Agenda

- Call to Order / Roll Call
- Public Comment (for items not on the Agenda)
- Action to set the Agenda and Approve Consent Items 1-5
  - Consent - Public Comment
6. Chair Report (Discussion)

Regular Agenda
7. CEO Report (Discussion)

Regular Agenda
Staffing Updates

- Sandra Benetti starting November 1 as Associate Manager, Community Relations
- Blake Herrschaft starting November 29th as Building Electrification Programs Manager
- Account Services Analyst – in the process of finalizing our hire
Other Open Positions

- Starting recruitment for Chief Operating Officer
CC Power Update

• RFO issued for 200 MW of Firm Clean Resources
• [https://cacommmunitypower.org/solicitations](https://cacommmunitypower.org/solicitations)
• Offers due December 13, 2021
Upcoming Meetings

• Citizens Advisory Committee:
  o November 4 at 6:30 p.m. (Zoom)

• Audit & Finance Committee:
  o November 8 at 8:30 a.m. (Zoom)

• Executive Committee:
  o November 8 at 10:00 a.m. (Zoom)

• Board of Directors:
  o November 18 at 6:30 p.m. (Zoom)
8. Citizens Advisory Committee Report (Discussion)

Regular Agenda
9. Audited Financial Statements
Board Meeting (Action)

Regular Agenda
October 28, 2021
# Income Statement vs. Budget – Final

<table>
<thead>
<tr>
<th>Quarter ending June 2021</th>
<th>Year-to-date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>Budget</td>
</tr>
<tr>
<td>OPERATING REVENUES</td>
<td>OPERATING REVENUES</td>
</tr>
<tr>
<td>Electricity Sales, net</td>
<td>43,259,158</td>
</tr>
<tr>
<td>Green electricity premium</td>
<td>642,855</td>
</tr>
<tr>
<td>Total Operating Revenues</td>
<td>43,902,013</td>
</tr>
<tr>
<td>OPERATING EXPENSES</td>
<td>OPERATING EXPENSES</td>
</tr>
<tr>
<td>Cost of energy</td>
<td>46,452,608</td>
</tr>
<tr>
<td>Staff compensation</td>
<td>1,501,229</td>
</tr>
<tr>
<td>Data Manager</td>
<td>849,155</td>
</tr>
<tr>
<td>Service Fees - PG&amp;E</td>
<td>314,867</td>
</tr>
<tr>
<td>Consultants &amp; Professional Services</td>
<td>484,486</td>
</tr>
<tr>
<td>Legal</td>
<td>309,294</td>
</tr>
<tr>
<td>Marketing and Noticing</td>
<td>317,282</td>
</tr>
<tr>
<td>General and Administrative</td>
<td>384,795</td>
</tr>
<tr>
<td>Community Energy Programs</td>
<td>4,537,758</td>
</tr>
<tr>
<td>Depreciation</td>
<td>21,618</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>55,173,093</td>
</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>(11,271,081)</td>
</tr>
<tr>
<td>NON-OPERATING REVENUES (EXP.)</td>
<td>NON-OPERATING REVENUES (EXP.)</td>
</tr>
<tr>
<td>Total Nonoperating Income/(Expense)</td>
<td>355,789</td>
</tr>
<tr>
<td>CHANGE IN NET POSITION</td>
<td>(10,915,292)</td>
</tr>
</tbody>
</table>

**Changes and Notes since Preliminary:**

- **Revenues**
  - Slightly higher ($228K)

- **Expenses**
  - are $2.1 million lower
  - Cost of Energy - $2.3 million lower
  - Small changes in multiple and other accounts and categories as we refined our estimates and accruals

- **Change in Net Position**
  - $2.4 million higher (i.e. less negative)
Auditor Conclusions

- Auditor Required Communications Findings/Summary
  - Unmodified opinion – The financial statements are materially accurate
  - No significant deficiencies or material weakness is 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

• Audit & Finance Committee – October 12, 2021
  • Reviewed draft financial statements
  • Met with Auditors
  • Approved resolution recommending approval by Board of Directors

• Audit complete and signed off on October 21, 2021
Recommendation

APPROVE THE AUDITED FINANCIAL STATEMENTS FOR FISCAL YEAR 2020-2021
10. Authorize Agreement for Arica Solar (Action)

Regular Meeting
Siobhan Doherty, Director of Power Resources
October 28, 2021
Recommendation

Approve Resolution Delegating Authority to Chief Executive Officer to Execute Power Purchase and Sale Agreement for Renewable Supply with Arica Solar, LLC, and any necessary ancillary documents with a Power Delivery Term of 15 years starting at the Commercial Operation Date on or about April 1, 2024, in an amount not to exceed $215 million.
Long-term RE + Storage RFP

• Peninsula Clean Energy published an RFP soliciting contract proposals of ≥10 years in term length
• Staff received offers for solar + storage, wind, and offers for geothermal from three counterparties
• Procuring solar + Storage out of this RFP was a high priority to staff, provides flexibility to the portfolio, allowing us to move electricity to higher demand hours in the evening
• This will help to meet Peninsula Clean Energy’s goal to provide renewable energy on a 24/7 basis
Red Bluff Solar

<table>
<thead>
<tr>
<th>Developer / Owner</th>
<th>Clearway Energy Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Riverside County</td>
</tr>
<tr>
<td>Solar Capacity</td>
<td>PCE Portion: 100 MWac</td>
</tr>
<tr>
<td></td>
<td>Total: 263 Mwac</td>
</tr>
<tr>
<td>Capacity Factor</td>
<td>34%</td>
</tr>
<tr>
<td>Storage Size</td>
<td>50 MW / 4 hour – 200 MWh</td>
</tr>
<tr>
<td>COD</td>
<td>April 2024</td>
</tr>
<tr>
<td>Key Milestones</td>
<td>Executed LGIA: Completed</td>
</tr>
<tr>
<td></td>
<td>Permitting Complete:Q4 2021</td>
</tr>
<tr>
<td></td>
<td>Construction Start: Q2 2023</td>
</tr>
<tr>
<td>Labor</td>
<td>Intend to execute PLA</td>
</tr>
<tr>
<td>Environmental</td>
<td>Located in area designated as a preferred renewable energy zone</td>
</tr>
<tr>
<td>DACs</td>
<td>Not located in DAC</td>
</tr>
</tbody>
</table>
Contract Structure

- Pay for the output of the solar generating portion of the project at a fixed-price rate per MWh
- Pay for the use of the storage portion of the project at a fixed-price rate per kW-month
- Both with no escalation
- Contract term: 15 years
- Peninsula Clean Energy is entitled to all product attributes from the facility:
  - Energy
  - Renewable energy
  - Ancillary services
  - Resource adequacy.
Labor

- Project has committed that the construction will be conducted using a project labor agreement, community workforce agreement, work site agreement, collective bargaining agreement, or other similar agreement providing for terms and conditions of employment with applicable labor organizations.
Staff worked with several environmental non-profits to develop a system for evaluating the environmental impact of projects. Staff studied the geospatial footprint of the project to evaluate whether the project is located in a restricted or high conflict area for renewable energy development:

- Protected areas at the federal, state, regional, local level (e.g. County-designated conservation areas, BLM Areas of Critical Environmental Concern, critical habitat for listed species, national, state, county parks, etc.).
- Identified and mapped important habitat and habitat linkages, especially for threatened and endangered species (either state or federally listed).

For this project, the analysis showed that the project was not located in a protected area based on the USGS Protected Areas Database (PAD-US) or in an area not suitable for renewable energy development as identified by the Renewable Energy Transmission Initiative (RETI).

RETI: https://reti.databasin.org/
Permitting

• This project is located in an area identified as suitable for renewable energy development as part of the Desert Renewable Energy Conservation Plan (DRECP).

• The DRECP is a collaborative effort between the BLM, Fish and Wildlife Service, California Energy Commission and California Department of Fish and Wildlife.

• The DRECP is focused on 10.8 million acres of public lands in the desert regions of seven California counties and is a landscape-level plan that streamlines renewable energy development while conserving unique and valuable desert ecosystems and providing outdoor recreation opportunities.
Solar generation peaks in summer months, adding storage could shift generation to evening peak hours.
Fit with Strategic Plan

- Priority 1: Design a power portfolio that is sourced by 100% carbon free energy by 2025 that aligns supply and consumer demand on a 24x7 basis
- Power Resources Goal 1: Secure sufficient, low-cost, clean sources of electricity that achieve Peninsula Clean Energy's priorities while ensuring reliability and meeting regulatory mandates
  - Objective A Low Cost and Stable Power: Develop and implement power supply strategies to procure low-cost, reliable power.
  - Objective B Clean Power: Design a diverse power portfolio that is 100% carbon-free by 2021; and is 100% carbon-free by 2025 that aligns supply and consumer demand on a 24 x 7 basis.
Recommendation

Approve Resolution Delegating Authority to Chief Executive Officer to Execute Power Purchase and Sale Agreement for Renewable Supply with Arica Solar, LLC, and any necessary ancillary documents with a Power Delivery Term of 15 years starting at the Commercial Operation Date on or about April 1, 2024, in an amount not to exceed $215 million.
10A. Authorize Agreement for Gonzaga Wind (Action)

Regular Agenda
Chelsea Keys, Senior Manager, Power Resources
October 28, 2021
Recommendation

Approve Resolution Delegating Authority to Chief Executive Officer to Execute Power Purchase and Sale Agreement for Renewable Supply with Gonzaga Ridge Wind Farm, LLC, and any necessary ancillary documents with a Power Delivery Term of 15 years starting at the Delivery Commencement Date on or about October 31, 2024, in an amount not to exceed $204 million.
Long-term RE + Storage RFP

• Peninsula Clean Energy published an RFP soliciting contract proposals of ≥10 years in term length
• Staff received offers for solar + storage, wind, and offers for geothermal from three counterparties
• Procuring wind out of this RFP was a high priority to staff, as new wind development in CA is scarce – wind regions within the state have already been developed
• This will help to meet Peninsula Clean Energy’s goal to provide renewable energy on a 24/7 basis
**Gonzaga Ridge – Project Overview**

<table>
<thead>
<tr>
<th>Developer / Owner</th>
<th>Scout Clean Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterparty</td>
<td>Gonzaga Ridge Wind Farm, LLC</td>
</tr>
<tr>
<td>Location</td>
<td>Pacheco State Park in Merced County, CA</td>
</tr>
</tbody>
</table>
| Capacity          | PCE share: 76.35 MW  
Total Planned Capacity: 197.5 MW |
| Term              | 15 years |
| Delivery Start    | October 31, 2024 |
| Environmental / Permitting |  
- CEQA Environmental Impact Report received in August 2020  
- Environmental Assessment – Finding of No Significant Impact |
| Labor             | Project will use union labor under their contractor |
Site Layout

- Gonzaga will be constructed on state park land
- Land has an existing 18.4 MW wind project – 162 turbines, built in 1980s
- This facility will be deconstructed prior to construction of Gonzaga, and ~ 25 turbines will take its place, constructed in two phases
- While not listed as an EPA re-power site, it is on land designated for wind energy development
Contract Structure

- Contract term: 15 years
- Pay for the output of the wind generating portion of the project at a fixed-price rate per MWh, no escalation
- Peninsula Clean Energy is entitled to all product attributes from the facility:
  - Energy
  - Renewable energy
  - Resource adequacy.
- Peninsula Clean Energy will be the Scheduling Coordinator

Courtesy of Scout Clean Energy
Labor

• The project is a commitment to constructing the project using union labor
• Rather than sign a new project-specific labor agreement, their contractor has an agreement already in place with national labor unions
• The relevant trades included are Ironworkers, Carpenters/Millwrights, Laborers, and Operators. Additionally, they have also committed to using electrical subcontractors that are signatory to IBEW
Environmental Review

- Staff worked with several environmental non-profits to develop a system for evaluating the environmental impact of projects. Staff studied the geospatial footprint of the project to evaluate whether the project is located in a restricted or high conflict area for renewable energy development:
  - Protected areas at the federal, state, regional, local level (e.g. County-designated conservation areas, BLM Areas of Critical Environmental Concern, critical habitat for listed species, national, state, county parks, etc.).
  - Identified and mapped important habitat and habitat linkages, especially for threatened and endangered species (either state or federally listed).

- For this project, the analysis showed that the project was not located in a protected area based on the USGS Protected Areas Database (PAD-US) or in an area not suitable for renewable energy development as identified by the Renewable Energy Transmission Initiative (RETI).

RETI: https://reti.databasin.org/
Permitting

• California Department of Parks and Recreation (CDPR) was the lead agency for the CEQA process
  o CEQA Environmental Impact Report completed in August 2020
• CUP not required by state park
• Bureau of Reclamation (BOR) conducted a Finding of No Significant Impact (FONSI) declaring that the project will have no significant impact on the environment
  o Completed in January 2021
Gonzaga provides valuable night generation in shoulder and summer months.
Gonzaga Month-Hour Shape - 2025
Gonzaga + Arica Month-Hour Shape in 2025
Fit with Strategic Plan

- Priority 1: Design a power portfolio that is sourced by 100% carbon free energy by 2025 that aligns supply and consumer demand on a 24x7 basis.

- Power Resources Goal 1: Secure sufficient, low-cost, clean sources of electricity that achieve Peninsula Clean Energy's priorities while ensuring reliability and meeting regulatory mandates.
  - Objective A Low Cost and Stable Power: Develop and implement power supply strategies to procure low-cost, reliable power.
  - Objective B Clean Power: Design a diverse power portfolio that is 100% carbon-free by 2021; and is 100% carbon-free by 2025 that aligns supply and consumer demand on a 24 x 7 basis.
Recommendation

Approve Resolution Delegating Authority to Chief Executive Officer to Execute Power Purchase and Sale Agreement for Renewable Supply with Gonzaga Ridge Wind Farm, LLC, and any necessary ancillary documents with a Power Delivery Term of 15 years starting at the Delivery Commencement Date on or about October 31, 2024, in an amount not to exceed $204 million.
Questions

Courtesy of Scout Clean Energy

Regular Agenda
Recommendation

Approval of a Resolution Delegating Authority to the Chief Executive Officer to Execute an Agreement with GCAP Services, Inc. in Amount Not to Exceed $175,650 for Diversity, Equity, Accessibility, and Inclusion Consulting Services
Agenda

• Background/Discussion of CAC Equity Statement
• Senate Bill 255 and Utility Supplier Diversity
• DEAI RFP Process
• Information about selected Consultant, GCAP Services
Background: Citizens Advisory Committee Equity Statement

- CAC Equity Working Group formed July 2020
- Primary task of Equity Working Group: “ensure equity is a priority across all working groups and built into PCE strategic priorities”
- CAC’s draft equity statement accepted by the Board of Directors at January 28, 2021 meeting
- Board to work with CAC to build on Draft Equity Statement and create DEAI Organizational Statement/Policy and Action Plan
SB 255 (Bradford) and Utility Supplier Diversity

• SB 255 signed in October 2019
• Requires Community Choice Aggregators to “annually submit a detailed and verifiable plan for increasing procurement from small, local, and diverse business enterprises”
• Expands California Public Utilities Commission’s (CPUC’s) Utility Supplier Diversity Program
DEAI RFP Process

• DEAI RFP was released as a competitive solicitation in early May, 2021
• Responses due in mid-June 2021
• Received 8 proposals, 7 complete
• DEAI Subcommittee interviewed top 3 finalists in early/mid July
• Staff posed additional questions to top 2 finalists in early August
• Board Subcommittee and Staff had follow up meetings with top 2 finalists in late September/early October
• Consensus reached on top Consultant, GCAP Services, on 10/15
About GCAP Services, Inc. and Rosales Business Partners

- Minority Business Enterprise (MBE) certified professional consulting firm headquartered in Costa Mesa, CA
- 75% of employees are minority and/or women
- Over 22 years experience providing management, assessment, benchmarking, training, and support in a wide variety of DEAI work areas
- Hired by the CPUC to implement the Supplier Diversity Program
- Subcontractor for this engagement- Rosales Business Partners (RBP)
  - RBP is a San Francisco based consulting firm focused on DEAI regarding internal and external workforce policies and programs
Recommendation

Approval of a Resolution Delegating Authority to the Chief Executive Officer to Execute an Agreement with GCAP Services, Inc. in Amount Not to Exceed $175,650 for Diversity, Equity, Accessibility, and Inclusion Consulting Services
12. CC Power Long Duration Energy Storage Background (Action)

Regular Agenda
October 28, 2021
Siobhan Doherty, Director of Power Resources
Objective

• Provide background on RFO, evaluation, shortlisting and negotiation process to support approval of an Energy Storage Service Agreement, and ancillary agreements with, LS Power for Tumbleweed Long Duration Energy Storage at a future Board meeting
RFO Objectives & Requirements

Objectives

• Procure cost-effective LDS to integrate renewables & support grid reliability
• Joint-procurement to share resources and project risk
• Meet future potential IRP procurement mandates
• Technology and location agnostic with desire to evaluate emerging technologies
• Full tolls – for capacity and energy value

Requirements

• CAISO resource or Import with dynamic transfer rights
• Must be able to qualify for Resource Adequacy
• Grid-charged with minimum 8-hour discharge duration
• COD no later than June 1, 2026
• Minimum delivery term 10 years
• 50 MW minimum
• Complete bid submission
RFO Background and Timeline

- **June ’20**: Interest & Information Gathering (RFI)
- **Oct ’20**: CCAs Issue a Joint-Request for Offers (RFO) for up to 500 MW of LDS
- **Feb ’21**: California Community Power (CC Power) Formed/Long Duration Storage Project Oversight Committee formalized
- **Jun ’21**: LDS Projects Shortlisted, ESSA Negotiations start, and begin to development of CC Power/CCA Agreements
- **Jun ’21**: CPUC Issues Mid-term Reliability Procurement Order – LDS POC Develop Pathways to Achieve Compliance
- **Oct ’21**: Start CC Power and individual CCA Approval Process for LDS Project #1 – LS Power’s Tumbleweed
### RFO Timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>Original Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuance of RFO</td>
<td>October 15, 2020</td>
</tr>
<tr>
<td>Offerors Webinar</td>
<td>October 28, 2020</td>
</tr>
<tr>
<td>Offer Submission Deadline</td>
<td>December 1, 2020</td>
</tr>
<tr>
<td>Project Shortlisting</td>
<td>Mid-May 2021</td>
</tr>
<tr>
<td>Developer/Buyer Negotiations</td>
<td>June – October 2021</td>
</tr>
<tr>
<td>CC Power 60-day Notice for Contract Approval</td>
<td>October 2021</td>
</tr>
<tr>
<td>CC Power Final Contract Approval (Tentative)</td>
<td>December 2021</td>
</tr>
<tr>
<td>Individual CCA Board Approval</td>
<td>December 2021 – February 2022</td>
</tr>
</tbody>
</table>
Offers

- Projects on-line as early as 2023
- 51 Entities submitted offers (over 9,000 MW)
- Total of 221 unique pricing offers
  - 160 Full Toll Offers
  - 57 RA Only Offers
- 8 Technology types
  - 18 distinct technologies
- 8, 10, 12-hour, and multi-day discharge durations

<table>
<thead>
<tr>
<th>Technology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery</td>
<td>aqueous-air flow</td>
</tr>
<tr>
<td></td>
<td>lithium-ion</td>
</tr>
<tr>
<td></td>
<td>zinc</td>
</tr>
<tr>
<td>Chemical Flow</td>
<td>iron redox flow</td>
</tr>
<tr>
<td></td>
<td>vanadium flow</td>
</tr>
<tr>
<td>Compressed Air</td>
<td></td>
</tr>
<tr>
<td>Fuel Cell – Hydrogen</td>
<td></td>
</tr>
<tr>
<td>Hybrid</td>
<td>hydrogen, combined-cycle gas gen</td>
</tr>
<tr>
<td></td>
<td>li-ion, combined-cycle gas gen</td>
</tr>
<tr>
<td>Mechanical – Gravity</td>
<td></td>
</tr>
<tr>
<td>Pumped Hydro</td>
<td></td>
</tr>
<tr>
<td>Thermal</td>
<td>ice (HVAC)</td>
</tr>
<tr>
<td></td>
<td>liquid air</td>
</tr>
<tr>
<td></td>
<td>molten Salt</td>
</tr>
<tr>
<td></td>
<td>molten Salt &amp; Gas gen</td>
</tr>
<tr>
<td></td>
<td>volcanic stone</td>
</tr>
<tr>
<td></td>
<td>water heat exchange</td>
</tr>
</tbody>
</table>
Primary Offers

• Identified **98 primary offers** out of the initial list of 221
• Primary offers were chosen based on the following principles:
  o Conforming offers only
  o Lowest price
  o Shortest delivery term (10-15 years)
Two-Round Evaluation Process

Round One

Expected Value
Project Cost minus Deterministic Value
CCCE, SCPA, SVCE & PCE

Locational Value
Based on congestion/price mapping
SCPA & Ascend

Project Risk & Ability to meet RA requirements
SVCE & Gridwell

Technology Viability
MCE & RCEA

Offer/Developer, Environmental and Offer parameters (term and terms)
SCPA, MCE, PCE & RCEA

All 98 Primary Offers were scored and ranked. Top 17 moved to Round 2
Lithium-Ion v. Emerging Technologies

- The top 10 projects were the highest scores (all li-ion).
- The remaining 7 spots were allocated to the highest scoring non li-ion projects.
  - The decision to include non li-ion and classify as “emerging technologies” was to introduce technology diversity to the potential shortlist.
  - 56 out of the 98 primary offers represented li-ion
Round 2 Evaluation Process

- Project specific NPV, stochastic modeling, assessment of value under various operational strategies
  - SCPA, SVCE & Ascend

- Locational & Interconnection Risk
  - SVCE & Gridwell

- Labor – Project Labor Agreement, prevail wages, apprentices
  - PCE

- Environmental & Environmental Justice
  - PCE

- Emerging Technology* specific viability assessment with follow-up interviews
  - All

*Emerging technologies defined as non-Li-Ion including 2nd life EV, Gravity, Hydrogen, Liquid Air, Compressed Air, Iron Redox Flow, and Pumped Storage Hydro
Project Value

1. Cost were assumed fixed, with the exception of projects with a variable operating component
2. Expected value ranged from negative to marginally positive
3. Value highly variable and uncertain over time
   1. Location matters
   2. Dependent on how the storage is operated (day ahead vs. real time)
   3. A/S value expected to decrease over time
4. Resource Adequacy value (avoided cost) is dependent on regulatory structure
Shortlisting

• Agreed upon a two-tier shortlist.
  o **Tier 1** – Offers that scored the highest and received the most confidence in delivering a long duration storage product.
  o **Tier 2** – Offers that require more information for CC Power negotiating team to commit to executing a contract.

• Provided additional capacity to deal with projects dropping

• Focus of negotiations on Tier 1 Projects
Contract Structure

- LDS Project
- Energy Storage Services Agreement
  - Developer
  - CC Power
- Project Participation Share Agreement
  - CC Power
  - 7 CCAs
- Buyer Liability Pass Through
  - (Each participating CCA executes with Developer’s Seller entity and CC Power)

Scheduling Coordinator Agreement

CCA Customers
Participating CCAs

- 7 CCAs agreed to move forward with joint LDS procurement
Mid-Term Reliability Decision (2023 – 2026)

- **D.21-06-035** adopted by CPUC on June 24, 2021 to address mid-term reliability needs
- LSEs required to collectively procure 11,500 MW NQC of new resources
- Follow-on to November 7, 2019 CPUC decision mandating 3,300 MW NQC procurement for 2021-2023 to maintain reliability
- Contract of at least 10 years
- Allocated to LSEs by load share
- Resources must be zero-emission or RPS eligible (no fossil resources)
- 4,500 MW of obligation subject to specific category requirements (next slide)
Procurement Timing

- Timing of overall procurement requirement and specific categories is assigned in tranches between 2023 and 2026

**Procurement Obligation in NQC\(^1\) MW for All LSEs by Category and Year**

<table>
<thead>
<tr>
<th>Procurement Category</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-emissions generation, generation paired with storage, or demand response resources(^2)</td>
<td>-</td>
<td>-</td>
<td>2,500</td>
<td>-</td>
<td>2,500</td>
</tr>
<tr>
<td>Firm zero-emitting resources(^3)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Long-duration storage resources(^3)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Remaining New Capacity Required</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total Annual Net Qualifying Capacity (NQC) Requirements</strong></td>
<td>2,000</td>
<td>6,000</td>
<td>1,500</td>
<td>2,000</td>
<td>11,500</td>
</tr>
</tbody>
</table>

1. Obligation is in NQC MW (not nameplate) and subject to ELCC factor
2. Zero-emissions resources required to replace Diablo Canyon must be procured by 2025, but may occur in any of the years 2023-2025; therefore, the columns do not add to the total.
3. LSEs may request an extension by February 1, 2023 up to 2028 for the LLT resources. Minimum 8-hour discharge
Peninsula Clean Energy Allocation

- Volumes allocated to LSEs based on load share
- Some portion of category 1 would need to come online prior to 2025 to meet targets below

<table>
<thead>
<tr>
<th>Procurement Category</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-emissions generation, generation paired with storage, or demand response resources&lt;sup&gt;1&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>47</td>
<td>-</td>
<td>47</td>
</tr>
<tr>
<td>Firm zero-emitting resources&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Long-duration storage resources&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Remaining New Capacity Required</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>132</td>
</tr>
<tr>
<td><strong>Total Annual Net Qualifying Capacity (NQC) Requirements</strong></td>
<td><strong>38</strong></td>
<td><strong>113</strong></td>
<td><strong>28</strong></td>
<td><strong>38</strong></td>
<td><strong>217</strong></td>
</tr>
</tbody>
</table>

1. Zero-emissions resources required to replace Diablo Canyon must be procured by 2025, but may occur in any of the years 2023-2025; therefore, the columns do not add to the total.
2. LSEs may request an extension by February 1, 2023 up to 2028 for the LLT resources
Effective Load Carrying Capacity Factors

- CPUC released an **ELCC study** in September 2021 to convert facility nameplate to Net Qualifying Capacity (“NQC”)
- 2025 and 2026 figures are indicative and will be finalized by end of 2022

### Incremental ELCCs for Storage Resources

<table>
<thead>
<tr>
<th>Procurement Category</th>
<th>2023</th>
<th>2024</th>
<th>2025 Indicative</th>
<th>2026 Indicative</th>
</tr>
</thead>
</table>
LDS Obligation for Participating CCAs

- Long Duration Storage requirement in NQC MW and converted to nameplate using the available 2024 and 2026 ELCCs

<table>
<thead>
<tr>
<th>CCA</th>
<th>NQC MW</th>
<th>Nameplate MW (2024 ELCC)</th>
<th>Nameplate MW (2026 ELCC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CleanPowerSF</td>
<td>15.5</td>
<td>16.4</td>
<td>19.8</td>
</tr>
<tr>
<td>Peninsula Clean Energy</td>
<td>19.0</td>
<td>20.1</td>
<td>24.3</td>
</tr>
<tr>
<td>Redwood Coast Energy</td>
<td>3.5</td>
<td>3.7</td>
<td>4.5</td>
</tr>
<tr>
<td>San Jose Clean Energy</td>
<td>21.5</td>
<td>22.8</td>
<td>27.5</td>
</tr>
<tr>
<td>Silicon Valley Clean Energy</td>
<td>20.5</td>
<td>21.7</td>
<td>26.2</td>
</tr>
<tr>
<td>Sonoma Clean Power</td>
<td>12.5</td>
<td>13.3</td>
<td>16.0</td>
</tr>
<tr>
<td>Valley Clean Energy</td>
<td>4.0</td>
<td>4.2</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96.5</strong></td>
<td><strong>102.3</strong></td>
<td><strong>123.4</strong></td>
</tr>
</tbody>
</table>
LDS Project #1

- **Project** – LS Power’s Tumbleweed
- **Product** - 69 MW/552 MWh – Tolling Agreement
- **Location** – Rosamond, Kern County
- **Technology** – Li-ion
- **Interconnection Status** - PCDS
- **COD** – 7/1/24
- **Discharge Duration** – 8 hours
- **Price** - fixed $/kw-mo
- **Term** – 15 years
Tumbleweed Shares per CCA

- Expected capacity share per CCA is based on a pro rata share of CPUC’s Mid-term Reliability Procurement Order

<table>
<thead>
<tr>
<th>Participating CCA</th>
<th>MTR Procurement Capacity Order LDS MW</th>
<th>% of MTR Requirement</th>
<th>Tumbleweed Allocation MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSF</td>
<td>15.5</td>
<td>16%</td>
<td>11.1</td>
</tr>
<tr>
<td>PCE</td>
<td>19</td>
<td>20%</td>
<td>13.6</td>
</tr>
<tr>
<td>RCEA</td>
<td>3.5</td>
<td>4%</td>
<td>2.5</td>
</tr>
<tr>
<td>SJCE</td>
<td>21.5</td>
<td>22%</td>
<td>15.4</td>
</tr>
<tr>
<td>SVCE</td>
<td>20.5</td>
<td>21%</td>
<td>14.7</td>
</tr>
<tr>
<td>SCPA</td>
<td>12.5</td>
<td>13%</td>
<td>8.9</td>
</tr>
<tr>
<td>VCE</td>
<td>4</td>
<td>4%</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96.5</strong></td>
<td></td>
<td><strong>69.0</strong></td>
</tr>
</tbody>
</table>

- Participating CCAs will seek authority to take a maximum capacity to cover:
  - Increased capacity should a CCA not obtain approval to move forward
  - Step-up capacity of up to 25% of contracted capacity
CC Power Tumbleweed Approval Process

**Step 1:** CC Power Board issues 60-day notice to consider ESSA for approval in December - Today

**Step 2:** CC Power Board approves ESSA, PPSA, BLPTA & Operating Agreement condition on individual CCA Approval

**Step 3:** CCAs seek respective Board Approvals of PPSA, BLPTA and Operating Agreement ✓

**Step 4:** Tumbleweed Agreements become effective

---

October
March 2022

CC Power Board issues 60-day notice to consider ESSA for approval in December

November

Finalize Tumbleweed ESSA and CC Power/CCA Supporting Agreements

December 8th*

CC Power Approves LS Power Tumbleweed *tentative

December 2021 –

Participating CCAs Approve Participation Agreements

ESSA with LS Power Tumbleweed

---

Process will be repeated for additional LDS Project Agreements – condition on negotiations and interest from other CCAs
## Peninsula Clean Energy Approval Process

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/12</td>
<td>October Executive Committee</td>
<td>Provide background</td>
</tr>
<tr>
<td>10/28</td>
<td>October Board Meeting</td>
<td>Provide Board with background on project</td>
</tr>
<tr>
<td>11/4</td>
<td>Procurement Subcommittee</td>
<td>Deeper dive on project and contract</td>
</tr>
<tr>
<td>11/8</td>
<td>November Executive Committee</td>
<td>Provide any updates</td>
</tr>
<tr>
<td>11/18</td>
<td>November Board Meeting</td>
<td>Vote on CC Power participation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vote on Peninsula Clean Energy participation</td>
</tr>
<tr>
<td>12/16</td>
<td>December Board Meeting</td>
<td>Report back on status of CC Power vote</td>
</tr>
</tbody>
</table>
Summary

1. Tumbleweed NPV to participating CCAs is highly uncertain
2. Procurement of Long Duration Storage (8-hours or more) is mandated through MTR order
3. LS Power’s Tumbleweed project will meet 56 to 68 percent of participating members obligation
4. Tumbleweed COD is 2024, which may provide for a greater ELCC (94.3%) than 2026 COD (78.2%). Seeking CPUC clarification
5. Seeking provisions for prevailing wages, a PLA and prohibition of forced labor.
13. Board Members’ Reports (Discussion)

Regular Agenda
Adjournment