City of Davis
Community Choice Energy
Public Forum
Hosted by the City’s Community Choice Energy Advisory Committee

April 23, 2015
City Hall Community Chambers, 23 Russell Blvd.

AGENDA

FORUM OBJECTIVES:
✓ Share information about what Community Choice Energy is and why Davis is looking at it;
✓ Gather community feedback on Community Choice Energy;
✓ Learn about other Community Choice programs and what options are available to Davis;
✓ Share information about the work of the Community Choice Energy Advisory Committee and how they will make a recommendation to the City Council;
✓ Identify key questions that need additional research; and
✓ Share information about how to continue to be involved in this process.

6:30pm  I.  WELCOME & INTRODUCTIONS
Robb Davis, Mayor Pro-tem
Lucas Frerichs, City Councilmember

6:35pm  II.  BACKGROUND – What is CCE and why is Davis looking at it?
Community Choice Energy Advisory Committee/City Staff

6:45pm  III.  PRESENTATIONS – Community Choice Power programs: working examples
Geof Syphers, CEO, Sonoma Clean Power
Dawn Weisz, CEO, Marin Clean Energy

8:00pm  IV.  QUESTIONS & ANSWERS

8:30pm  V.  WRAP-UP & NEXT STEPS
Community Choice Energy Public Forum

April 23, 2015
Davis, CA
Public Forum Objectives

- Share information about what Community Choice Energy is and why Davis is looking at it;
- Gather community feedback on Community Choice Energy;
- Learn about other Community Choice programs and what options are available to Davis;
- Share information about the work of the Community Choice Energy Advisory Committee and how they will make a recommendation to the City Council;
- Identify key questions that need additional research; and
- Share information about how to continue to be involved in this process.
Overview

• Background
  – What is Community Choice Energy (CCE)
  – How does it work?
  – Community Choice Energy Advisory Committee

• Presentations
  – Geof Syphers, CEO, Sonoma Clean Power
  – Dawn Weisz, CEO, Marin Clean Energy

• Questions and Answers
Background: What is CCE

source
CCE
buys and builds cleaner energy supplies

delivery
PG&E
delivers energy, repairs lines

customer
YOU
choice, cleaner energy, local control and competitive rates

Source: Sonoma Clean Power
Davis’ options for CCE

• Stay with IOU (do nothing)
• Form new CCE
  – Stand alone or joint program with other jurisdictions
• Join existing CCE Program
CCE Advisory Committee

• Formed to do the homework to see if CCE is a good fit for Davis
  – Gather information
  – Community outreach and feedback
  – Consider CCE options
  – Make a recommendation to the City Council
CCE Advisory Committee

• Basic Metrics for Recommendation
  – Consumer Choice
  – Competitive Pricing
  – Localized Control
  – Cleaner Energy
  – Risk Mitigation
  – Time to Implement
  – Alignment with City Goals (environmental and economic)
Presentations

• Geof Syphers, CEO, Sonoma Clean Power

• Dawn Weisz, CEO, Marin Clean Energy
Questions and Answers

• Geof Syphers, CEO, Sonoma Clean Power

• Dawn Weisz, CEO, Marin Clean Energy

• Community Choice Energy Advisory Committee

• City Staff
Wrap up/How to Stay Involved

• Public Forum II – May 4, Vets Memorial Center

• City Web site – Committee Agendas, FAQ’s and other Materials: cityofdavis.org

• Questions/comments: news@cityofdavis.org
Explain with a Picture

**source**
SCP
buys and builds
cleaner energy
supplies

**delivery**
PG&E
delivers energy,
repairs lines

**customer**
YOU
choice, cleaner
energy, local
control and
competitive rates
Governance

Public board oversees Joint Powers Authority

Board can delegate to committees as needed

Voting is normally one director one vote, but allows load-weighted voting for veto
33% renewable power – more than PG&E
Competitive rates — 6 to 9% lower than PG&E (Feb 2015)
34% lower greenhouse gas emissions
Default service – designed for maximum participation
EverGreen

100% local, 100% renewable power

Premium of 3.5¢/kWh (about 14% more than PG&E)

Optional program available to everyone in participating cities
As a part of our mutual commitment to support your energy choice, Sonoma Clean Power (SCP) and PG&E have partnered to create a comparison of our typical electric rates, average monthly charges and generation portfolio contents. Below you will find a representative comparison of our rates, average monthly bills and power generation portfolio content based on customer class. To find your specific electric rate, please scroll down to your rate plan to view the rate and bill comparisons.

**E-1 / RES-1**

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>Sonoma Clean Power</th>
<th>Sonoma Clean Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CleanStart</td>
<td>EverGreen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(33% Renewable)</td>
<td>(100% Renewable)</td>
</tr>
<tr>
<td>Residential: E-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation Rate ($/kWh)</td>
<td>$0.09745</td>
<td>$0.07100</td>
<td>$0.10600</td>
</tr>
<tr>
<td>PG&amp;E Delivery Rate ($/kWh)</td>
<td>$0.11769</td>
<td>$0.11769</td>
<td>$0.11769</td>
</tr>
<tr>
<td>PG&amp;E PCIA/FF ($/kWh)</td>
<td>N/A</td>
<td>$0.01234</td>
<td>$0.01234</td>
</tr>
<tr>
<td>Total Electricity Cost ($/kWh)</td>
<td>$0.21514</td>
<td>$0.20103</td>
<td>$0.23603</td>
</tr>
<tr>
<td>Average Monthly Bill ($)</td>
<td>$115.28</td>
<td>$107.72</td>
<td>$126.48</td>
</tr>
</tbody>
</table>

Monthly usage: 536 kWh
Rates are current as of January 1, 2015
NEM and EV Rates

Same rate structures as PG&E – all types offered

Discounts still apply (CARE, medical baseline)

Charges for generation are less

SCP credits $0.01/kWh bonus on customer generation

Cash out credits every April at retail up to $5,000/acct
Special Rates

NEM-A Aggregation: agriculture, business parks, campuses

NEM-V Virtual: multifamily, shopping centers

Option R: NEM customers with loads over 1 MW (coming soon)

ProFIT: feed-in tariff standard offer up to 1 MW
In-County Renewables

50 MW of local baseload geothermal contracted

7,000 NEM customers producing about 2 MW of excess

12.5 MW of new floating solar under construction

Active recruitment of new projects
Risk Mitigation

Joint Powers Authority is valuable to shield member general funds

Pre-plan how cities can leave program, due to long-term supply contracts

Hire real wholesale market experts to manage supply portfolio and compliance
  • Retail experience with energy and renewables is virtually unrelated
  • Industry is heavily regulated (surprise!)

Streamline contracting process with industry metrics (value at risk instead of dollars) to allow flexible response to real-time market
SCP and Economic Development

Average electric service savings = 7% on total charges

Bonding capacity in 4 years

Over $60 million invested in Sonoma County in first three years

Active business partnerships
Marin Clean Energy
A not-for-profit, community renewable energy provider
About MCE

2008: Marin Clean Energy formed

2010: Customer service start

2015: Serving 165,000 customers including Marin County, Richmond, San Pablo, Benicia El Cerrito and unincorporated Napa County

Highlights to-date:

• 59,421 tons of greenhouse gas reductions

• $5.9 million customer savings in 2014

• $516 M committed to new CA-built renewable energy projects
MCE Board of Directors

• 17-Member Board of Directors
• Local government elected officials
• Public oversight of rates, power sources and policies
• Report to California Public Utilities Commission, California Energy Commission, and customers
Customer Choice

- **PG&E**: 22% Renewable
- **MCE Light Green**: 50% Renewable
- **MCE Deep Green**: 100% Renewable
- **MCE Local Sol**: 100% Local Solar

*Most recently reported by PG&E*
## 2013 Electric Power Content Mix

<table>
<thead>
<tr>
<th>Renewable</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22%</td>
<td>51%</td>
<td>100%</td>
</tr>
<tr>
<td>Bioenergy</td>
<td>4%</td>
<td>6%</td>
<td>0</td>
</tr>
<tr>
<td>Geothermal</td>
<td>5%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Small hydroelectric</td>
<td>2%</td>
<td>12%</td>
<td>0</td>
</tr>
<tr>
<td>Solar</td>
<td>5%</td>
<td>&lt;1%</td>
<td>0</td>
</tr>
<tr>
<td>Wind</td>
<td>6%</td>
<td>33%</td>
<td>100%</td>
</tr>
<tr>
<td>Large Hydroelectric</td>
<td>10%</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>28%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nuclear</td>
<td>22%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unspecified</td>
<td>18%</td>
<td>39%</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 2012 GHG Emissions (lbs CO2e/MWh)

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>MCE</th>
<th>MCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>445</td>
<td>380</td>
<td>0</td>
</tr>
</tbody>
</table>
MCE Local Development

MCE Local Power Resources, 2012 – 2015

KEY
- BIOMASS
- SOLAR
- MCE SERVICE AREA

Map information accurate as of 10/06/14
**Residential Cost Comparison**

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>MCE Local Sol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly Residential</td>
<td>22% ** Renewable</td>
<td>50% Renewable</td>
<td>100% Renewable</td>
<td>100% Local Solar</td>
</tr>
<tr>
<td>Electric Charges</td>
<td>Energy</td>
<td>Energy</td>
<td>Energy</td>
<td>Solar</td>
</tr>
<tr>
<td>PG&amp;E Electric</td>
<td>$37.30</td>
<td>$37.30</td>
<td>$37.30</td>
<td>$37.30</td>
</tr>
<tr>
<td>Delivery (all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>customers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Generation</td>
<td>$45.12</td>
<td>$37.97</td>
<td>$42.60</td>
<td>$65.75</td>
</tr>
<tr>
<td>(all customers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Fees</td>
<td>-</td>
<td>$5.71</td>
<td>$5.71</td>
<td>$5.71</td>
</tr>
<tr>
<td>(MCE customers only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Total Cost</strong></td>
<td><strong>$82.42</strong></td>
<td><strong>$80.98</strong></td>
<td><strong>$85.61</strong></td>
<td><strong>$108.76</strong></td>
</tr>
</tbody>
</table>

*The above comparison is based on a typical usage of 463 kWh at PG&E’s rates effective as of March 1st and MCE’s current rates for the April 2015 to March 2016 fiscal year under the Res-1/E-1 rate schedule. Costs shown are an average of summer and winter rates in baseline territory X with gas heating; actual differences may vary depending on usage, rate schedule and other factors.

**Most recently verified.**

- Delivery rates stay the same
- Generation rates vary by service option
- PG&E assesses additional fees for MCE customers
- **Light Green is less expensive than PG&E service**
## Commercial Cost Comparison

<table>
<thead>
<tr>
<th>Example Monthly Commercial Electric Charges*</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>MCE Local Sol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E Electric Delivery (all customers)</td>
<td>22% Renewable Energy</td>
<td>$127.29</td>
<td>$127.29</td>
<td>$127.29</td>
</tr>
<tr>
<td>Electric Generation (all customers)</td>
<td>$122.75</td>
<td>$98.62</td>
<td>$110.72</td>
<td>$171.82</td>
</tr>
<tr>
<td>Additional PG&amp;E Fees (MCE customers only)</td>
<td>-</td>
<td>$13.31</td>
<td>$13.31</td>
<td>$13.31</td>
</tr>
</tbody>
</table>

Average Total Cost
- PG&E: $250.05
- MCE Light Green: $239.22
- MCE Deep Green: $251.32
- MCE Local Sol: $312.42

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*The above comparison is based on a typical usage of 1210 kWh at PG&E's rates effective as of March 1st and MCE's current rates for the April 2015 to March 2016 fiscal year under the Com-1/A-1 rate schedule. Costs shown are an average of summer and winter rates; actual differences may vary depending on usage, rate schedule and other factors.

**Most recently verified.

- Delivery rates stay the same
- Generation rates vary by service option
- PG&E assesses additional fees for MCE customers
- Light Green is less expensive than PG&E service
Cost Savings to Cities & Special Districts

- **City of San Rafael**
  - $30,000 (2013)
  - $47,000 (2014)

- **City of Richmond**
  - $107,000 (2014)

- **West Contra Costa Unified School District**
  - $66,000 (2014)

- **City of Novato**
  - $9,000 (2013)
MCE customers receive the exact same savings from these programs as PG&E customers.

**CARE** and **FERA** are programs which discount electricity for households with limited income.

**Medical Baseline** is a program which effectively discounts electricity for customers with necessary medical equipment consuming electricity.

Both are state programs administered by PG&E. They will continue to provide the same discount on MCE customer bills.

Current charges include a discount of $12.54 for CARE.
Local Generation Opportunities

• **Feed In Tariff (FIT)** – a standard offer 20 year contract for renewable projects <1 MW located within MCE’s service territory

• **Net Energy Metering (NEM)** – MCE serves 3,800 rooftop solar customers, totaling 35.2 MW
Feed-In Tariff (FIT)

Prices Shall Apply Under the Following Conditions

<table>
<thead>
<tr>
<th>Prices Shall Apply Under the Following Conditions</th>
<th>Peak Energy Prices (20-year Term, $/MWh)</th>
<th>Baseload Energy Prices (20-year Term, $/MWh)</th>
<th>Intermittent Energy Prices (20-year Term, $/MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 1</td>
<td>$137.66</td>
<td>$116.49</td>
<td>$100.57</td>
</tr>
<tr>
<td>Condition 2</td>
<td>$120.00</td>
<td>$105.00</td>
<td>$95.00</td>
</tr>
<tr>
<td>Condition 3</td>
<td>$115.00</td>
<td>$100.00</td>
<td>$90.00</td>
</tr>
<tr>
<td>Condition 4</td>
<td>$110.00</td>
<td>$95.00</td>
<td>$85.00</td>
</tr>
<tr>
<td>Condition 5</td>
<td>$105.00</td>
<td>$90.00</td>
<td>$80.00</td>
</tr>
</tbody>
</table>

San Rafael Airport 972kW Feed in Tariff Project, 2012
Customer-Sited Solar

$50,000 towards residential solar rebates for low-income customers

Generous Net Energy Metering
  • Premium credits (retail rate + 1¢/kWh)
  • Credits never zero out
  • Annual cash out payment for over-generation
Local MCE Programs and Pilots

- Energy Efficiency program, funded by Public Goods Charge at $2 million + per year
- Electric vehicle charging stations installed
- Home Area Network pilot program with Bidgley complete
- Commercial customer battery storage pilot program with Tesla in process
- Residential load-shifting pilot program with Schneider Electric in process

Ruben Pendroza, Richmond BUILD graduate
Energy Efficiency Programs Highlights

• No-cost energy assessments for multifamily properties and businesses: Valued at $3,000 - $5,000

• No-cost direct installs for multifamily tenant units

• On-bill financing loans with River City Bank

• Behavior-based residential efficiency program

• Cash rebates (30-55% of project costs) for commercial and multi-family customers
Thank you! Questions?

mceCleanEnergy.org | 1 (888) 632-3674