Peninsula Clean Energy
Board of Directors Meeting

July 23, 2020
Agenda

• Call to order / Roll Call

• Public Comment

• Action to set the agenda and approve consent items
Regular Agenda

1. Chair Report (Discussion)
Regular Agenda

2. CEO Report (Discussion)
Today’s Updates

• Staffing Update
• COVID-19 Update
  • Load Impact Analysis
• Merced County Update
• RFO’s Issued
• Update on Power On Peninsula
• Reach Codes
• Joint Rate Mailer
• EV Ready Launch
• CalCCA Updates
• Regulatory Update
• Legislative Update
• Upcoming PCE Meetings
Staffing Updates

• We currently have one open position for a Data Manager.

• With continued uncertainty and changing conditions with COVID, PCE staff will continue to work-from-home through end of 2020
  • Providing up to $500 per staff member for additional equipment needs at home
  • Providing $50/month stipend to all staff to upgrade their internet connections
COVID-19 Load Impact Analysis

- Overall PCE load
- Monthly Load Changes
- Load Shapes by Customer Type

Thank you to the power resources team for this analysis!
PCE Load after Shelter-in-place order

• April-June 2020 compared to April-June 2019:
  • 7% decrease in Total PCE load compared to same period in 2019.
  • Around 17% decrease in medium/large commercial load, and 21% decrease in small commercial load
  • Around 9% increase in residential load

<table>
<thead>
<tr>
<th>Year</th>
<th>Total PCE Load (MWh)</th>
<th>Residential (MWh)</th>
<th>Small Commercial (MWh)</th>
<th>Medium Commercial (MWh)</th>
<th>Large Commercial (MWh)</th>
<th>Industrial (MWh)</th>
<th>Agricultural (MWh)</th>
<th>Street Lights-Other (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>906,179</td>
<td>123,290</td>
<td>331,627</td>
<td>145,764</td>
<td>215,147</td>
<td>79,105</td>
<td>68,730</td>
<td>902,317</td>
</tr>
<tr>
<td>2020</td>
<td>841,359</td>
<td>97,260</td>
<td>302,024</td>
<td>120,532</td>
<td>151,022</td>
<td>68,730</td>
<td></td>
<td>841,359</td>
</tr>
</tbody>
</table>
Significant decrease in PCE’s monthly load starting March 2020:

- 4% decrease in March 2020 compared to March 2019
- 7%, 6%, and 8% decrease in April, May, and June of 2020 compared to same months in 2019
Monthly Load Changes by Customer Class

- Significant decrease in C&I load, increases in residential load in each month compared to same month in 2019.
Load Shapes (C&I)

- 2020 shapes (dashed lines) are scaled down compared to 2019.
Load Shapes (Residential)

- 2020 residential load shapes (orange lines) have changed compared to 2019 shapes (blue lines):
  - Smaller morning peak
  - No drop-off during mid-day
PCE Load Shapes

- 2020 PCE load shapes (orange lines) have scaled down compared to 2019 shapes (blue lines)
Merced County Update

• Los Banos made request on June 11 to PG&E for load data
• Load data delivered by PG&E yesterday
• MRW under contract to perform technical study:
  • Costs and benefits to Los Banos on becoming a CCA
  • Costs and benefits to PCE of Los Banos joining PCE
RFOs Issued and on PCE website:

• Long-term renewables and storage RFO with SJCE – issued July 15
  • Offers due September 4

• DER Site Evaluation and Engineering Services RFP – issued July 16
  • Evaluation of SMC solar+storage opportunities
  • Initial screening August 5
  • Qualifying respondents invited to Step 2
  • Deadline for responses August 28
Launch of Power On Peninsula

More details to be discussed during Agenda Item 5
Power On Peninsula: Backup Power for San Mateo County

- Offering **clean** backup power primarily through **solar+battery** or **battery storage only** at **low or no cost**

- Programs address renters and homeowners

- **Priority customers**: High Fire Threat Districts, affected by previous PSPS events, low income/disadvantaged communities, CARE/FERA, Medical Baseline

- Programs are **live**. Click [here](#) for our web page for Power On Peninsula – Medical. We will have a separate web page for our standard Power On Peninsula program in early August.
### Power on Peninsula - Program Details

<table>
<thead>
<tr>
<th></th>
<th>Power On Peninsula</th>
<th>Power On Peninsula – Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Segment</td>
<td>Single-family homeowners and multi-family homes</td>
<td>Renters and apartment dwellers</td>
</tr>
<tr>
<td>Technology Solution</td>
<td>Sunrun BrightBox: Solar + battery storage installation</td>
<td>Goal Zero Yeti 3000x battery + Boulder 200 Briefcase solar panel</td>
</tr>
<tr>
<td>Cost to Customer</td>
<td>Most customers will have no out-of-pocket cost; equipment costs are financed through a PPA</td>
<td>Zero</td>
</tr>
<tr>
<td>Incentives to Participate</td>
<td>$1,000 upfront incentive, electricity bill savings</td>
<td>Free, clean backup power</td>
</tr>
<tr>
<td>Number of Customers Served</td>
<td>400 – 4,000</td>
<td>150</td>
</tr>
</tbody>
</table>
Power on Peninsula - Timeline

June 26: Signed Sunrun contract

July 15: Website for portable batteries is live

July 21: Signed Hassett Hardware contract

August 5: Website for permanent installations will go live

August 10: Portable batteries arrive for PCE customers

September 5: Second wave of portable batteries for PCE customers

October 9: Anniversary of first PSPS event
Reach Codes

• Holding meetings with cities to assist in moving forward on reach codes:
  • June 11 – Belmont
  • June 17 – Daly City
  • June 19 – Foster City
  • June 24 – Hillsborough
  • June 26 – San Bruno
  • July 17 – Redwood City

• Menlo Park Goal
  • Committing to becoming zero carbon by 2030 – first city in US
  • Moving forward on “burnout ordinance” in Climate Action Plan
Joint Rate Mailer

- Informational memo in board packet (Item 18)
- AB1110 implementation has changed how GHG-free resources from “ACS” suppliers is now reported differently:
  - Purchases of GHG-free energy (large hydroelectric) on 2019 Joint Rate Mailer and Product Content Label will show some nuclear content (0.8%) from suppliers in the Pacific Northwest: Powerex, Bonneville Power Administration, and Tacoma Power
# Understanding your energy choice

<table>
<thead>
<tr>
<th>2020 Residential Rate Comparison, E-1*</th>
<th>PG&amp;E Solar Choice</th>
<th>PENINSULA CLEAN ENERGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Rate (KWH)</td>
<td>$0.11752</td>
<td>$0.07312</td>
</tr>
<tr>
<td>PG&amp;E Delivery Rate (KWH)</td>
<td>$0.01615</td>
<td>$0.01615</td>
</tr>
<tr>
<td>PG&amp;E PCA/FF (KWH)</td>
<td>N/A</td>
<td>$0.02424</td>
</tr>
<tr>
<td>Total Electricity Cost (KWH)</td>
<td>$0.27917</td>
<td>$0.27220</td>
</tr>
<tr>
<td>Average Monthly Bill ($)</td>
<td>$115.74</td>
<td>$114.92</td>
</tr>
</tbody>
</table>

**This compares electricity costs for an average residential customer in the Peninsula Clean Energy/PG&E service area (San Mateo County) with an average monthly usage of 415 kilowatt-hours (KWH). This is based on a representative 12-month billing history for all customers on E-1 rate schedules for PG&E and PCE’s published rates as of May, 2020.**

**Create new caption here** *Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud*

**Generation Rate** is the cost of creating electricity to power your business. The generation rate varies based on your energy provider and the resources included in your energy provider’s generation supply.

**PG&E Delivery Rate** is a charge assessed by PG&E to deliver electricity to your business. The PG&E delivery rate depends on your electricity usage, and is charged equally to both Peninsula Clean Energy and PG&E customers.

**PG&E PCA/FF** represents the Power Charge Indifference Adjustment (PCA) and the Franchise Fee surcharge (FF). The PCA is a charge to recover PG&E’s above-market costs for generation resources acquired prior to a customer’s switch to a third-party electric generation provider such as Peninsula Clean Energy. The PCA also applies to PG&E’s customers that elect to take service under PG&E’s optional Solar Choice program. PG&E acts as a collection agent for the Franchise Fee surcharge, which is levied by the California Public Utilities Commission on behalf of cities and counties in PG&E’s service territory for all customers. The costs for resources included in the PCA and FF surcharges are included in the generation rates for PG&E bundled service customers.

**DRAFT**

**Footnote to be added re PG&E Solar Choice**
EV Ready Launch

• $28 million total program
  • $20 million CALeVIP program – DCFC and Level 2 chargers
    • $8 million PCE funds over 4 years + $12 million California Energy Commission
  • $4 million – PCE specific-funds for Level 1 and 2, MUD-focus
  • $2 million – Outreach, education, technical assistance
  • $1 million – Workforce development
  • $1 million – Administration

• PCE-specific launch planned on August 4 – now delayed
  • $4 million for Level 1 and 2 with MUD focus
  • Delayed due to delay in CALeVIP launch from October to December 2020
CalICCA Updates

Local Elected Officials Subcommittee

Meeting planned for August 14, 11:00 am

- Legislative update
- PCIA trigger update
- Next steps / call to action
Setting up “meet and greets” with CPUC commissioners
- Commissioner Genevieve Shiroma, August 28, 9:00 am
- Commissioner Martha Guzman-Aceves, Sept 3, 1:00 pm

- Please let Shayna know if you want to attend

- More to come . . .
## Legislative Update

Legislature back in session on July 27
- PCE is submitting letters of support for:

<table>
<thead>
<tr>
<th>Measure / Author</th>
<th>Summary</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 1001 / Ting</td>
<td>Requires CEC to administer loan program for schools for school resiliency projects including solar+storage.</td>
<td>Senate Education Hearing likely July 27</td>
</tr>
<tr>
<td>AB 3256 / Garcia</td>
<td>$6.98B natural resources bond proposal for Nov 2020 ballot. Includes $500M for resiliency projects</td>
<td>Assembly Rules Effectively Dead</td>
</tr>
<tr>
<td>SB 1117 / Monning</td>
<td>Eliminates statutory conflict resulting in mobile home park residents being charged the IOU rate rather than the CCA rate</td>
<td>Assembly Energy Hearing on July 29</td>
</tr>
<tr>
<td>SB 1215 / Stern</td>
<td>IOU/local govt/CCA collaboration to identify critical circuits and develop microgrids</td>
<td>Assembly Energy</td>
</tr>
<tr>
<td>SB 1312 / McGuire</td>
<td>Directs CPUC to establish protocols for an IOU to trigger a PSPS event</td>
<td>Assembly Energy</td>
</tr>
<tr>
<td>SB 1403 / Hueso</td>
<td>Amends definition of “low-income customers” to account for cost-of-living differences by region</td>
<td>Assembly Energy</td>
</tr>
</tbody>
</table>
Upcoming Meetings

These meetings will continue to be held by video/teleconference

- Executive Committee:
  - August 10 at 8:00 a.m.

- Audit & Finance Committee:
  - August 10 at 10 a.m.

- Citizens Advisory Committee:
  - August 13 at 6:30 p.m.

- Board of Directors:
  - August 27 at 6:30 p.m.
Regular Agenda

3. Citizens Advisory Committee Report (Discussion)
Integrated Resource Plan
Siobhan Doherty, Director of Power Resources
July 23, 2020
RECOMMENDATION

• Approve results of IRP analysis as presented by staff or in a form substantially similar to that presented by staff for the two required submissions – (1) 46 MMT Conforming Portfolio and (2) 38 MMT Conforming Portfolio.

• Authorize the CEO to determine whether to submit any alternative portfolios.

• Authorize staff to use the results of the IRP analysis to populate the CPUC-required document templates and delegate authority to the CEO to approve the final IRP report on behalf of the Board for submittal to the CPUC by September 1, 2020.
BACKGROUND

• The CPUC IRP was mandated by SB350, (de León, Chapter 547, 2015)

• Initial reporting year was 2018; report every other year

• 2020 IRP is due September 1, 2020

• Primary purpose:
  o To provide CPUC staff with the inputs from each LSE to forecast industry-wide procurement and
  o Determine whether load serving entities (LSEs) in CA are meeting GHG and reliability needs for 2030.
ELECTRICITY’S ROLE

2030 Statewide Goal: 260 million metric tons (MMT) of CO2 equivalent

2030 Electricity Sector Portion: 46 MMT, 18% of allowable emissions

To meet SB100, electricity sector to target 38 MMT in 2030, 15% of allowable emissions

1. Figure courtesy of California’s 2017 Climate Change Scoping Plan: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf
IRP: HOW WE GET THERE

• Integrated Resource Planning (IRP): Ensure electricity sector is on track to meet its portion of California’s 2030 GHG targets

• Under two scenarios:
  o Target 46 MMT GHG Emissions in 2030 to meet 40% reduction from 1990 GHG levels
  o Target 38 MMT GHG Emissions in 2030 to meet SB100 targets
BIANNUAL PROCESS

• Odd-numbered years – CPUC conducts modeling to:
  o Recommend a GHG target for the electricity sector; and
  o Identify optimal portfolio – “Reference System Portfolio (RSP)"

• Even-numbered years – LSEs submit IRPs to the CPUC

• CPUC aggregates individual IRPs and conducts production cost modeling and a reliability assessment
REFERENCE SYSTEM PORTFOLIO (RSP)

• Identifies the portfolio of resources required for all CPUC-regulated LSEs across CA to
  o meet GHG reduction goals
  o at least cost
  o while ensuring electric service reliability.
CANDIDATE RESOURCES

• Resources available to be chosen by the model to meet GHG targets at least cost

<table>
<thead>
<tr>
<th>Resource Type</th>
<th>First Available Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar PV</td>
<td>2020</td>
</tr>
<tr>
<td>Wind (CA onshore)</td>
<td>2022-2023</td>
</tr>
<tr>
<td>Wind (OOS onshore)</td>
<td>2026</td>
</tr>
<tr>
<td>Wind (offshore)</td>
<td>2030</td>
</tr>
<tr>
<td>Geothermal</td>
<td>2024-2026</td>
</tr>
<tr>
<td>Biomass</td>
<td>2020</td>
</tr>
<tr>
<td>Pumped Storage</td>
<td>2026</td>
</tr>
<tr>
<td>Battery Storage</td>
<td>2020</td>
</tr>
</tbody>
</table>
# RSP for All CA – 46 MMT

## 46 MMT RSP New Resource Buildout (Incremental MW)

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural Gas Capacity Not Retained</th>
<th>Shed Demand Response</th>
<th>Pumped Storage</th>
<th>Battery Storage</th>
<th>Utility-Scale Solar</th>
<th>Out of State Wind</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>-</td>
<td>222</td>
<td>-</td>
<td>-</td>
<td>2,000</td>
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<td>-</td>
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<tr>
<td>2021</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>973</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2022</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>846</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>2023</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,828</td>
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<td>2,746</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,017</td>
<td>-</td>
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<tr>
<td>2026</td>
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<td>2029</td>
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</tr>
</tbody>
</table>
### RSP for All CA – 38 MMT

#### 38 MMT RSP New Resource Buildout (Incremental MW)

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural Gas Capacity Not Retained</th>
<th>Shed Demand Response</th>
<th>Pumped Storage</th>
<th>Battery Storage</th>
<th>Utility-Scale Solar</th>
<th>Out of State Wind</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>152</td>
<td>2,000</td>
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<td>2021</td>
<td>-</td>
<td>222</td>
<td>-</td>
<td>2,301</td>
<td>2,000</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2022</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,000</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2023</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>2,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2024</td>
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<td>2025</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>684</td>
<td>3,000</td>
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<td>2026</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>1,605</td>
<td>1,929</td>
<td>4,678</td>
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<tr>
<td>2027</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,541</td>
<td>4,218</td>
<td>10,411</td>
</tr>
</tbody>
</table>

**Notes:**
- Natural Gas Capacity Not Retained: (2,046)
- Wind: 3,500, 5,500, 7,500, 9,500, 11,500, 13,500
CCA COORDINATION

• Coordinating with 3 CCAs on modeling for IRP
  
  o East Bay Community Energy
  o Clean Power Alliance
  o San Jose Community Energy

• Siemens is providing modeling services to PCE and other 3 CCAs
MODELING REQUIREMENTS

- Two portfolios are required:
  - Target 46 MMT GHG Emissions in 2030 to meet 40% reduction from 1990 GHG levels
  - Target 38 MMT GHG Emissions in 2030 to meet SB100 targets

- Use the assigned load forecast\(^1\) from the CEC’s 2019 Integrated Energy Policy Report (IEPR)

- Use inputs and assumptions matching those used by CPUC staff to develop the Reference System Portfolio

- GHG emissions from portfolios must be within 1% of assigned target (Conforming Portfolio)
  - May also submit a portfolio with emissions that are below the GHG target for the 38 MMT scenario only (Preferred Portfolio)

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1. The mid-AAEE version of Form 1.1c of the 2017 IEPR Mid-demand case
MODELING APPROACH

• Modeled portfolios to meet 100% renewable target on an annual basis for 46 MMT and 38 MMT scenarios by 2025

• Adjusted resulting portfolios by removing resources to increase GHG emissions to within 1% of target assigned by CPUC

• Siemens is currently working on a 100% renewable time coincident portfolio
## PORTFOLIO’S MODELLED BY SIEMENS

<table>
<thead>
<tr>
<th></th>
<th>46 MMT Preferred Portfolio</th>
<th>46 MMT Conforming Portfolio</th>
<th>38 MMT Preferred Portfolio</th>
<th>38 MMT Conforming Portfolio</th>
<th>38 MMT Hourly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net open position is filled with contracts to meet 100% renewable on annual accounting</td>
<td>46 MMT Preferred Portfolio adjusted to meet 46 MMT GHG benchmark</td>
<td>Net open position is filled with contracts to meet 100% renewable on annual accounting</td>
<td>38 MMT Preferred Portfolio adjusted to meet 38 MMT GHG benchmark</td>
<td>Net open position is filled with contracts to meet 100% renewable on 24/7 accounting</td>
<td></td>
</tr>
<tr>
<td>File with CPUC?</td>
<td>No</td>
<td>Yes</td>
<td>TBD</td>
<td>Yes</td>
<td>TBD</td>
</tr>
<tr>
<td>CPUC GHG Benchmark?</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>100% RE Goal?</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>100% RE Time Coincident?</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>
## MODELING REQUIREMENTS

<table>
<thead>
<tr>
<th>LSE</th>
<th>2030 Load (GWh)</th>
<th>Share of Load in IOU Territory</th>
<th>2030 Emissions Benchmark – 46 MMT</th>
<th>2030 Emissions Benchmark – 38 MMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCE</td>
<td>3,560</td>
<td>4.68%</td>
<td>0.630</td>
<td>0.503</td>
</tr>
<tr>
<td>EBCE</td>
<td>6,910</td>
<td>9.08%</td>
<td>1.222</td>
<td>0.977</td>
</tr>
<tr>
<td>SJCE</td>
<td>4,449</td>
<td>5.85%</td>
<td>0.787</td>
<td>0.629</td>
</tr>
<tr>
<td>CPA</td>
<td>11,867</td>
<td>13.85%</td>
<td>1.785</td>
<td>1.417</td>
</tr>
<tr>
<td>PG&amp;E</td>
<td>26,777</td>
<td>35.2%</td>
<td>4.737</td>
<td>3.784</td>
</tr>
<tr>
<td>SCE</td>
<td>54,393</td>
<td>63.5%</td>
<td>8.180</td>
<td>6.496</td>
</tr>
<tr>
<td>SDG&amp;E</td>
<td>5,366</td>
<td>29.5%</td>
<td>1.093</td>
<td>0.876</td>
</tr>
</tbody>
</table>

**Other CCAs**

**IOUs**

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## PORTFOLIOS MODELLED BY SIEMENS (2030)

<table>
<thead>
<tr>
<th></th>
<th>46 MMT Preferred Portfolio</th>
<th>46 MMT Conforming Portfolio</th>
<th>38 MMT Preferred Portfolio</th>
<th>38 MMT Conforming Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Li-Ion</td>
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Goal: To meet 100% renewable on an annual basis

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MW

38 MMT Conforming New Resource Buildout Cumulative

- 400
- 600
- 800
- 1,000
- 1,200
- 1,400

38 MMT Conforming – DRAFT – TO BE FILED
Goal: To meet 100% renewable on an annual basis

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% Renewable – 46 MMT Preferred

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

% Renewable
CA RPS Target
PCE RPS Target
### 38 MMT Preferred New Resource Buildout Cumulative

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</table>

MW

38 MMT Preferred New Resource Buildout Cumulative
SUBMISSION REQUIREMENTS

1. Standard LSE Plan – written description of IRP, including:
   • Description of modeling process and assumptions

2. CPUC Provided Clean System Power Calculator
   • Calculates LSE’s Portfolio’s expected GHG Emissions

3. Resource Data Template
   • Details on current and planned resources to meet LSE’s targets
NEXT STEPS

• Receive results from Siemens on time-coincident analysis
• Receive sensitivity analysis results from Siemens
• Determine whether to submit 100% renewable portfolio
• Complete narrative and templates
• IRP Submission due 9/1/2020
RECOMMENDATION

• Approve results of IRP analysis as presented by staff or in a form substantially similar to that presented by staff for the two required submissions – (1) 46 MMT Conforming Portfolio and (2) 38 MMT Conforming Portfolio.

• Authorize the CEO to determine whether to submit any alternative portfolios.

• Authorize staff to use the results of the IRP analysis to populate the CPUC-required document templates and delegate authority to the CEO to approve the final IRP report on behalf of the Board for submittal to the CPUC by September 1, 2020.
Regular Agenda

5. Approve Additional Expenditure of up to $250,000 for Portable Battery Program for Medically Vulnerable Customers (Action)
Power On Peninsula Portable Battery Program for Medically Vulnerable

July 23, 2020
Recommendation

Approve an Additional Expenditure of up to $250,000 for the Portable Battery Program for Medically Vulnerable Customers
# Budget

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<th>Item</th>
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<tr>
<td>150 Yeti 3000x Portable Power Station Portable Batteries</td>
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<td>100 Boulder 200 Briefcase Solar Panel</td>
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<td><strong>Total Budget</strong></td>
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Agenda

1. Program Background
2. Vendor & Product Selection
3. Program Structure
4. Hassett Hardware Partnership
5. Non-Profit Outreach Partners
Program Background

- Board approved $500k towards the purchase of portable batteries in May 2020.
- Qualifying customers include those that are medically vulnerable and most-likely to experience a PSPS event.
- Peninsula Clean Energy will donate a portable battery to up to 150 qualifying customers, prioritized by medical and financial need.
- Each customer will receive one to two batteries to help get through power outages.
Program Priorities

- Target customers who are most vulnerable to the intersection of PSPS and COVID-19. **Keep costs low** for our customers to increase access.

- **Prioritize clean power solutions** over traditional diesel-fueled generators.

- Ensure that the **batteries are used safely** throughout distribution, storage, and operation.
Vendor & Product Selection

• **Vendor Selection:** Sent RFI to 8 potential Vendors with five responses. Final selection: **Goal Zero**

• **Yeti 3000x battery:**
  - 3 kWh capacity
  - Zero on-site emissions
  - Easy to operate
  - No cost to customer

• **Boulder 200 Briefcase solar panel**
  - 200W capacity
  - Zero on-site emissions
  - Folds up for easy storage
  - Plugs directly into Yeti 3000x
  - Slowly recharges the battery
  - No cost to customer
Program Structure

• **Company Background:**
  - Local hardware store with 4 out of 5 stores in San Mateo County
  - Third-generation family-owned
  - Member of Ace cooperative (not a franchise)

• **Partnership Structure**
  Four tasks bundled under one contract:
  1. Product Procurement
  2. Storage
  3. Delivery
  4. Customer Training

• **Customer targets:** Limit participation to medically vulnerable customers who are most likely to experience PSPS
Hassett Hardware Partnership Details

**Product Procurement**
- Staggered procurement:
  - 75 batteries + 50 solar panels delivered mid-August; 75 more batteries + 50 solar panels delivered early September
- Batteries cost $2849.99 + tax
- Solar panels cost $479.99 + tax

**Product Storage**
- Storing batteries and solar panels inside Hassett Hardware’s stores
- Low-cost (free if <30 days)

**Product Delivery**
- Option to pickup in-store or have products delivered to the customer’s home
- Customers must sign a waiver to receive products
- $99-$199/unit delivery cost, depending on where the customer lives

**Customer Training**
- In-depth training on how to use product
- Training at-store or in-home
- Spanish training offered
- $99/hr training cost, capped at 1.5 hours
Non-Profit Partner Details

Senior Coastsiders
• Non-profit located in Half Moon Bay
• Provides services for older adults and adults with disabilities
• More than two-thirds of our target audience is located in its service area along the coast from Montara to Pescadero

Puente de la Costa Sur
• Nonprofit core social service agency with offices in Pescadero & La Honda
• Focuses on bilingual outreach and services, including to farmworkers
Outreach and Enrollment Services

Outreach for both of PCE’s Power On Peninsula resilience programs:
  • Portable backup battery donations for renters
  • Installation of solar and backup batteries for homeowners

Enrollment support to help eligible residents from all parts of San Mateo County navigate eligibility and enrollment for several programs:
  • Peninsula Clean Energy resilience programs
  • Medical Baseline utility discounts
  • Emergency resources from Center for Independence for Individuals with Disabilities

In addition, Senior Coastsiders will provide support for residents from all parts of San Mateo County who need help navigating Sunrun’s solar and battery storage installation process, for example those with cognitive disabilities or early stage dementia.
Recommendation

Approve an Additional Expenditure of up to $250,000 for the Portable Battery Program for Medically Vulnerable Customers
Regular Agenda

6. Approve Building Electrification Awareness Program (Action)
Building Electrification Awareness Program

July 23, 2020
Obtain approval for CEO to enter into 3-year agreement, not to exceed $300,000 with Gelfand Partners Architects for purpose of implementing a Building Electrification Awareness Program
Background

• Program was approved by the Board on January 23, 2020 in conjunction with the Reach Code Assistance and Technical Training program

• Addresses two key issues that arose out of the Reach Code program:
  o Need for developer and contractor education and training
  o Consumers’ preference for gas stoves and lack of awareness of modern electrical alternatives
Building Electrification Awareness and Education

1. Showcase all-electric buildings and technologies
2. Recognize designers and builders
3. Engage consumers on induction cooking
4. Marketing campaign & action

RFP issued: 3/20
Responses: 5/8
Award decision: 5/29
Customer Journey

Customer

Awareness → Understanding → Consideration → Action

Peninsula Clean Energy

Inspire → Educate → Support → Motivate

- Switch is On Campaign
- Recognition
- Case studies and collateral
- Tours
- Induction cooking demos
- Hands-on induction cooking
- Building electrification database
- Building electrification technical assistance
- Workforce development
- Pilots
- Rebates
- Reach codes
“Switch is On” Campaign

• Goal is to raise awareness of electrification
  o Address perceptions and misconceptions about electric home
  o Involve, empower and educate homeowners and key influencers (contractors, installers)

• First year target audience
  o Energy engaged homeowners
  o New construction homeowners
  o Industry influencers

• Campaign timeline:
  o Starting in fall 2020 in Bay Area and LA
  o Running through 2024

• Funding:
  o Coalition members
  o Possibly TECH funds in future
“Switch is On” Campaign – Funders*

* As of 6/3/20
Building Electrification Awareness

RFP Awardee: Gelfand Partners Team

- Award-winning green architecture firm; LEED and Zero Net Energy expertise
- Residential energy, sustainable design, and green building certification
Gelfand & Team

nbi new buildings institute

Nonprofit focused on ZNE recognition; manages the Getting to Zero database of buildings

FRONTIER energy

Operates the Food Service Technology Center (FSTC) with 30+ years experience

Media partner
Deliverables

• Collateral materials and case studies on building electrification and induction cooking
• Call for Entries to Peninsula Clean Energy database of electrified buildings
• Tours:
  o 3 new virtual tours
  o 1-2 onsite tours per year, once allowed
• Awards 2021, 2022, 2023 (juried and aligned with existing events)
• Induction Cooking Demonstrations
  o Virtual demonstrations and video
  o In-person demonstrations and hands-on training (about 11/year, once allowed)
  o Induction cooktop loaner program
• Promotion and awareness via owned and earned media
Budget

• Up to $400K over 3 years authorized by the Board
• ~$100K allocated to first year of BDC “Switch is On” campaign
• Remaining $300K for the Building Electrification Awareness program over 3 years
  o Actual spend will be based on deliverables
Regular Agenda

7. Approve E-Bike Program (Action)
E-Bikes Programs Proposal

July 23, 2020
E-Bikes Rebate Program: Request

Program: Rebate program for 300 electric bikes for low-income residents over 3 years

Request: Recommend approval to the Board of the proposed E-Bikes Rebate Program

Amount & Term: Up to $300,000 over 3 years
E-Bike Background

• Electric pedal assist, aids:
  • Parents with kids
  • Seniors
  • Commuters
  • Hills/cargo

• Very low cost, flexible mobility

• 33% - 50% of e-bike trips replaced a car trip

• Some incentives available in other US regions ($200-500)
Program Components

1. Focus on lower-income communities (max 400% above poverty line)
2. Rebate of up to 80% purchase price ($800 cap)
3. Bike vendor enrollment
4. Commute.org performance-based incentive
5. Partnership with Silicon Valley Bicycle Coalition (safety classes and other promotion), community partners
6. Performance measurement

Program launch aim for fall
Eligibility

Customers:
1. 400% Federal Poverty Limit or participation in CARE/FARA, CalFresh, Affordable Housing, etc.
2. 1 rebate per residential address

Bicycles:
1. Must be new
2. MSRP < $1,800

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E-Bikes Rebate Program: Request

**Program:** Rebate program for 300 electric bikes for low-income residents

**Request:** Recommend approval to the Board of the proposed E-Bikes Rebate Program

**Amount & Term:** Up to $300,000 over 3 years
Background Slides
Existing E-Bike Incentive Programs

1. Clean Cars for All (Bay Area)
   • E-bikes recently qualified (SB 400)
   • BAAQMD developing incentive now (scrap and replace alternative to cars)

2. Redwood Coast Energy Authority
   • Announced Earth Day, April 22
   • $500 rebate, first come first served, capped at $41,500 (83 rebates)

3. Burlington, VT
   • $200 point of sale rebate, through local bike shops
   • Requires proof of residency

4. Austin Energy
   • Up to $300
   • Also includes scooters, mopeds, etc.

Note: CalBike currently lobbying to get E-bikes includes in CVRP
8. Create a Board Procedure for Appointing a Citizens Advisory Committee (CAC) Liaison and Alternate, followed by Appointment of new CAC Liaisons (Action)
9. Review Peninsula Clean Energy Citizen Advisory Committee Work Plan (Discussion)
9. Review Peninsula Clean Energy Citizens Advisory Committee Work Plan (Discussion)
PCE Staff were surveyed in April 2020 for project ideas to collaborate on with the CAC.

The CAC grouped these project ideas into 9 different focus areas and formed a working group for each.

Each working group has:
- One CAC member lead who is responsible for scheduling and coordination.
- One or more staff liaisons for each project.

Working group tasks and membership may change as PCE priorities and CAC membership change.
Transportation Working Group

• Help promote EV engagement strategies by leveraging networks and relationships with community groups
• Help generate ideas for promoting participation in e-bike programs

CAC Lead: Janelle London
CAC Members: Tim Bussieke, Ray Larios
Building Electrification Working Group

- Reach code advocacy
- Heat pump water heater and electrification outreach to local environmental groups
- Support development of programs for low-income residents
- Participate in tech pilot "assessment team"

CAC Lead: Diane Bailey
CAC Members: Steven Booker, Jason Mendelson, Ray Larios, Janet Creech
Education Working Group

• Continue & build upon existing education programs such as science fair awards, internship programs, dashboards, and curricula development

CAC Lead: Janet Creech
CAC Members: Katie Green, Joe Fullerton, Steven Booker, Allen Brown, Desiree Thayer
Work Force Working Group

• Assist with programs for work force development in electrification
• Advise on workforce grant programs

CAC Lead: Joe Fullerton
CAC Members: Diane Bailey, Steven Booker, Ray Larios
Resiliency and DER Working Group

- Promote participation in resilience programs
- Research life cycle of existing renewable technologies including solar, wind, and lithium-based energy storage
- Explore trends in long-duration batteries and alternative forms of energy storage
- Support local sourcing of generation and distributed energy resources

CAC Lead: Michael Closson
CAC Members: Allen Brown, Joe Fullerton, Jason Mendelson
Legislative and Regulatory Working Group

- Assist in timely advocacy in promoting policies to support CCAs
- Support reach code advocacy as needed *(supporting Building Electrification working group)*

CAC Lead: Desiree Thayer
CAC Members: Steven Booker, Jason Mendelson, Katie Green, Ray Larios
PCE Strategic Priorities Working Group

• Continue to respond to key issues raised by the organization, for example: nuclear allocations, expansion in Central Valley, Resiliency, Storage
• Explore options for future of ECOplus and ECO100

CAC Lead: Tim Bussiek
CAC Members: Michael Closson, Janet Creech, Desiree Thayer
General Marketing/Outreach Working Group

• Explore potential op-ed pieces to support building electrification and other programs
• Promote PCE messages e.g. via social media
• Write blog posts on specific topics to support engagement in programs and initiatives

CAC Lead: Desiree Thayer
CAC Members: Tim Bussiek
Equity Working Group

• Ensure equity is a priority across all working groups and built into PCE strategic priorities

CAC Lead: Ray Larios
CAC Members: Diane Bailey, Jason Mendelson, Katie Green
Regular Agenda

10. Board Members’ Reports (Discussion)
Regular Agenda

Adjourn