclusions of Law

The following Conclusions of Law should be revised as follows:

7. The existence of local governing boards for CCA LSEs does not diminish or supplant the Commission’s authority over IRP filings of CCAs.

8. The Commission’s role with respect to review of CCA IRPs is substantive and requires the Commission to certify the CCA’s plan as consistent with all of the requirements of Section 454.52(b)(3), as well as Section 454.51(d) and (e), which includes the Commission’s authority over certain procurement-related activities of CCAs, as well as their renewable integration responsibilities.

8. Section 454.51 provides the Commission with the means to impact CCA planning and procurement. Specifically, section 454.51 provides the Commission the ability to determine: (1) whether an individual CCA must either pay additional costs to fill in any gaps the Commission perceives exist in the State’s collective portfolio of resources or (2) self-supply to meet the individual CCA’s allocated portion of the gap, if the Commission determines that a particular CCA’s IRP is deficient through the certification process established by section 454.52.

9. Through the certification process in section 454.52(b)(3), the Commission may determine: (i) that an individual CCA IRP is deficient; (ii) that this deficiency will cause a gap in the resources needed for the State which must be filled, and (iii) that the costs of filling such gap will
(under section 454.51) either be allocated to the individual CCA or the
CCA may devise a self-supply strategy to fill its portion of the gap.

10. The certification process in section 454.52(b)(3) does not give the
Commission the authority to approve or disapprove a CCA IRP, which
section 454.52(b)(3) explicitly designates is the role of the CCA governing
board.

11. The certification process in section 454.52(b)(3) preserves the
autonomy of a CCA governing board to direct a CCA’s procurement
activities.

Ordering Paragraphs

The following Ordering Paragraphs should be revised as follows:

18. The Commission delegates to the Assigned Commissioner and/or
assigned Administrative Law Judge the authority to modify the required
filing date identified in Ordering Paragraph 1 or authorize any deviations
from the templates identified in Ordering Paragraphs 11 and 12 for the
integrated resource plan filings of individual load-serving entities.

19. The Commission directs the Energy Division staff, in conjunction with the assigned
Administrative Law Judge, to hold a series of workshops for all LSEs to raise additional
questions related to the development of LSE-specific IRPs.
TO: Honorable Peninsula Clean Energy Authority Board of Directors

FROM: Jan Pepper, Chief Executive Officer

SUBJECT: Authorize Execution of Amendments to Power Purchase Agreement for Renewable Supply with Mega Renewables (Hatchet Creek), Mega Renewables (Roaring Creek), and Mega Renewables (Bidwell Ditch), and necessary ancillary documents.

RECOMMENDATION:
Approve resolution delegating authority to the Chief Executive Officer to execute Amendment 1 to the Power Purchase Agreements (PPAs) for purchase of renewable supply, in a form approved by the General Counsel with:

- 11.1 Mega Renewables, a California general partnership (Hatchet) – Hatchet Creek Hydroelectric Project. Contract Term: 20 years. Not to Exceed $17,000,000. (Action)
- 11.2 Mega Renewables, a California general partnership (Roaring) – Roaring Creek Hydroelectric Project. Contract Term: 17 years. Not to Exceed $5,000,000. (Action)
- 11.3 Mega Renewables, a California general partnership (Bidwell) – Bidwell Ditch Hydroelectric Project. Contract Term: 17 years. Not to Exceed $10,000,000. (Action)

And any necessary ancillary documents for each.

BACKGROUND:
PCE has a goal to provide customers with 50% renewable energy in 2018 increasing to 100% by 2025. PCE has made several purchases of renewable energy in the past to meet its obligations to customers, but will need to complete additional purchases over the next several years to meet our increasing goals. On January 26, 2017, the Board approved and PCE executed PPAs with Mega Renewables for three small hydroelectric projects.
projects – Hatchet Creek, Roaring Creek, and Bidwell Ditch for terms of two to five years.

In October 2017, the project owner approached PCE and to discuss extending the terms of those contracts by 15 years to 17 to 20 years. In December 2017, the Board approved PCE’s Integrated Resource Plan (IRP) outlining goals to diversify PCE’s portfolio by resource, term length, location, ownership, size and additionality. Amending these three PPAs to extend the term length contributes to the diversity targets outlined in the IRP.

**DISCUSSION:**

On January 26, 2017, the Board approved and PCE executed three PPAs with the following hydroelectric projects:

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Size</th>
<th>Term Length</th>
<th>Not to Exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hatchet Creek</td>
<td>7.5 MWac</td>
<td>5 Years</td>
<td>$4,130,000</td>
</tr>
<tr>
<td>Roaring Creek</td>
<td>2 MWac</td>
<td>2 Years</td>
<td>$562,000</td>
</tr>
<tr>
<td>Bidwell Ditch</td>
<td>2 MWac</td>
<td>2 Years</td>
<td>$1,150,000</td>
</tr>
</tbody>
</table>

These three projects are existing hydroelectric projects located in Shasta County, CA and provide renewable electricity that helps PCE to meet its renewable portfolio standard (RPS) Bucket 1 obligations and to meet PCE’s goal to serve customers with 50% renewable energy in 2018 and 100% renewable energy in 2025. Further, extending the contracts of these three projects will help PCE to meet the diversity targets described in the IRP approved by the Board on December 14, 2017.

The Board is being asked to authorize the CEO to execute Amendment 1 to the PPAs for purchase of renewable supply, in a form approved by the General Counsel with the following projects:
- Hatchet Creek Hydroelectric Project. Contract Term: 20 years. Not to Exceed $17,000,000;
- Roaring Creek Hydroelectric Project. Contract Term: 17 years. Not to Exceed $5,000,000; and
- Bidwell Ditch Hydroelectric Project. Contract Term: 17 years. Not to Exceed $10,000,000;

as well as any necessary ancillary documents for each.
RESOLUTION NO. ___________

PENINSULA CLEAN ENERGY AUTHORITY, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

* * * * * *

RESOLUTION DELEGATING AUTHORITY TO THE CHIEF EXECUTIVE OFFICER TO EXECUTE (1) AMENDMENT 1 TO THE POWER PURCHASE AGREEMENT (PPA) WITH MEGA RENEWABLES FOR PURCHASE OF RENEWABLE SUPPLY, IN A FORM APPROVED BY THE GENERAL COUNSEL, FROM THE HATCHET CREEK HYDROELECTRIC PROJECT FOR A CONTRACT TERM OF 20 YEARS, IN AN AMOUNT NOT TO EXCEED $17,000,000; AND (2) ANY NECESSARY ANCILLARY DOCUMENTS

______________________________________________________________

RESOLVED, by the Peninsula Clean Energy Authority of the County of San Mateo, State of California, that

WHEREAS, the Peninsula Clean Energy Authority (“Peninsula Clean Energy” or “PCEA”) was formed on February 29, 2016; and

WHEREAS, launch of service for Phase I occurred in October 2016, and launch of service for Phase II occurred in April 2017; and

WHEREAS, PCEA has ongoing commitments to purchase Renewable Energy to meet both its renewable portfolio standard (RPS) requirements as well as its internal
goal to provide customers with 50% renewable energy supply in 2018 and 100% renewable energy supply in 2025; and

WHEREAS, on January 26, 2017, the Board approved and PCE executed a Power Purchase Agreement (“PPA”) with Mega Renewables (“Contractor”) for the Hatchet Creek Hydroelectric Project; and

WHEREAS, in October 2017, Contractor proposed an amendment to the PPA extending the term of the contract from five years to 20 years at a price competitive with similar projects; and

WHEREAS, both parties negotiated an amendment to the PPA, reference to which should be made for further particulars; and

WHEREAS, the PPA was provided to the Board for its review at the January 26, 2017 board meeting, reference to which should be made for further particulars; and

WHEREAS, the Board wishes to delegate to the Chief Executive Officer authority to execute the aforementioned Amendment for said purchase of renewable energy from the Contractor.

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the Board delegates authority to the Chief Executive Officer to execute (1) the Amendment with the Contractor in a form approved by the General Counsel and for a contract term of 20 years, in an amount not to exceed $17,000,000; and (2) any necessary ancillary documents.

* * * * * *

2
RESOLUTION NO. _____________

PENINSULA CLEAN ENERGY AUTHORITY, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

*   *   *   *   *   *

RESOLUTION DELEGATING AUTHORITY TO THE CHIEF EXECUTIVE OFFICER TO EXECUTE (1) AMENDMENT 1 TO THE POWER PURCHASE AGREEMENT (PPA) WITH MEGA RENEWABLES FOR PURCHASE OF RENEWABLE SUPPLY, IN A FORM APPROVED BY THE GENERAL COUNSEL, FROM THE ROARING CREEK HYDROELECTRIC PROJECT FOR A CONTRACT TERM OF 17 YEARS, IN AN AMOUNT NOT TO EXCEED $5,000,000; AND (2) ANY NECESSARY ANCILLARY DOCUMENTS

RESOLVED, by the Peninsula Clean Energy Authority of the County of San Mateo, State of California, that

WHEREAS, the Peninsula Clean Energy Authority ("Peninsula Clean Energy" or "PCEA") was formed on February 29, 2016; and

WHEREAS, launch of service for Phase I occurred in October 2016, and launch of service for Phase II occurred in April 2017; and

WHEREAS, PCEA has ongoing commitments to purchase Renewable Energy to meet both its renewable portfolio standard (RPS) requirements as well as its internal
goal to provide customers with 50% renewable energy supply in 2018 and 100% renewable energy supply in 2025; and

**WHEREAS**, on January 26, 2017, the Board approved and PCE executed a Power Purchase Agreement ("PPA") with Mega Renewables ("Contractor") for the Roaring Creek Hydroelectric Project; and

**WHEREAS**, in October 2017, Contractor proposed an amendment to the PPA extending the term of the contract from two years to 17 years at a price competitive with similar projects; and

**WHEREAS**, both parties negotiated an amendment to the PPA, reference to which should be made for further particulars; and

**WHEREAS**, the PPA was provided to the Board for its review at the January 26, 2017 board meeting, reference to which should be made for further particulars; and

**WHEREAS**, the Board wishes to delegate to the Chief Executive Officer authority to execute the aforementioned Amendment for said purchase of renewable energy from the Contractor.

**NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED** that the Board delegates authority to the Chief Executive Officer to execute (1) the Amendment with the Contractor in a form approved by the General Counsel and for a contract term of 17 years, in an amount not to exceed $5,000,000; and (2) any necessary ancillary documents.

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2
RESOLUTION NO. _____________

PENINSULA CLEAN ENERGY AUTHORITY, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

* * * * * *

RESOLUTION DELEGATING AUTHORITY TO THE CHIEF EXECUTIVE OFFICER TO EXECUTE (1) AMENDMENT 1 TO THE POWER PURCHASE AGREEMENT (PPA) WITH MEGA RENEWABLES FOR PURCHASE OF RENEWABLE SUPPLY, IN A FORM APPROVED BY THE GENERAL COUNSEL, FROM THE BIDWELL DITCH HYDROELECTRIC PROJECT FOR A CONTRACT TERM OF 17 YEARS, IN AN AMOUNT NOT TO EXCEED $10,000,000; AND (2) ANY NECESSARY ANCILLARY DOCUMENTS

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RESOLVED, by the Peninsula Clean Energy Authority of the County of San Mateo, State of California, that

WHEREAS, the Peninsula Clean Energy Authority (“Peninsula Clean Energy” or “PCEA”) was formed on February 29, 2016; and

WHEREAS, launch of service for Phase I occurred in October 2016, and launch of service for Phase II occurred in April 2017; and

WHEREAS, PCEA has ongoing commitments to purchase Renewable Energy to meet both its renewable portfolio standard (RPS) requirements as well as its internal
goal to provide customers with 50% renewable energy supply in 2018 and 100% renewable energy supply in 2025; and

WHEREAS, on January 26, 2017, the Board approved and PCE executed a Power Purchase Agreement ("PPA") with Mega Renewables ("Contractor") for the Bidwell Ditch Hydroelectric Project; and

WHEREAS, in October 2017, Contractor proposed an amendment to the PPA extending the term of the contract from two years to 17 years at a price competitive with similar projects; and

WHEREAS, both parties negotiated an amendment to the PPA, reference to which should be made for further particulars; and

WHEREAS, the PPA was provided to the Board for its review at the January 26, 2017 board meeting, reference to which should be made for further particulars; and

WHEREAS, the Board wishes to delegate to the Chief Executive Officer authority to execute the aforementioned Amendment for said purchase of renewable energy from the Contractor.

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the Board delegates authority to the Chief Executive Officer to execute (1) the Amendment with the Contractor in a form approved by the General Counsel and for a contract term of 17 years, in an amount not to exceed $10,000,000; and (2) any necessary ancillary documents.

* * * * * * *

2
DATE: January 16, 2018
BOARD MEETING DATE: January 25, 2018
SPECIAL NOTICE/HEARING: None
VOTE REQUIRED: Majority Present

TO: Honorable Peninsula Clean Energy Authority Board of Directors
FROM: Jan Pepper, Chief Executive Officer
SUBJECT: Authorize Execution of Power Purchase Agreement for Renewable Supply with Hydro Partners for Clover Creek Hydroelectric project.

RECOMMENDATION:
Approve resolution delegating authority to the Chief Executive Officer to execute a Power Purchase Agreement (PPA) for renewable supply with Hydro Partners, in a form approved by the General Counsel, from the Clover Creek hydroelectric project, for a contract term of 15 years, in an amount not to exceed $3,000,000, and any necessary ancillary documents.

BACKGROUND:
PCE has a goal to provide customers with 50% renewable energy in 2018 increasing to 100% by 2025. PCE has made several purchases of renewable energy in the past to meet its obligations to customers, but will need to complete additional purchases over the next several years to meet our increasing goals.

In December 2017, the Board approved PCE’s Integrated Resource Plan (IRP) outlining goals to diversify PCE’s portfolio by resource, term length, location, ownership, size and additionality.

In October 2017, the project owner provided PCE with a proposal for a PPA with the 1 MW Clover hydroelectric project for a 15-year term at a price competitive with other projects of similar size, vintage and technology. Executing this PPA and adding it to PPAs portfolio will help PCE to meet its renewable obligations and contributes to the diversity targets outlined in the IRP.

DISCUSSION:
The project is an existing 1 MWac hydroelectric project located in Shasta County, CA and will provide renewable electricity that helps PCE to meet its renewable portfolio standard (RPS) Bucket 1 obligations and to meet PCE’s goal of 50% renewable in 2018 and 100% renewable in 2025. Further, this contract will help PCE to meet the diversity targets described in the IRP approved by the Board on December 14, 2017.

The Board is being asked to authorize the CEO to execute the PPA and ancillary documents for renewable supply, in a form approved by the General Counsel with Hydro Partners, a California general partnership for the Clover Creek Hydroelectric project over a contract term of 15 years in an amount not to exceed: $3,000,000.
RESOLUTION NO. _____________

PENINSULA CLEAN ENERGY AUTHORITY, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

* * * * * *

RESOLUTION DELEGATING AUTHORITY TO THE CHIEF EXECUTIVE OFFICER TO EXECUTE A POWER PURCHASE AGREEMENT (PPA) FOR RENEWABLE SUPPLY WITH HYDRO PARTNERS, IN A FORM APPROVED BY THE GENERAL COUNSEL, FROM THE CLOVER CREEK HYDROELECTRIC PROJECT, FOR A CONTRACT TERM OF 15 YEARS, IN AN AMOUNT NOT TO EXCEED $3,000,000, AND ANY NECESSARY ANCILLARY DOCUMENTS.

______________________________________________________________

RESOLVED, by the Peninsula Clean Energy Authority of the County of San Mateo, State of California, that

WHEREAS, the Peninsula Clean Energy Authority (“Peninsula Clean Energy” or “PCEA”) was formed on February 29, 2016; and

WHEREAS, launch of service for Phase I occurred in October 2016, and launch of service for Phase II occurred in April 2017; and

WHEREAS, PCEA has ongoing commitments to purchase Renewable Energy to meet both its renewable portfolio standard (RPS) requirements as well as its internal goal to provide customers with 50% renewable energy supply in 2018 and 100% renewable energy supply in 2025; and
WHEREAS, in October 2017, Hydro Partners ("Contractor") provided PCE with a proposal to purchase renewable supply from the 1 MW Clover Creek Hydroelectric Project for a term of 15 years and at a price competitive with similar projects; and

WHEREAS, staff is presenting to the Board for its review the negotiated Power Purchase Agreement (PPA), reference to which should be made for further particulars; and

WHEREAS, the Board wishes to delegate to the Chief Executive Officer authority to execute the aforementioned PPA for said purchase of renewable energy from the Contractor.

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the Board delegates authority to the Chief Executive Officer to execute the Amendment with the Contractor in a form approved by the General Counsel and for a contract term of 15 years, in an amount not to exceed $3,000,000, as well as any necessary ancillary documents.

* * * * * * *
TO: Honorable Peninsula Clean Energy Authority Board of Directors

FROM: Dave Pine, Board Chair, Peninsula Clean Energy Authority

SUBJECT: Board Officers & Committee Appointments

RECOMMENDATION:
Adopt the attached policy governing: (i) the appointment of the Chair and Vice-Chair; (ii) the make up of, and appointment process for, the Executive Committee, the Audit Committee, and the Finance Committee; and (iii) the maximum term length, if any, of the Chair, Vice-Chair and members the Executive Committee, the Audit and Finance Committee.

BACKGROUND:
Peninsula Clean Energy Authority (PCE) was formed in February 2016 by the County of San Mateo and all twenty cities within the County. In March 2016, the PCE Board elected its first Chair (Dave Pine) and Vice Chair (Jeff Aalfs), who have continued to serve in those roles since.

The PCE Board has established two committees:
- In April 2016, the PCE Board formed and appointed an Executive Committee made up of eight members, all of whom have continued to serve in that role since with the exception of one member who resigned from the Executive Committee.
- In April 2017, the PCE Board formed and appointed an Audit and Finance Committee made up of four members, all of whom have continued to serve in that role since.

In addition, from time to time, the CEO has requested that members of the Board serve on ad hoc committees to provide her advice and counsel, often with respect to power purchase agreements. The policy described below and attached hereto is not intended to inhibit that practice. However, it is of note that those advisory groups will not be
convened with more than four Executive Committee members or two Audit and Finance Committee Members.

**DISCUSSION:**
The Executive Committee has discussed and recommends that the PCE Board adopt the attached policy governing: (i) the appointment of the Chair and Vice-Chair; (ii) the make up of, and appointment process for, the Executive Committee, the Audit Committee, and the Finance Committee; and (iii) the maximum term length, if any, of the Chair, Vice-Chair and members the Executive Committee, the Audit and Finance Committee.

**Chair and Vice-Chair**

The Chair and Vice-Chair will be elected by the Board to serve one year terms. The Chair and Vice-Chair will each be subject to a consecutive term limit of three years. That means that a member may serve as Chair for up to three consecutive one-year terms. However, after a break in service, a member may again serve as Chair. The same rules apply to the position of Vice-Chair. A member may consecutively serve three years as Vice-Chair and then three years as Chair. There is a general expectation that Vice-Chairs will serve as Chair following their term as Vice-Chair. However, ultimately, the decision whom to elect is in the discretion of the Board.

With respect to the process and timing for nomination and election of the Chair and Vice-Chair, every January the Chair will appoint an *ad hoc* nominating committee made up of between three and five Board members, each of whom has indicated to the Chair an intention not to seek the positions of Chair or Vice-Chair. At the January meeting of the Board, the Chair will inform the Board of the composition of the nominating committee and invite interested members to notify the nominating committee of their desire to serve as either Chair or Vice-Chair. Prior to the February meeting of the Board, the nominating committee shall confer and prepare a recommendation regarding who should serve as Chair and Vice-Chair for that year. At the February Board meeting, that recommendation shall be submitted to the Board and the Board shall take action thereon.

**Executive Committee**

The Executive Committee will continue to consist of up to eight members, two of whom will be the Chair and Vice-Chair and six of whom will be separately elected by the Board to serve one-year terms. The Chair of the Board shall also serve as the Chair of the Executive Committee. The Vice-Chair of the Board shall also serve as the Vice-Chair of the Executive Committee. Members of the Executive Committee will not be subject to term limits.

With respect to the process and timing for nomination and election of the Executive Committee, the Chair elected in February will, in consultation with the Vice-Chair, recommend to the Board at its March meeting a slate of up to six Executive Committee members. The Board will be asked to cast a vote either for or against the entire slate. In
the event that Board does not approve the slate, either Board members may nominate individual members to the Executive Committee or the Board may direct the Chair to return at the April Board meeting with a new slate.

**Audit and Finance Committee**

The Audit and Finance Committee will continue to consist of up to four members elected by the Board to serve one-year terms. Members of the Audit and Finance Committee will not be subject to term limits.

With respect to the process and timing for nomination and election of the Audit and Finance Committee, the Chair elected in February will, in consultation with the Vice-Chair, recommend to the Board at its March meeting a slate of up to four Audit and Finance Committee members. The Board will be asked to cast a vote either for or against the entire slate. In the event that Board casts a vote does not approve the slate, either Board members may nominate individual members to the Audit and Finance Committee or the Board may direct the Chair to return at the April Board meeting with a new slate.

**FISCAL IMPACT:**
None.
Subject: Selection of the Chair and Vice Chair and appointment to the Executive Committee and other standing Board Committees.

Policy: Policy governing: (i) the appointment of the Chair and Vice-Chair; (ii) the make up of, and appointment process for, the Executive Committee, the Audit Committee, and the Finance Committee; and (iii) the maximum term length, if any, of the Chair, Vice-Chair and members the Executive Committee, the Audit and Finance Committee.

Chair and Vice-Chair

The Chair and Vice-Chair will be elected by the Board to serve one year terms. The Chair and Vice-Chair will each be subject to a consecutive term limit of three years. That means that a member may serve as Chair for up to three consecutive one-year terms. However, after a break in service, a member may again serve as Chair. The same rules apply to the position of Vice-Chair. A member may consecutively serve three years as Vice-Chair and then three years as Chair. There is a general expectation that Vice-Chairs will serve as Chair following their term as Vice-Chair. However, ultimately, the decision whom to elect is in the discretion of the Board.

With respect to the process and timing for nomination and election of the Chair and Vice-Chair, every January the Chair will appoint an ad hoc nominating committee made up of between three and five Board members, each of whom has indicated to the Chair an intention not to seek the positions of Chair or Vice-Chair. At the January meeting of the Board, the Chair will inform the Board of the composition of the nominating committee and invite interested members to notify the nominating committee of their desire to serve as either Chair or Vice-Chair. Prior to the February meeting of the Board, the nominating committee shall confer and prepare a recommendation regarding who should serve as Chair and Vice-Chair for that year. At the February Board meeting, that recommendation shall be submitted to the Board and the Board shall take action thereon.

Executive Committee

The Executive Committee will continue to consist of up to eight members, two of whom will be the Chair and Vice-Chair and six of whom will be separately elected by the Board to serve one-year terms. The Chair of the Board shall also serve as the Chair of the Executive Committee. The Vice-Chair of the Board shall also serve as the Vice-Chair of the Executive Committee. Members of the Executive Committee will not be subject to term limits.
With respect to the process and timing for nomination and election of the Executive Committee, the Chair elected in February will, in consultation with the Vice-Chair, recommend to the Board at its March meeting a slate of up to six Executive Committee members. The Board will be asked to cast a vote either for or against the entire slate. In the event that Board does not approve the slate, either Board members may nominate individual members to the Executive Committee or the Board may direct the Chair to return at the April Board meeting with a new slate.

**Audit and Finance Committee**

The Audit and Finance Committee will continue to consist of up to four members elected by the Board to serve one-year terms. Members of the Audit and Finance Committee will not be subject to term limits.

With respect to the process and timing for nomination and election of the Audit and Finance Committee, the Chair elected in February will, in consultation with the Vice-Chair, recommend to the Board at its March meeting a slate of up to four Audit and Finance Committee members. The Board will be asked to cast a vote either for or against the entire slate. In the event that Board casts a vote does not approve the slate, either Board members may nominate individual members to the Audit and Finance Committee or the Board may direct the Chair to return at the April Board meeting with a new slate.
Agenda Item 15: Documents will be sent under separate cover.
REGULAR MEETING of the Board of Directors of the Peninsula Clean Energy Authority (PCEA)
Thursday, December 14, 2017
MINUTES

Peninsula Clean Energy
2075 Woodside Road, Redwood City, CA 94061
6:30 p.m.

CALL TO ORDER

Meeting was called to order at 6:38 p.m.

ROLL CALL

Present:  Dave Pine, County of San Mateo, Chair
         Jim Eggemeyer, County of San Mateo
         Jeff Aalfs, Town of Portola Valley, Vice Chair
         Rick DeGolia, Town of Atherton
         Carlos Romero, City of East Palo Alto
         Elizabeth Cullinan, Town of Hillsborough
         Catherine Carlton, City of Menlo Park
         Wayne Lee, City of Millbrae
         John Keener, City of Pacifica
         Marty Medina, City of San Bruno
         Rick Bonilla, City of San Mateo
         Pradeep Gupta, City of South San Francisco
         Daniel Yost, Town of Woodside

Absent:  City of Belmont
         City of Brisbane
         City of Burlingame
         Town of Colma
         City of Daly City
         City of Foster City
         City of Half Moon Bay
         City of Redwood City
         City of San Carlos

Staff:    Jan Pepper, Chief Executive Officer
         Jay Modi, Director of Finance and Administration
         Siobhan Doherty, Director of Power Resources
A quorum was achieved at 6:57 p.m.

PUBLIC COMMENT:

Diane Bailey, Menlo Spark
Ted Howard, Citizens Advisory Committee

ACTION TO SET THE AGENDA AND APPROVE CONSENT AGENDA ITEMS

Jan Pepper—CEO—requested to pull item 14 from the Consent Agenda.

Motion Made / Seconded: Lee / Bonilla

Motion passed unanimously 12-0 (Absent: Belmont, Brisbane, Burlingame, Colma, Daly City, Foster City, Half Moon Bay, Menlo Park, Redwood City, San Carlos.)

14. AUTHORIZE THE CHIEF EXECUTIVE OFFICER TO ADJUST ALL 2018 PCE RATES, AS NECESSARY, AFTER PG&E’S NEW RATES HAVE BEEN CONFIRMED IN MARCH 2018, TO PROVIDE A 5% DISCOUNT COMPARED TO PG&E’S GENERATION RATES (MODIFIED)

Jan Pepper—CEO—reviewed the resolution and, whereas PG&E’s rate change is being moved from January 1, 2018 to March 1, 2018, she recommended changing the resolution to reflect the March 1, 2018 date, and requested that the Board approve the resolution with that change.

Motion Made / Seconded: Yost / DeGolia

Motion passed unanimously, as amended 12-0 (Absent: Belmont, Brisbane, Burlingame, Colma, Daly City, Foster City, Half Moon Bay, Menlo Park, Redwood City, San Carlos.)

REGULAR AGENDA

1. CHAIR REPORT

Dave Pine—Chair—reported that Dan Lieberman will be leaving Peninsula Clean Energy (PCE).
Dave announced that he will bring a proposal to the January 2018 meeting for policies on electing the Board Chair, Vice Chair, and appointing committees. Jeff Aalfs—Vice Chair—reported that he attended the Citizens Advisory Committee meeting, and encouraged Board members to attend future meetings.
2. CEO REPORT

Jan Pepper—Chief Executive Officer—reported that Dan Lieberman would be leaving PCE effective December 19, but he’ll remain in the Community Choice Aggregator (CCA) family as he will take a position at East Bay Community Energy. Jan reported that an offer was made for the Key Accounts Executive position, interviews are taking place for the Power Resources Manager and Creative Content Designer, and that PCE hopes to hire an Energy Program lead in January 2018.

Jan reported that PG&E’s rate increase has been delayed until March 1, 2018, so PCE’s rate change has been put on hold until then. She announced a Special Meeting of the Board on January 12 for Pradeep Gupta’s presentation on 100% renewable resources on the grid, and a meeting with CPUC Commissioner Rechtschaffen on January 16, 2018.

3. CITIZENS ADVISORY COMMITTEE REPORT

Michael Clossen—Chair of the Citizens Advisory Committee (CAC)—reported that CAC members are interested in supporting local programs, so they’ve developed a combined report on programs being done by Municipalities, Investor Owned Utilities, and CCAs, which they would like to present to the Board in January. He thanked Jeff Aalfs for attending their meeting and invited other Board members to attend.

4. AUDIT AND FINANCE COMMITTEE REPORT

Carlos Romero—Audit and Finance Committee member—reported that the Committee reviewed the audit with the auditors, and discussed the draft Investment Policy. He reported that the Committee wanted to take more time to research the investment policy, investment guidelines, and risk management.

5. ACCEPT ANNUAL AUDIT REPORT

Jan Pepper introduced Matt Brewer and Brett Bradford, the auditors from Pisenti & Brinker. Brett Bradford announced that the audit was complete, and they have a clean opinion with no findings. He reported that everything looked good for the years they audited, which were fiscal years 2016 and 2017.

Motion Made / Seconded: Lee / Carlton

Motion passed unanimously 13-0 (Absent: Belmont, Brisbane, Burlingame, Colma, Daly City, Foster City, Half Moon Bay, Redwood City, San Carlos.)

6. ADOPT INVESTMENT POLICY

Jan Pepper withdrew the Investment Policy from the agenda, to move it to a future meeting after the Audit and Finance Committee has finalized the policy for the Board.
7. **ADOPT POLICY ON ENERGY SUPPLY PROCUREMENT AUTHORITY**

Jan Pepper reported that PCE missed an opportunity to purchase energy at a very favorable price because a special meeting of the Board couldn’t be organized quickly enough. She reported that the proposed Policy on Energy Supply Procurement Authority was reviewed with the Executive Committee on Monday, December 11, 2017. A revised version of the policy was reviewed.

**Motion Made / Seconded:** Gupta / Lee

**Motion passed unanimously, as amended 13-0 (Absent: Belmont, Brisbane, Burlingame, Colma, Daly City, Foster City, Half Moon Bay, Menlo Park, Redwood City, San Carlos.)

8. **APPROVE INTEGRATED RESOURCE PLAN (IRP)**

Siobhan Doherty—Director of Power Resources—reported that PCE’s IRP outlines guidelines to meet PCE’s goals, which is separate from the regulatory IRP guidelines being created by the CPUC. She reviewed the highlights and details of the IRP through her PowerPoint presentation, and announced that PCE will issue a Request for Proposals (RFP) for renewables and storage in January 2018.

**Motion Made / Seconded:** Aalfs / Carlton

**Motion passed unanimously 13-0 (Absent: Belmont, Brisbane, Burlingame, Colma, Daly City, Foster City, Half Moon Bay, Menlo Park, Redwood City, San Carlos.)

**PUBLIC COMMENT**

Michael Clossen

9. **MARKETING AND OUTREACH REPORT**

Dan Lieberman—Director of Marketing and Public Affairs—reviewed the written report. TJ Carter—Marketing Associate—reported on an Op Ed schedule for 2018. Kirsten Andrews-Schwind—Communications and Outreach Manager—reported on outreach small grants pilot projects.

10. **REGULATORY AND LEGISLATIVE REPORT**

Joe Wiedman—Director of Legislative and Regulatory Affairs—reported on recent filings.
11. BOARD MEMBERS' REPORTS

No reports.

ADJOURNMENT

Meeting was adjourned at 8:55 p.m.
ACCOUNTANTS’ COMPILATION REPORT

Board of Directors
Peninsula Clean Energy Authority

Management is responsible for the accompanying special purpose statement of Peninsula Clean Energy Authority (the Authority), a California Joint Powers Authority, which comprise the budgetary comparison schedule for the period ended December 31, 2017, and for determining that the budgetary basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statement nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any assurance on this special purpose budgetary comparison statement.

The special purpose statement is prepared in accordance with the budgetary basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. This report is intended for the information of the Board of Directors of PCE.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the special purpose budgetary comparison statement, they might influence the user’s conclusions about the Authority’s results of operations. Accordingly, this special purpose budgetary comparison statement is not designed for those who are not informed about such matters.

We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

Maher Accountancy
San Rafael, CA
January 19, 2018
ACCOUNTANTS’ COMPILATION REPORT

Board of Directors
Peninsula Clean Energy Authority

Management is responsible for the accompanying financial statements of Peninsula Clean Energy Authority (the Authority), a California Joint Powers Authority, which comprise the statement of net position as of December 31, 2017, and the related statement of revenues, expenses, and changes in net position, and the statement cash flows for the period then ended in accordance with accounting principles generally accepted in the United States of America. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statements nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, conclusion, nor provide any assurance on these financial statements.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the financial statements, they might influence the user’s conclusions about the Authority’s financial position, results of operations, and cash flows. Accordingly, the financial statements are not designed for those who are not informed about such matters.

We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

Maher Accountancy
San Rafael, CA
January 19, 2018
## PENINSULA CLEAN ENERGY AUTHORITY

### STATEMENT OF NET POSITION

**As of December 31, 2017**

### ASSETS

<table>
<thead>
<tr>
<th>Current assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$53,541,005</td>
</tr>
<tr>
<td>Accounts receivable, net of allowance</td>
<td>17,092,453</td>
</tr>
<tr>
<td>Other receivables</td>
<td>46,569</td>
</tr>
<tr>
<td>Accrued revenue</td>
<td>11,061,682</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>265,488</td>
</tr>
<tr>
<td>Deposits</td>
<td>1,924,926</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>83,932,123</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noncurrent assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital assets, net of depreciation</td>
<td>322,254</td>
</tr>
<tr>
<td>Deposits</td>
<td>135,355</td>
</tr>
<tr>
<td><strong>Total noncurrent assets</strong></td>
<td>457,609</td>
</tr>
</tbody>
</table>

**Total assets**                                    **84,389,732**

### LIABILITIES

<table>
<thead>
<tr>
<th>Current liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>669,675</td>
</tr>
<tr>
<td>Accrued cost of electricity</td>
<td>27,068,267</td>
</tr>
<tr>
<td>Accrued payroll and related liabilities</td>
<td>103,073</td>
</tr>
<tr>
<td>Other accrued liabilities</td>
<td>25,000</td>
</tr>
<tr>
<td>Supplier security deposits</td>
<td>50,000</td>
</tr>
<tr>
<td>User taxes and energy surcharges due to other governments</td>
<td>740,872</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>28,656,887</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noncurrent liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier security deposits</td>
<td>75,000</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>28,731,887</td>
</tr>
</tbody>
</table>

### NET POSITION

| Net investment in capital assets                   | 322,254  |
| Unrestricted                                       | 55,335,591 |
| **Total net position**                             | **$55,657,845** |
# PENINSULA CLEAN ENERGY AUTHORITY

## STATEMENT OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
July 1, 2017 through December 31, 2017

### OPERATING REVENUES
- Electricity sales, net  
  $ 127,028,378
- Green electricity premium  
  568,365

**Total operating revenues**  
127,596,743

### OPERATING EXPENSES
- Cost of electricity  
  88,130,793
- Staff compensation and benefits  
  991,423
- Data manager  
  2,016,690
- Service fees - PG&E  
  765,925
- Consultants and other professional fees  
  270,704
- Legal  
  604,911
- Communications and noticing  
  360,035
- General and administration  
  309,932
- Depreciation  
  23,388

**Total operating expenses**  
93,473,801

**Operating income (loss)**  
34,122,942

### NONOPERATING REVENUES (EXPENSES)
- Interest income  
  6,947
- Interest and related expense  
  (182,573)

**Total nonoperating revenues (expenses)**  
(175,626)

### CHANGE IN NET POSITION
- Net position at beginning of period  
  21,710,529

**Net position at end of period**  
$ 55,657,845

See accountants' compilation report.
### CASH FLOWS FROM OPERATING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts from electricity sales</td>
<td>$132,410,562</td>
</tr>
<tr>
<td>Tax and surcharge receipts from customers</td>
<td>2,171,073</td>
</tr>
<tr>
<td>Payments to purchase electricity</td>
<td>(85,434,751)</td>
</tr>
<tr>
<td>Payments for staff compensation and benefits</td>
<td>(998,347)</td>
</tr>
<tr>
<td>Payments for consultants and other professional fees</td>
<td>(3,114,401)</td>
</tr>
<tr>
<td>Payments for legal fees</td>
<td>(579,911)</td>
</tr>
<tr>
<td>Payments for communications and noticing</td>
<td>(387,230)</td>
</tr>
<tr>
<td>Payments for general and administration</td>
<td>(384,361)</td>
</tr>
<tr>
<td>Tax and surcharge payments to other governments</td>
<td>(2,091,980)</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by operating activities</strong></td>
<td>41,590,654</td>
</tr>
</tbody>
</table>

### CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal payments on loan</td>
<td>(7,480,800)</td>
</tr>
<tr>
<td>Deposits and collateral paid</td>
<td>(2,633,718)</td>
</tr>
<tr>
<td>Deposits and collateral returned</td>
<td>2,115,750</td>
</tr>
<tr>
<td>Interest and related expense payments</td>
<td>(216,703)</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by non-capital financing activities</strong></td>
<td>(8,215,471)</td>
</tr>
</tbody>
</table>

### CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of capital assets</td>
<td>(223,381)</td>
</tr>
</tbody>
</table>

### CASH FLOWS FROM INVESTING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income received</td>
<td>7,505</td>
</tr>
</tbody>
</table>

Net change in cash and cash equivalents: 33,159,307
Cash and cash equivalents at beginning of year: 20,381,698
Cash and cash equivalents at end of period: $53,541,005
## RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating income (loss)</td>
<td>$34,122,942</td>
</tr>
<tr>
<td>Adjustments to reconcile operating income to net cash provided (used) by operating activities</td>
<td></td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>$23,388</td>
</tr>
<tr>
<td>Revenue reduced for uncollectible accounts</td>
<td>$448,157</td>
</tr>
<tr>
<td>(Increase) decrease in net accounts receivable</td>
<td>$3,584,228</td>
</tr>
<tr>
<td>(Increase) decrease in other receivables</td>
<td>$(13,310)</td>
</tr>
<tr>
<td>(Increase) decrease in accrued revenue</td>
<td>$808,437</td>
</tr>
<tr>
<td>(Increase) decrease in prepaid expenses</td>
<td>$(40,964)</td>
</tr>
<tr>
<td>Increase (decrease) in accounts payable</td>
<td>$(87,134)</td>
</tr>
<tr>
<td>Increase (decrease) in accrued payroll and related</td>
<td>$(12,932)</td>
</tr>
<tr>
<td>Increase (decrease) in accrued cost of electricity</td>
<td>$2,680,752</td>
</tr>
<tr>
<td>Increase (decrease) in accrued liabilities</td>
<td>$25,000</td>
</tr>
<tr>
<td>Increase (decrease) in user taxes and energy surcharges due to other governments</td>
<td>$52,090</td>
</tr>
<tr>
<td>Net cash provided (used) by operating activities</td>
<td>$41,590,654</td>
</tr>
</tbody>
</table>
# BUDGETARY COMPARISON SCHEDULE

## July 1, 2017 through December 31, 2017

### REVENUE AND OTHER SOURCES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue - Electricity, net</td>
<td>133,889,974</td>
<td>127,028,378</td>
<td>(6,861,596)</td>
<td>95%</td>
<td>248,082,000</td>
<td>121,053,622</td>
</tr>
<tr>
<td>Revenue - Green Premium, net</td>
<td>375,015</td>
<td>568,365</td>
<td>193,350</td>
<td>152%</td>
<td>737,000</td>
<td>168,635</td>
</tr>
<tr>
<td>Interest income</td>
<td></td>
<td></td>
<td>6,947</td>
<td></td>
<td>6,947</td>
<td></td>
</tr>
<tr>
<td><strong>Total revenue and other sources</strong></td>
<td>134,264,989</td>
<td>127,603,690</td>
<td>(6,661,299)</td>
<td>95%</td>
<td>248,819,000</td>
<td>121,222,257</td>
</tr>
</tbody>
</table>

### EXPENDITURES AND OTHER USES

#### CURRENT EXPENDITURES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of energy</td>
<td>91,851,671</td>
<td>88,130,793</td>
<td>(3,720,878)</td>
<td>96%</td>
<td>181,715,000</td>
<td>93,584,207</td>
</tr>
<tr>
<td>Data manager</td>
<td>1,979,861</td>
<td>2,016,690</td>
<td>36,829</td>
<td>102%</td>
<td>3,970,000</td>
<td>1,953,310</td>
</tr>
<tr>
<td>PG&amp;E service fees</td>
<td>803,949</td>
<td>765,925</td>
<td>(38,024)</td>
<td>95%</td>
<td>1,636,000</td>
<td>870,075</td>
</tr>
<tr>
<td>Personnel</td>
<td>1,500,000</td>
<td>991,423</td>
<td>(508,577)</td>
<td>66%</td>
<td>3,320,000</td>
<td>2,328,577</td>
</tr>
<tr>
<td>Customer noticing</td>
<td>150,000</td>
<td>158,684</td>
<td>8,684</td>
<td>106%</td>
<td>425,000</td>
<td>266,316</td>
</tr>
<tr>
<td>Outreach and communications</td>
<td>312,000</td>
<td>201,351</td>
<td>(110,649)</td>
<td>65%</td>
<td>624,000</td>
<td>422,649</td>
</tr>
<tr>
<td>Professional services</td>
<td>508,500</td>
<td>270,704</td>
<td>(237,796)</td>
<td>53%</td>
<td>1,017,000</td>
<td>746,296</td>
</tr>
<tr>
<td>Legal and regulatory</td>
<td>510,000</td>
<td>604,911</td>
<td>94,911</td>
<td>119%</td>
<td>1,030,000</td>
<td>425,089</td>
</tr>
<tr>
<td>Energy programs</td>
<td>100,000</td>
<td>(100,000)</td>
<td>0%</td>
<td></td>
<td>250,000</td>
<td>250,000</td>
</tr>
<tr>
<td>General and administration</td>
<td>422,500</td>
<td>309,932</td>
<td>(112,568)</td>
<td>73%</td>
<td>795,000</td>
<td>485,068</td>
</tr>
<tr>
<td><strong>Total current expenditures</strong></td>
<td>98,138,481</td>
<td>93,450,413</td>
<td>(4,688,068)</td>
<td>95%</td>
<td>194,782,000</td>
<td>101,331,587</td>
</tr>
</tbody>
</table>

#### OTHER USES

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate stabilization reserve *</td>
<td>6,713,249</td>
<td></td>
<td>(6,713,249)</td>
<td>0%</td>
<td>12,440,950</td>
<td>12,440,950</td>
</tr>
<tr>
<td>Capital outlay</td>
<td>375,000</td>
<td>326,729</td>
<td>(48,271)</td>
<td>87%</td>
<td>484,000</td>
<td>157,271</td>
</tr>
<tr>
<td><strong>Total other uses</strong></td>
<td>7,088,249</td>
<td>326,729</td>
<td>(6,761,520)</td>
<td>5%</td>
<td>12,924,950</td>
<td>12,598,221</td>
</tr>
</tbody>
</table>

#### DEBT SERVICE

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt service</td>
<td>7,997,000</td>
<td>182,573</td>
<td>(7,814,427)</td>
<td>2%</td>
<td>7,997,000</td>
<td>7,814,427</td>
</tr>
<tr>
<td><strong>Total Expenditures, Other Uses and Debt Service</strong></td>
<td>113,223,730</td>
<td>93,959,715</td>
<td>(19,264,015)</td>
<td>83%</td>
<td>215,703,950</td>
<td>121,744,235</td>
</tr>
</tbody>
</table>

**Net increase (decrease) in available fund balance**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21,041,259</td>
<td>33,643,975</td>
<td>12,602,716</td>
<td>160%</td>
<td>33,115,050</td>
<td>(521,978)</td>
</tr>
</tbody>
</table>

* The rate stabilization reserve will be recognized at the end of the fiscal year

---

See accountants' compilation report.
Net increase (decrease) in available fund balance per budgetary comparison schedule: $33,643,975

Adjustments needed to reconcile to the changes in net position in the Statement of Revenues, Expenses and Changes in Net Position:

Subtract depreciation expense (23,388)
Add back capital asset acquisitions 326,729

Change in net position $33,947,316