Green collar jobs at Solar One

Community Power Coalition

5th 2017 meeting
November, 2017
Guest speaker - J R Killigrew, presenting on Deep Green 2017

Updates:
• Charles F. McGlashan celebration
• Future Build Training
• 2018 Integrated Resource Plan
• Diablo Canyon Update

Possible Action:
✓ Contra Costa CLAGs
✓ 2017 Coalition Survey

Other member updates or future agenda items?
Choosing Deep Green

50% CA Solar

50% CA Wind

Supports Local Renewable Development
Deep Green in 2017

100s of advocates

700 & counting new residential customers
New 2017 Deep Green Customers

13 Local Govs Opted Up

- Joining Belvedere, Fairfax, San Anselmo, San Pablo, Sausalito
- Direct email marketing to residents

~6,000 Metric Tons of GHG Reduced
Evolution of Deep Green

- 3000% growth in kWh since launch
- Over 23,500 metric tons of carbon reduced
- Achieved 2025 Integrated Resource Plan (IRP) goal of 5%
Deep Green Usage by Community

% of DG kWh (MCE Service)
1/1/2017 - 9/30/2017

- American Canyon: 2.22%
- Belvedere: 0.57%
- Benicia: 0.43%
- Corte Madera: 0.00%
- El Cerrito: 2.98%
- Fairfax: 3.96%
- Lafayette: 13.15%
- Larkspur: 1.63%
- Mill Valley: 3.12%
- Napa: 2.42%
- Novato: 1.35%
- Richmond: 5.19%
- Ross: 1.64%
- Saint Helena: 7.83%
- San Anselmo: 4.83%
- San Pablo: 4.36%
- San Rafael: 5.74%
- Sausalito: 1.45%
- Tiburon: 7.85%
- UNINC Marin Co: 3.22%
- UNINC Napa Co: 0.60%
- Walnut Creek: 0.15%
New 2017 Deep Green Customers

19 New Deep Green Champion Businesses

~6,000 Metric Tons of GHG Reduced
New 2017 Deep Green Customers

19 New Deep Green Champion Businesses

“At the San Rafael Airport, we are early adopters of solar energy and MCE’s Feed In Tariff program whereby we sell local solar power to MCE providing for the electricity needs of about 150 homes. We were absolutely ready to eliminate the balance of the Airport’s Scope 2 GHG emissions by enrolling in MCE’s Deep Green service. As of our next PG&E bill, our Scope 2 emissions plummeted to zero after we opted up to MCE’s 100% CA bundled renewable electricity for the remaining electricity needs of our facilities and our customers.”

Bob Herbst, Manager
San Rafael Airport

San Rafael Airport is also the location of MCE’s first FIT project
19 New Deep Green Champion Businesses

“Since 2007 SCOCO has been inspiring people to make sustainable choices. The way we use and choose energy is one of the most important choices. We are committed to One Planet Living principles and achieving global Sustainable Development goals through local action. We are grateful to have the 100% renewable option and to partner with MCE on this essential path to a bright future!”

Tina Neuhausel, President Sustainable Contra Costa

Sustainable Contra Costa, nonprofit
MCE Updates
Charles F. McGlashan

Sarah & Helene from the Environmental Forum of Marin

Melissa Yu of the Sierra Club Bay Chapter

El Cerrito Environmental Quality Committee

Annual Advocacy Award
Future Build & Rubicon

Partnered with Future Build East County, Rubicon, City of Pittsburg, Calpine & AnswerNet

5 day workforce development training to prepare for new call center in Pittsburg

Training on history of CCA, MCE programs, & how to be a successful customer service representative.

Visit to Solar One, Richmond
Priorities set by MCE’s Board of Directors

Integrated Resource Plan (IRP) Key Elements

- **2018 IRP now live:**
  - mceCleanEnergy.org/energy-procurement
- Projected customer demand and energy needs
  - Renewable, GHG-free & conventional resources
- Estimated deliveries from contracted resources
- “Open Positions”
  - Difference between future energy needs and commitments from contracted resources
  - Methods and guidelines to fill open positions
MCE Procurement Policies

Reduce GHG Emissions & Other Pollutants by increasing use of renewable energy and reducing fossil fuel reliance.

Maintain Competitive Rates & Increase Control Over Costs by managing a diverse resource portfolio.

Benefit the Area’s Economy by investing in local infrastructure & energy programs.

Help Customers Save on Energy & Bills by providing energy efficiency, distributed generation & other demand-side programs.
Projected 2018 growth by including nine new Contra Costa communities:
From 255,000 to almost 500,000
Snapshot of Procurement Portfolio, 2018

Estimated Resource Mix

57% Renewable
77% GHG-free
Estimated Resource Mix (GWh) 2018-2027

- Solar
- Wind
- Large Hydro
- Small Hydro
- New Efficiency/NEM
- Conventional
- Geothermal
- Biomass/LFG
IRP NEM projections

- MCE currently serves ~14,700 NEM customers, representing 128+ MW of generating capacity.
- MCE expects to serve 9,800+ customers with 71+ MW of capacity with the enrollment of the nine new Contra Costa communities.
- In addition to rooftop solar, MCE plans to develop or purchase 25 MW of local, utility-scale renewables by 2021.
The Commission released a proposed decision on PG&E's Diablo Canyon Application. Keep in mind that parties will submit comments and this proposed decision could change before the Commission votes on it. Major points are:

1) PG&E’s proposed 2024/2025 retirement schedule for Diablo Canyon is reasonable

2) No replacement procurement will be authorized in this proceeding ("Overall, practical and policy reasons indicate that it is better for potential replacement procurement issues to be addressed in the Commission’s IRP process, rather than addressing it in a more piecemeal fashion in this proceeding. Accordingly, the need for and authorization of any replacement procurement should be addressed in the IRP proceeding.")

3) PG&E's request for $350 million for employee retention was reduced to $160 million

4) PG&E's request for $85 million to replace lost tax income to the local community was rejected

5) PG&E's request for $50 million for costs of seeking license renewal was reduced to $18.6 million in a settlement and approved

6) There are no material ratemaking changes in the proposed decision (e.g. no Clean Energy Charge)

Great news! But we need the Commission to vote yes on 12/4 before it’s done!
Contra Costa Community Leader Advisory Groups (CLAG)
Community Outreach Plan

One plan
• 9 Appendices
• Demographic data
• Outreach strategies
• Mailer information
• Outreach timeline

Incorporates community demographics and feedback from various stakeholders to create strategy and timeline for intensive and comprehensive public engagement.
Community Leader Advisory Groups

Groups consisting of community leaders identified by city & town staff and local grassroots advocates

- 3 CLAGs in Contra Costa County
- 3 meetings each with different asks (9 total)
  - 1st: Informational, December
  - 2nd: Update, February
  - 3rd: Enrollment Feedback, April

Please promote!
www.MCECleanEnergy.org/CLAG
Please promote!
MCECleanEnergy.org/CLAG

Danville Veterans Memorial Hall, 400 Hartz Ave
Thursday, Dec 7th, 7 pm

Pittsburg City Council Chambers, 65 Civic Ave
Wednesday, Dec 13th, 7 pm
Most important actions for CCAs to support disadvantaged communities:

1. Provide energy efficiency and solar rebates
2. Lower electricity rates (e.g., lower generation rates, reduce PCIA)
3. Local development of renewable energy projects
Last year’s survey helped MCE set priorities and allocate resources.

We need your input and feedback to continue refining our focus and putting Community first.

Cheers to many more years of growing together!
Fin
Additional Slides
• Allocated $155,000 in solar rebates, administered by GRID Alternatives
• Helped fund 87 solar installations for low-income families → 186 kWs of new, local solar
• $1.5M in expected energy savings for avoided electricity costs
• Estimated 3,000 metric tons of GHG emissions eliminated
**OIR Scoping Memo**

**OIR – 2 tracks**

1\(^{st}\): CARE & Medical Baseline Exemption (briefing in Dec 2017; proposed decision in April 2018)

2\(^{nd}\): PCIA Data Access, Transparency, Reform (briefing in March/April 2018; proposed decision in July 2018)

Degrees of involvement: from informal public comment to the CPUC to formal regulatory engagement

Extremely aggressive timeline

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>SCE</th>
<th>SDG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCA Customers (not CARE or Medical Baseline)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (other than residential)</td>
</tr>
<tr>
<td>CCA CARE Customers</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CCA Medical Baseline Customers</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
## Residential Cost Comparison

<table>
<thead>
<tr>
<th>Example Monthly Electric Charges*</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>PG&amp;E Solar Choice</th>
<th>MCE Local Sol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E Electric Delivery</td>
<td>$54.25</td>
<td>$54.25</td>
<td>$54.25</td>
<td>$54.25</td>
<td>$54.25</td>
</tr>
<tr>
<td>Electric Generation</td>
<td>$43.78</td>
<td>$30.26</td>
<td>$34.71</td>
<td>$42.40</td>
<td>$63.19</td>
</tr>
<tr>
<td>Average Total Cost</td>
<td>$98.03</td>
<td>$97.76</td>
<td>$102.21</td>
<td>$109.64</td>
<td>$130.69</td>
</tr>
</tbody>
</table>

*Based on a typical usage of 445 kWh at current PG&E rates and MCE rates under the Res-1/E-1 rate schedule. Actual differences may vary depending on usage, rate schedule, and other factors. Estimate provided is an average of seasonal rates.
# New California Renewables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Expected production (GWhs)</th>
<th>Project Capacity (MWs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>632.64</td>
<td>188.67</td>
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<tr>
<td>Construction (steel in the ground)</td>
<td>23.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Development (interconnection agreement executed; PPA in process)</td>
<td>1,486.94</td>
<td>613.08</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2,143.08 GWhs</strong></td>
<td><strong>812.25 MWs</strong></td>
</tr>
</tbody>
</table>

**Marin and Contra Costa Projects:**

- **19.95 MWs**
- **64.1 GWhs**
Workforce Development

### RichmondBUILD
- **Community Investment**: $45,000
- **Social Impact**:
  - 330 job hours
  - More coming in 2017 with MCE Solar One

### GRID ALTERNATIVES
- **Community Investment**: $155,000 allocated
- **Social Impact**:
  - 87 free or very low cost solar systems installed

### RISING SUN ENERGY CENTER
- **Community Investment**: $140,000
- **Social Impact**:
  - 400 multifamily units received upgrades
  - 1,369 job hours

### CDC
- **Community Investment**: $240,000
- **Social Impact**:
  - 1,798 job hours
  - 62 people trained
# Renewable Portfolio Standards

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>RPS established by SB 1078</td>
</tr>
<tr>
<td>2006</td>
<td>Accelerated by requiring 20% of retail electricity sales be from renewable sources by 2010</td>
</tr>
<tr>
<td>2008</td>
<td>33% by 2020</td>
</tr>
<tr>
<td>2015</td>
<td>SB 350 states 50% by 2050</td>
</tr>
</tbody>
</table>

## 2016 Power Content Label

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E³</th>
<th>MCE Light Green³</th>
<th>MCE Deep Green³</th>
<th>MCE Local Sol⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL RENEWABLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar</td>
<td>13%</td>
<td>55%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Wind</td>
<td>8%</td>
<td>34%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Biomass &amp; biowaste</td>
<td>4%</td>
<td>5%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Eligible hydroelectric</td>
<td>3%</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geothermal</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CARBON-FREE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large hydroelectric</td>
<td>12%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>24%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ¹ Based on typical residential usage of 5,340 kWh/yr and the recently reported GHG emission factors for MCE and PG&E.
- ² Based on the EPA’s GHG equivalencies: epa.gov/energy/greenhouse-gas-equivalencies-calculator
- ³ Renewable energy content as reported in the 2016 Annual Report to the CEC Power Source Disclosure Program. Totals may not add up due to rounding.
- ⁴ Based on the projected 2017 power mix for Local Sol as reported to Green-e.
- ⁵ Electricity for Local Sol service is produced at the Cooley Quarry in Novato. Learn more at: mceCleanEnergy.org/LocalSol
- ⁶ Based on typical usage of 445 kWh/month and current PG&E and MCE rates under the E-1 rate schedule. Actual differences may vary depending on usage, rate schedule, and other factors. Estimate provided is an average of seasonal rates.
- ⁷ PG&E electric delivery rates are the same for MCE and PG&E customers and are available at pge.com.