Call to order / Roll call

Public Comment

Action to set the agenda and approve consent items
1. Chair Report (Discussion)
Important Events and Anniversaries

• May 27th: Jan Pepper’s two-year anniversary with PCE!!

• May 24th (today): SVLG Energy and Sustainability Summit, Oracle
• Highlights:

– Dave Pine: Regional Resilience through partnerships (inter-agency and public-private)

– Antonio Villaraigosa, Candidate for Governor; former Mayor of Los Angeles: “I support SB1380 (Stern)”: Climate adaptation information and transparency.

– Carla Peterman, CPUC: EV adoption policies
Impacts of High Variable Renewable Energy Futures on Wholesale Electricity Prices, and on Electric-Sector Decision Making

Authors:
Joachim Seel*, Andrew Mills, Ryan Wiser ¹

Sidart Deb, Aarthi Asokkumar, Mohammad Hassanzadeh, Amirsaman Aarabali ²

¹ Lawrence Berkeley National Laboratory
² LCG Consulting
Moderate Renewables Integration in CA leads to significantly lower prices

### Wholesale Price Effects of 40-50% Wind & Solar

(Wind: 30% wind & 10+% solar | Balanced: 20% wind & 20% solar | Solar: 30% solar & 10+% wind)

<table>
<thead>
<tr>
<th>Impacts in 2030 relative to baseline with 2016 wind &amp; solar shares</th>
<th>Southwest Power Pool</th>
<th>NYISO (New York)</th>
<th>CAISO (California)</th>
<th>ERCOT (Texas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Average Prices ($/MWh)</td>
<td>Wind</td>
<td>Balanced</td>
<td>Solar</td>
<td>Wind</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>-6</td>
<td>-12</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>-19%</td>
<td>-21%</td>
<td>-27%</td>
<td>-37%</td>
</tr>
</tbody>
</table>
2. CEO Report (Discussion)
Personnel Update

• Current recruitments:
  – Energy Programs Associate
  – Clean Energy Programs Manager
  – Regulatory Analyst
  – CFO (through search firm)

• New recruitments soon:
  – Distributed Energy Procurement
Local Programs Update

Board approved Phase 1 programs last month:

- $745K for EV measures
- $450K for community pilots
Local Programs: EV Measures

• Signed contract with Reach for Ride & Drive events
  – 4 corporate
  – 2 public

• Signed contract with EV Charging Pros for MUD technical assistance

• Meeting with auto dealerships in SMC
  – Met with Putnam in Burlingame
  – Arranging meetings with all others
Local Programs: Community Pilots

- Final refinement and marketing plans are under development
- Rollout expected in June
Other Updates

• Data Management Vendor:
  – Negotiating with Calpine

• Employee Handbook:
  – In final review

• Reserves Policy
  – Targeting approval in June
Legislative Committee – ad hoc meeting

- Met on May 16 – thank you to board members and alternates who were able to attend:
  - Pradeep Gupta
  - Rick DeGolia
  - Rick Bonilla
  - Daniel Yost
  - Julia Mates
Scheduling Board Retreat

• Propose changing date from September 22 to September 29
  – Can you make it on Sept 29?
  – If not, can your alternate?
Upcoming Events

• Business of Local Energy Symposium - June 4-5, Sacramento

• Precourt Energy Institute’s Silicon Valley Energy Summit – June 21, Stanford

• CalCCA Annual Summit – Sept 5-6, Asilomar (Monterey)

• Special Meeting June 28 at 5pm – Cordell Stillman presentation on SCP’s Drive Evergreen Program (Thanks to the CAC for requesting this presentation)

• PCE Board Retreat – Sept 29

• Groundbreaking for Wright Solar project – October 11

• CAISO Stakeholder Conference – Oct 17-18, Sacramento
3. Citizens Advisory Committee Report (Discussion)
4. Appointment of CAC Members (Action)
5. Audit and Finance Committee Report (Discussion)
6. Marketing and Outreach Report (Discussion)
<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>1,679</td>
<td>99</td>
<td>5.90%</td>
</tr>
<tr>
<td>SAN BRUNO INC</td>
<td>16,424</td>
<td>589</td>
<td>3.59%</td>
</tr>
<tr>
<td>PACIFICA INC</td>
<td>15,436</td>
<td>506</td>
<td>3.28%</td>
</tr>
<tr>
<td>SO SAN FRANCISCO INC</td>
<td>24,770</td>
<td>799</td>
<td>3.23%</td>
</tr>
<tr>
<td>DALY CITY INC</td>
<td>33,941</td>
<td>976</td>
<td>2.88%</td>
</tr>
<tr>
<td>MILLBRAE INC</td>
<td>9,366</td>
<td>249</td>
<td>2.66%</td>
</tr>
<tr>
<td>HALF MOON BAY INC</td>
<td>4,942</td>
<td>129</td>
<td>2.61%</td>
</tr>
<tr>
<td>UNINC SAN MATEO CO</td>
<td>24,413</td>
<td>625</td>
<td>2.56%</td>
</tr>
<tr>
<td>EAST PALO ALTO INC</td>
<td>7,797</td>
<td>199</td>
<td>2.55%</td>
</tr>
<tr>
<td>SAN MATEO INC</td>
<td>43,972</td>
<td>1018</td>
<td>2.32%</td>
</tr>
<tr>
<td>SAN CARLOS INC</td>
<td>14,441</td>
<td>332</td>
<td>2.30%</td>
</tr>
<tr>
<td>BELMONT INC</td>
<td>11,854</td>
<td>270</td>
<td>2.28%</td>
</tr>
<tr>
<td>HILLSBOROUGH INC</td>
<td>4,038</td>
<td>82</td>
<td>2.03%</td>
</tr>
<tr>
<td>BRISBANE INC</td>
<td>2,474</td>
<td>50</td>
<td>2.02%</td>
</tr>
<tr>
<td>REDWOOD CITY INC</td>
<td>34,784</td>
<td>675</td>
<td>1.94%</td>
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<tr>
<td>FOSTER CITY INC</td>
<td>14,645</td>
<td>281</td>
<td>1.92%</td>
</tr>
<tr>
<td>BURLINGAME INC</td>
<td>15,422</td>
<td>294</td>
<td>1.91%</td>
</tr>
<tr>
<td>WOODSIDE INC</td>
<td>2,282</td>
<td>37</td>
<td>1.62%</td>
</tr>
<tr>
<td>ATHERTON INC</td>
<td>2,694</td>
<td>42</td>
<td>1.56%</td>
</tr>
<tr>
<td>COLMA INC</td>
<td>797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENLO PARK INC</td>
<td>15,752</td>
<td>214</td>
<td>1.36%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>301,923</strong></td>
<td><strong>7,477</strong></td>
<td><strong>2.48%</strong></td>
</tr>
</tbody>
</table>
Outreach Grantee Update

• **Acterra** translated PCE brochures into Somoan and Tongan for East Palo Alto

• **Pacifica Resource Center** is reaching seniors, launching social media campaign

• **Rebuilding Together** is including PCE in mailer to National Building Day participants

• **Sound of Hope** recorded radio ads in Mandarin and Cantonese

• **El Concilio** is tabling events with PCE materials in Spanish

_PCE brochures in Somoan (left) and Tongan (right) feature Violet Saena of Acterra and her family, who are Somoan._
Solar Net Metering Bill Workshop

June 20th 6:30 pm at PCE office

Great response of 70 RSVPs: Workshop is full!
Taking wait list and scheduling additional dates
## ECO100 Opt-Ups by City

<table>
<thead>
<tr>
<th>CITY</th>
<th>Eligible Accts</th>
<th>May '18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Territory</td>
<td>RES ACT</td>
</tr>
<tr>
<td>ATHERTON INC</td>
<td>2,694</td>
<td>2,395</td>
</tr>
<tr>
<td>BELMONT INC</td>
<td>11,854</td>
<td>10,547</td>
</tr>
<tr>
<td>BRISBANE INC</td>
<td>2,474</td>
<td>1,911</td>
</tr>
<tr>
<td>BURLINGAME INC</td>
<td>15,422</td>
<td>13,022</td>
</tr>
<tr>
<td>COLMA INC</td>
<td>797</td>
<td>501</td>
</tr>
<tr>
<td>DALY CITY INC</td>
<td>33,941</td>
<td>30,774</td>
</tr>
<tr>
<td>EAST PALO ALTO INC</td>
<td>7,797</td>
<td>7,088</td>
</tr>
<tr>
<td>FOSTER CITY INC</td>
<td>14,645</td>
<td>13,304</td>
</tr>
<tr>
<td>HALF MOON BAY INC</td>
<td>4,942</td>
<td>4,173</td>
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<tr>
<td>HILLSBOROUGH INC</td>
<td>4,038</td>
<td>3,781</td>
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<tr>
<td>MENLO PARK INC</td>
<td>15,752</td>
<td>13,630</td>
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<tr>
<td>MILLBRAE INC</td>
<td>9,366</td>
<td>8,401</td>
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<tr>
<td>PACIFICA INC</td>
<td>15,436</td>
<td>13,976</td>
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<tr>
<td>PORTOLA VALLEY INC</td>
<td>1,679</td>
<td>1,431</td>
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<td>REDWOOD CITY INC</td>
<td>34,784</td>
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<td>SAN BRUNO INC</td>
<td>16,424</td>
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<tr>
<td>SAN CARLOS INC</td>
<td>14,441</td>
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<tr>
<td>SAN MATEO INC</td>
<td>43,972</td>
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<td>24,770</td>
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</tr>
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<td>UNINC SAN MATEO CO</td>
<td>24,413</td>
<td>20,616</td>
</tr>
<tr>
<td>WOODSIDE INC</td>
<td>2,282</td>
<td>2,006</td>
</tr>
<tr>
<td>Unallocated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unallocated (cust type)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>301,923</strong></td>
<td><strong>263,498</strong></td>
</tr>
</tbody>
</table>
VISA ECO100 Press Release

- Sent through Business Wire, received 2,500+ views
- Posted online by 260+ news outlets across the country
- Notable online publications:
  - New York Times
  - Nasdaq.com
  - Morningstar
  - Silicon Valley, San Francisco, Sacramento, and LA Business Journals
  - San Francisco Business Times
  - Solar Power World
7. Regulatory and Legislative Report (Discussion)
Regulatory and Legislative Report
May 24, 2018

Joseph Wiedman
Director of Regulatory and Legislative Affairs
• CalCCA rebuttal testimony in PCIA docket
• CalCCA comments and reply comments on “clean net short”
• CalCCA comments and reply comments on CCA bond methodology proposed decision
• PCE and SCP comments on congestion revenue rights
• Smart EV Charging Coalition comments on Low-Carbon Fuel Standard Credit allocations
April/May Regulatory Outreach

- CPUC Webinar on “Green Book”
- CalCCA Ex Parte with Jason Houck
April/May Legislative Activities

• CalCCA activity:
  – AB 813 (Holden) – Support
  – AB 893 (Garcia) – Oppose
  – SB 1088 (Dodd) – Oppose unless amended
  – SB 1347 (Stern) – Oppose unless amended
  – Letter to Governor’s Office
  – Letter to supportive legislators
8. Update on Power Charge Indifference Adjustment (PCIA) (Discussion)
“The [Power Charge Indifference Adjustment (PCIA)] is a mechanism adopted by the Commission as part of the ratemaking methodology developed to ensure that when electric customers of the investor-owned utilities (IOUs) depart from IOU service and receive their electricity from a non-IOU provider, those customers remain responsible for costs previously incurred on their behalf by the IOUs — but only those costs.”

Per P.U. Code 366.2(f)(2), these costs for CCA customers must be:

- “Net” (i.e. costs that are “above market” value)
- “Unavoidable” (i.e. costs that cannot be reduced or mitigated)
- “Attributable” (i.e. costs are specific to the customer and their timing of departure)
Commission initiated a Rulemaking (R.) 17-06-026 on June 29, 2017:

• “in order to review, revise, and consider alternatives” to the present PCIA methodology

• **Track 1** – Considers exemptions for CARE and medical baseline customers

• **Track 2** – Evaluates possible modifications of the PCIA methodology
CPUC Proceeding Process

1) Scope

2) Fact

3) Law

4) Policy Decision
PCIA Rulemaking (R.17-06-026)

Remaining Track 2 Schedule

- April 2\textsuperscript{nd} – Opening Testimony
- April 23\textsuperscript{rd} – Rebuttal Testimony
- May 7\textsuperscript{th}-11\textsuperscript{th} – Hearings
- June 1\textsuperscript{st} – Opening Briefs
- June 15\textsuperscript{th} – Reply Briefs
- Late July – Proposed Decision
- Late August – Final Decision
Shorter-Term Reform
- Revised Capacity Adder
- New Ancillary Service Adder
- New GHG-Free Adder

Longer-Term Reform
- Securitization
- Buy-Down/Buy-Out
- Auction
Potential Benchmark Reform

% of Total Portfolio Cost

PCIA

- Brown
- Green
- Capacity
- Above Market Cost

38% of Total Portfolio Cost
1. **Benchmark Reform**
   - Include values of:
     i. long-term capacity,
     ii. ancillary services, and
     iii. greenhouse gas-free resources
   - ~$500 M reduction in PG&E’s “above market” costs
2. **Securitization**
   - Focused on Utility Owned Generation (UOG)
   - ~$1.2 B in reduced costs for all PG&E ratepayers

3. **Buy-Down/Buy-Out**
   - Focused on existing, high-cost renewables contracts
   - Further reduces costs for all ratepayers

4. **Staggered Auction of IOU Portfolio**
   - Requires IOUs to sell all renewable and GHG-free resources into a quarterly action where all Load-Serving Entities (LSEs) can bid
   - Clearing prices would establish the true market value to replace need for benchmarks
Potential Impact on PG&E’s Above Market Costs:

$2.2 Billion -> $512 Million
Portfolio Allocation Mechanism (PAM)

- Forcefully allocates *costs and attributes* of IOU portfolio resources onto CCAs
- Values these attributes in short-term manner only
- Violates CCA procurement autonomy
- Fails to minimize both above-market costs and IOUs’ total portfolio costs
Now…

Green Allocation Mechanism (GAM)
• Forcefully allocates costs and attributes of IOUs’ renewable and large hydro resources onto CCAs

Portfolio Management Mechanism (PMM)
• Forcefully allocates costs of gas/nuclear/energy storage IOU resources onto CCAs
• Values these attributes in short-term manner only
Next Steps

Remaining Track 2 Schedule

- April 2\(^{nd}\) — Opening Testimony
- April 23\(^{rd}\) — Rebuttal Testimony
- May 7\(^{th}\) - 11\(^{th}\) — Hearings
- June 1\(^{st}\) — Opening Briefs
- June 15\(^{th}\) — Reply Briefs
- Late July — Proposed Decision
- Late August — Final Decision
<table>
<thead>
<tr>
<th>FY 2017-18 Budget Model</th>
<th>FY 2018-19 Budget Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prepared by PEA</td>
<td>• Internal Model</td>
</tr>
<tr>
<td>• Used 2014 data for load forecast, as basis for revenue and cost of energy budgeted numbers</td>
<td>• Used 2017 actual load data for revenue and cost of energy budgeted amounts</td>
</tr>
<tr>
<td>• Top-down and bottoms-up forecast</td>
<td>• Bottoms-up forecast</td>
</tr>
<tr>
<td>• The model might take time to build scenarios</td>
<td>• Model designed to run multiple “what if” scenarios</td>
</tr>
</tbody>
</table>
## DRAFT FY 2018-2019 Budget

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 2017-18</th>
<th>FY 2018-19</th>
<th>Change in $$$</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING REVENUES</strong></td>
<td></td>
<td></td>
<td>$ (11,246,144)</td>
<td>-5%</td>
</tr>
<tr>
<td>Electricity Sales</td>
<td>$247,213,713</td>
<td>$235,967,569</td>
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<tr>
<td>ECO100 Premium</td>
<td>737,000</td>
<td>750,842</td>
<td>13,842</td>
<td>2%</td>
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<tr>
<td>Revenues</td>
<td>$247,950,713</td>
<td>$236,718,411</td>
<td>(11,232,302)</td>
<td>-5%</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
<td>(1,142,596)</td>
<td>-1%</td>
</tr>
<tr>
<td>Cost of energy</td>
<td>181,715,000</td>
<td>176,147,894</td>
<td>(5,567,106)</td>
<td>-3%</td>
</tr>
<tr>
<td>Data Manager</td>
<td>3,970,000</td>
<td>3,758,400</td>
<td>(211,600)</td>
<td>-5%</td>
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<tr>
<td>Service Fees - PG&amp;E</td>
<td>1,636,000</td>
<td>1,260,000</td>
<td>(376,000)</td>
<td>-23%</td>
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<tr>
<td>Bad Debt expense</td>
<td>865,248</td>
<td>828,514</td>
<td>(36,734)</td>
<td>-4%</td>
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<tr>
<td>Communications and Outreach</td>
<td>1,049,000</td>
<td>1,010,600</td>
<td>(38,400)</td>
<td>-4%</td>
</tr>
<tr>
<td>General and Administrative</td>
<td>795,207</td>
<td>1,227,200</td>
<td>431,993</td>
<td>54%</td>
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<tr>
<td>Professional Services</td>
<td>1,017,000</td>
<td>1,432,511</td>
<td>415,511</td>
<td>41%</td>
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<tr>
<td>Energy Programs</td>
<td>250,000</td>
<td>3,200,000</td>
<td>2,950,000</td>
<td>1180%</td>
</tr>
<tr>
<td>Legal</td>
<td>1,030,000</td>
<td>1,146,600</td>
<td>116,600</td>
<td>11%</td>
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<tr>
<td>Personnel</td>
<td>3,319,605</td>
<td>4,492,745</td>
<td>1,173,140</td>
<td>35%</td>
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<tr>
<td>Total Operating Expenses</td>
<td>$195,647,060</td>
<td>$194,504,465</td>
<td>(1,142,596)</td>
<td>-1%</td>
</tr>
<tr>
<td><strong>Operating Income (Loss)</strong></td>
<td>52,303,653</td>
<td>42,213,946</td>
<td>(10,089,706)</td>
<td>-19%</td>
</tr>
<tr>
<td><strong>NON-OPERATING REVENUES (EXP.)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Interest Income</td>
<td>-</td>
<td>440,000</td>
<td>440,000</td>
<td>0%</td>
</tr>
<tr>
<td>Interest and related expense</td>
<td>-</td>
<td>(48,000)</td>
<td>(48,000)</td>
<td>0%</td>
</tr>
<tr>
<td>Nonoperating Revenues (Exp.)</td>
<td>-</td>
<td>392,000</td>
<td>392,000</td>
<td>0%</td>
</tr>
<tr>
<td><strong>OTHER USES.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>484,000</td>
<td>42,000</td>
<td>(442,000)</td>
<td>-91%</td>
</tr>
<tr>
<td>Debt Service Principal</td>
<td>7,997,000</td>
<td>-</td>
<td>(7,997,000)</td>
<td>-100%</td>
</tr>
<tr>
<td>Other Uses</td>
<td>8,481,000</td>
<td>42,000</td>
<td>(8,439,000)</td>
<td>-100%</td>
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<tr>
<td><strong>CHANGE IN NET POSITION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Position at the beginning of period</td>
<td>21,710,529</td>
<td>65,533,182</td>
<td>43,822,653</td>
<td>202%</td>
</tr>
<tr>
<td>Increase in Net Position</td>
<td>43,822,653</td>
<td>42,563,946</td>
<td>(1,258,706)</td>
<td>-3%</td>
</tr>
<tr>
<td>Net Position at the end of period</td>
<td>65,533,182</td>
<td>108,097,128</td>
<td>42,563,946</td>
<td>65%</td>
</tr>
</tbody>
</table>
Next Steps

• Projections for FY 2019 – FY 2023

• Run Scenarios

• Reserves Policy
10. Risks and Hedging for Power Purchases (Discussion)
Risks and Hedging for Power Purchases

May 24, 2018

Chelsea Keys
Power Resources Manager
Agenda

• What is an energy hedge?
• How hedging mitigates market risk
• PCE’s open position
• Review CAISO market prices in 2017
• PCE’s hedging strategy
What is a energy hedge?

• A hedge is when a buyer agrees to pay a seller a fixed price for a particular quantity of energy, and for a specific time period.

• Hedging allows us to manage our cost of energy vs. buying energy from the market
  – The CAISO market works similar to the stock market; it’s volatile and exposes participants to unpredictable risk.
How hedging mitigates market risk

• At PCE, we reduce our risk of market exposure by hedging to cover our open position
  – Helps us maintain our low rates for our customers

• Budget energy costs and ensure future cash flows with more confidence

• IRP Open Position Guidelines

<table>
<thead>
<tr>
<th>Percentage of Load Procured</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Year</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 2</td>
<td>75%</td>
<td>90%</td>
</tr>
<tr>
<td>Year 3</td>
<td>65%</td>
<td>80%</td>
</tr>
<tr>
<td>Year 4</td>
<td>55%</td>
<td>70%</td>
</tr>
</tbody>
</table>
PCE’s Open Position: July & December

- PCE’s load profile prior to completing our 2018 hedge

- Avg. daily load demand is different depending on the time of year
Energy Prices in 2017

Day Ahead CAISO Prices

- $/MWh
- Apr to Dec

PG&E DLAP DA Prices
Average Of PG&E DLAP DA Prices ($34.69)
PCE’s Hedging Strategy

1. Forecast future open position

2. Solicit offers to supply a shaped energy hedge

3. Suppliers send indicative offers

4. PCE reviews & invites competitive offers to final round of bidding

5. PCE negotiates price & selects winning supplier
11. Board Members’ Reports (Discussion)
Adjourn