Peninsula Clean Energy
Board of Directors Meeting
November 17, 2022
• Call to Order / Roll Call

• Public Comment (for items not on the Agenda)

• Action to set the Agenda and Approve Consent Items 1-4
  o Consent - Public Comment

• Regular Agenda

• Adjournment
Chair Report (Discussion)
CEO Report (Discussion)
Staffing Update

Open Positions:
• Director of Power Resources

New Hires:
• Brooke Morales, Senior Marketing Communications Specialist, starting Nov. 21
• Justine Pine, Strategic Accounts Manager, starting Nov. 28
Regulatory Updates

• NEM 3.0 Proposed Decision (PD) issued on November 10
  o Comparison to last year’s PD that was widely protested

• Projected PCIA Update
  o Latest information from PG&E is PCIA will be close to zero or negative in 2023 for 2016 and 2021 vintages; small PCIA for 2022 vintage
Solar+Storage on Public Buildings

• First cohort of 15 projects in 13 jurisdictions
  o Customer PPA almost finalized
  o EPC contract coming to Board in December

• Looking for projects for next cohort
  o Other city facilities
  o Other public facilities – school districts, water treatment and waste treatment facilities, transit agencies
  o Please contact us if with contact information of interested parties
News from Sacramento

• Election Update
  o Assembly Speaker(s) for 2023

• AB 361 Emergency Meetings
  end Feb 28, 2023
PCE Ad Hoc Subcommittees

• Any interest in serving on:
  
  o Ad hoc Legislative Subcommittee
  
  o Ad hoc Subcommittee on Emeriti Board Positions
“Retiring” Board Members

For some Board Members, this will be their final meeting with Peninsula Clean Energy. Our sincerest gratitude for all you have contributed during your time on our board. We will recognize all retiring board members and alternates at our December meeting.

- Larry May
- Giselle Hale
- Laura Parmer-Lohan
- Rick Bonilla
- Carole Groom (earlier this year)
Upcoming Meetings

• Citizens Advisory Committee:
  o December 1 at 6:30 p.m. (Zoom)

• Executive Committee:
  o December 5, at 10:00 a.m. (Zoom)

• Board of Directors:
  o December 15 at 6:30 p.m. (Zoom)

• Audit and Finance Committee:
  o February 13, 2023, at 8:30 a.m. (Zoom)
CAC Report (Discussion)
Approve the Audited Financial Statements for Fiscal Year 2021-2022

November 17, 2022
Auditor Conclusions

• Auditor Required Communications Findings/Summary
  • Unmodified opinion – The financial statements are materially accurate
  • No significant deficiencies or material weakness in internal control noted
  • The significant accounting policies adopted by PCE throughout the periods audited appear appropriate and consistently applied
  • No significant or unusual transactions or applications of accounting principles where a lack of authoritative guidance exists
  • No disagreements with management concerning the scope of audits, the application of accounting principles, or the basis for management’s judgments on any significant matters
Summary & Recommendation

• Audit & Finance Committee – October 12, 2022
  • Reviewed draft financial statements
  • Met with Auditors
  • Approved resolution recommending approval by Board of Directors

• Audit complete and signed off on November 8, 2022

Recommendation:
• Approve the Audited Financial Statements for Fiscal Year 2021-2022
Adopt Staff’s Recommendation on Delivering 100% Renewable Energy Annually on a 99% Time-Coincident Basis

November 17, 2022
Recommendation

- Adopt Staff’s Recommendation on Delivering 100% Renewable Energy Annually on a 99% Time-Coincident Basis
ORGANIZATIONAL PRIORITIES:

By 2025, deliver 100% renewable energy each and every hour of day.

Contribute to our community reaching a goal of 100% greenhouse gas-free in buildings and transportation by 2035.
Progress to Date

- Peninsula Clean Energy sets 100% renewable goal
- Procure resources and conduct preliminary analysis
- Publish White Paper, Part I
  - Finalize model development and analyze results
  - Board Retreat and Subcommittee Updates
  - Convene external advisory group
- Begin development of 24/7 planning model
  - Get preliminary modeling results → refine model
- Finalized modeling work
  - Shared 24/7 strategy recommendation with the board
  - Developing Part II of the White Paper
Why do we have this goal?

- Peninsula Clean Energy currently delivers to all of our customers electricity that is 100% from GHG-free or renewable resources on an annual basis.
- Our goal is to match our electricity supply to consumer load on an hourly basis.
  - We will not be relying on system power (methane gas plants) and can maximally reduce GHG emissions from our electricity supply.
- Peninsula Clean Energy wants to take the lead to show it’s possible to provide hourly renewable energy in a cost-effective way.
2021 Peninsula Clean Energy 24/7 Emissions Footprint due to use of California grid energy

<table>
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<th>Jun 1</th>
<th>Oct 1</th>
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Color Scale: lbs CO2 / MWh of Carbon Emission

Peninsula Clean Energy
Phasing our time-coincident renewable goal

Phase 1 (by 2025)
- Use Planning Forecasts
- Target time-coincident renewable energy using planning forecasts

Phase 2 (beyond 2025)
- Use Real-Time Data
- Continue to evaluate the cost/benefit of delivering time-coincident renewable energy in real-time
Modeling Approach

Scenario Design → MATCH model (Deterministic Portfolio Planning) → Analyze results

PowerSimm model (Stochastic Portfolio Analysis) → Analyze results → Final Recommendation
Renewable Goal Scenarios

Annual renewable

Current Portfolio (Annual 100% renewable with index-pluss RECs)

Annual 100% renewable (Add more PPAs)

24/7 renewable

All of these hourly scenarios satisfy the 100% annual goal.

Hourly 90% renewable

Hourly 95% renewable

Hourly 99% renewable

Hourly 100% renewable

Less perfect matching
Less expensive $

More perfect matching
More expensive $$$$
New Capacity Required to Add to our Portfolio

- New capacity required to be added to our portfolio generally increases as time-coincident target increases.

- More firm resources are needed at higher time-coincident targets.
Cost of Time-Coincident Procurement

• Based on our analysis, time-coincident renewable energy procurement up to 99% can be achieved with only 2% cost increase

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Difference in Expected Cost of Energy* relative to Current Portfolio (%)</th>
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<tbody>
<tr>
<td>Current Portfolio</td>
<td>0%</td>
</tr>
<tr>
<td>Annual 100%</td>
<td>-1%</td>
</tr>
<tr>
<td>Hourly 90%</td>
<td>0%</td>
</tr>
<tr>
<td>Hourly 95%</td>
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<td>Hourly 99%</td>
<td>2%</td>
</tr>
<tr>
<td>Hourly 100%</td>
<td>12%</td>
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</table>
Emissions Reductions: Hourly Carbon Intensity

• Increasing our time-coincident target will reduce our hourly carbon intensity

* The hourly carbon intensity accounts for our use of grid energy in some hours, and does not give us "credit" for supplying excess energy in other hours

** This method is anticipated to be similar to the method adopted in SB 1158 (Becker)
Effects on Grid: System Net Peak

- Our portfolios reduce the net peak, which improves the entire grid system operations
Real-Time Operations: Time-coincident performance

• In real-time operations, the portfolios fall short of the time-coincident target by 1% to 3%, due to variability in load and generation.
Summary

• Time-coincident renewable procurement can be cost-effective under a variety of market conditions
  - Based on our analysis, 99% time-coincident would increase our cost by 2% compared to our current portfolio
  - 100% time-coincident could increase our cost of energy significantly

• Procuring time-coincident renewable energy results in benefits to the society by reducing emissions and improving grid impacts
Recommendation

• Adopt Staff’s Recommendation on Delivering 100% Renewable Energy Annually on a 99% Time-Coincident Basis
Approval of Seventh Amended and Restated Agreement Between Peninsula Clean Energy Authority and Chief Executive Officer (Action)

November 17, 2022
Board Members’ Reports (Discussion)
Adjournment