Community Choice Energy in AZ

How CCE can Accelerate Customer Choice and Foster a Clean Energy Economy in Arizona

ASU Sustainable Cities Presentation
September 15, 2020
The Evolution of the Grid

- The vertically-integrated, monopoly utility of 100+ years ago made sense.
- But times are changing. The status quo is running behind.
- Technology is enabling distributed energy resources and advanced energy innovations at the local level.
- People and communities want more choice, more clean power, and market competition.
What is Community Choice Energy*?

- CCE creates a **functional partnership** between communities and their investor-owned utility.
- CCE allows cities and counties to **aggregate their electric load** in order to procure cleaner, cheaper power on the wholesale market.
- CCE serves **all electric accounts**—residential, municipal and commercial.
- CCE is an opt-out service. Customers **always have the choice** to remain with bundled utility service.
- The **utility continues to bill for and deliver power** and it continues to own and manage its electric distribution system (i.e. the poles and wires).

* Also called Community Choice Aggregation (CCA)
CCE Is Expanding Across the Country

**Authorized in 9 States:**
- California
- Illinois
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Ohio
- Rhode Island
- Virginia*

**Actively Investigating:**
- Arizona
- Colorado
- Connecticut
- Maryland
- Oregon

**Watch List/Potential:**
- Washington

* Not yet implemented
Community Choice Benefits

Energy Choice with Consumer Protections
- Communities can decide how green they want to be
- Customers have a choice in electricity providers and power options
- Contracts negotiated at the community level result in better consumer protections, volumetric pricing, and more favorable terms than individual contracts.

Affordable Electric Bills
- 3% to 10% average savings around the country
- Local rate setting authority

Accelerated Carbon Reduction
- Rapid achievement of environmental goals and mandates
- CCE’s offer energy efficiency and other clean energy programs
- Many communities are already 100% carbon free through CCE

Economic Development
- Customer rate savings remain in the community
- Open markets expand statewide economic opportunity/activity
- Local energy production and advanced energy programs create local jobs
- Community grid resilience = avoided costs
CCE Works As A Utility Partnership

- CCE is a form of public power but not full municipalization - often called “Muni-Lite”

- Two types of CCE: 1) **Wholesale CCE** (e.g. CA) and 2) **Retail CCE** (e.g. IL, MA). They work differently in different markets and achieve different results

- In all cases, the CCE assumes responsibility for power supply decisions, power contracting, and rate setting.

- Utility focuses on the poles and wires and (usually) phases-out owned generation.

- CCEs do not require public subsidy; they are self supporting through redirected electric generation revenues.

- In the wholesale CCE model, the utility is compensated for departing load through exit fees/cost recovery charges as well as unbundled distribution fees.
CCE Creates a Path for Local Innovation

- Critical Facility Microgrids
- Local DERs + Storage
- Feed in Tariff
- EV Infrastructure
- Net Energy Metering/Solar Incentives
- PACE/On-Bill Financing
- Energy Efficiency/Demand Response
- Community Programs
- Electric Vehicle Incentives
- One or more Supply Contracts
- Rate Savings
- Voluntary Green Options
CCE 1.0 - Newton, MA Green Energy Contract

- Extends 22 months, starting March 2019
- Decreases electricity rate from 13.70 ¢/kWh to 11.34¢/kWh, saving a typical ratepayer $16.48 per month
- Provides electric customers with 60% renewable energy content (compared with the state mandated 14%)
- Contract reflects market conditions at time of negotiations
CCE 2.0 - Cape Light Compact, MA

Your Energy Resource on Cape Cod and Martha's Vineyard!

- **Energy Efficiency For Your Home**
  Learn more about our FREE home energy assessments and ways to save with rebates

- **100% Renewable Power Supply**
  Make sure your power supply is 100% renewable. Sign up here!

- **Business Incentives**
  Learn more about how to save your business money

- **Commercial New Construction**
  Check out all the ways to make your new building Energy Efficient

- **Consumer Advocacy**
  Find out how we advocate for Cape and Vineyard Consumers

- **Energy Efficiency for Your Business**
  Learn more about energy assessments and ways to save energy and money for your business
CCE 3.0 – Examples from California CCEs

Airport Microgrid - Redwood Coast Energy Authority

Advanced Energy Rebuild – Sonoma Clean Power

Electric Bus Conversion – Lancaster Choice Energy

10.5 MW Community Solar on Brownfield Site – MCE Clean Energy

EV Rebates and Incentives – multiple CCAs

Off-Shore Wind – Redwood Coast and Monterey Bay Community Power
CCEs Reach 100% Renewable Faster

We promised local renewables. Now we’re delivering.

MCE’s installed local, renewable energy projects total over 19 megawatts. Learn more about where this energy comes from.

MCE Solar One, The Bay Area’s Largest Public-Private Solar Partnership

MCE Solar One was conceived by the Richmond community to integrate renewable energy and solar facilities in the Chevron Modernization Project. MCE teamed up with RichmondBUILD — which has successfully graduated hundreds of students and placed an impressive 80% of its graduates into well paying jobs — to train and hire its skilled, local graduates for the project.

Environmental and Local Benefits:

• Expected to eliminate 3,224 metric tons of carbon dioxide in one year, equivalent to taking more than 680 fossil fueled cars off the road annually*
• Repurposed 60 acres of a remediated brownfield site
• Supported 341 jobs
• Maximized local economic benefits by requiring 50% local resident workforce and engaging Richmond-based contractors and supplier

For press inquiries, please contact Kalicia Pivrotto, Marketing Manager, at kpivrotto@mceclearenergy.org.

Ten Southern California Municipalities Commit to 100 Percent Renewable Electricity

Community choice energy program will power 9 cities and Ventura County with 100% renewables in 2019

Thursday, November 1, 2018

Contact:
Stephanie Steinbrecher, 415-977-5736, stephanie.steinbrecher@sierraclub.org

VENTURA, CA -- A total of nine cities and one county have opted to power their communities with 100 percent renewable electricity through Clean Power Alliance, a new Community Choice Aggregation (CCA) program in Los Angeles and Ventura Counties.

The cities of Culver City, Ojai, Oxnard, Rolling Hills Estates, Santa Monica, South Pasadena, Thousand Oaks, Ventura, and West Hollywood, as well as unincorporated Ventura County, have each set a 100 percent renewable electricity default through the CCA. This means all residential, business, and municipal customers will be automatically powered entirely by
How CCE Would Work in AZ

1. ACC adopts CCE policy and establishes exit fees and other program rules through a rulemaking.
2. Local government(s) participate by passing an ordinance to form a CCE and enroll customers.
3. As an opt-out program, the CCE becomes the default electricity provider and handles required customer noticing and enrollment. [Nationwide, customer opt-out rates avg. 10% or below]
4. Cities continue to receive utility franchise fees; CCEs do not affect franchise agreements.
5. CCEs can serve a single city/county or group of them with similar interests. Larger programs often fare better economically.
6. Different power options are offered to customers with varied pricing structures and green attributes.
7. Customers always have the choice to opt out and, depending on market structure, either return to bundled utility service or select a different electric service provider.
AZ Laws Affecting CCE Formation

- Municipalization: Cities/towns have the option to municipalize utility distribution assets ("i.e., the last mile"). Municipalization requires city council approval and purchase of distribution.

- Form a district: (1) form either a community facilities district (ARS 48-700 et seq) or municipal improvement district (ARS 48-900 et seq).

- Joint Action Agency HB2653 in 2010 added Section 11-952.02 among other changes to the Arizona Revised Statutes. This Section allows public agencies (any city, town, county or special taxing district established pursuant to Title 48) to join together to form a separate legal entity.

- Community Choice Energy Arizona-style (CCE): cities could seek to add language to Title 48 and make CCE's another special taxing district.
The mission of Arizonans for Community Choice is to open doors for our cities and counties in Arizona to create an affordable renewable energy future through Community Choice Energy.

We are building grassroots support by joining forces with local government, industry stakeholders, and environmental advocacy groups to urge the Arizona Corporation Commission to adopt a CCE policy.

We aim to bring to Arizona the benefits of CCE currently enjoyed by states, counties and cities throughout the U.S.

For more information visit www.az4cc.org.
“The bottom line is this: To steer away from the current mix of energy for new capacity and embrace a typical CCA strategy will yield a monthly savings for a family in APS territory of about $40/month, which is a 32% cost reduction compared to expanding the current energy mix at APS as indicated in its 2019 annual report.”


For a Typical Household Running 750 Kilowatt-Hours of Electricity (kWhe) Per Month in Arizona

<table>
<thead>
<tr>
<th>TABLE.1: Electricity Option</th>
<th>2019 Electricity Mix of APS(^{a,b})</th>
<th>kWhe per Month</th>
<th>Old Mix, New Delivered Cost/kWhe</th>
<th>750 kWhe Cost for Typical Household</th>
<th>Old Mix CO2 Grams/ Energy Option</th>
<th>CO2 grams/kWhe</th>
<th>TABLE 2: CCE Preferred Mix %</th>
<th>CCE Preferred Mix kWhe</th>
<th>CCE Cost For Typical Household</th>
<th>CCE CO2 Grams/ Energy Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear(^{c})</td>
<td>35.9%</td>
<td>270</td>
<td>$0.250</td>
<td>$67.40</td>
<td>17,523</td>
<td>65</td>
<td>0.0%</td>
<td>0</td>
<td>$ -</td>
<td>0</td>
</tr>
<tr>
<td>Coal</td>
<td>26.2%</td>
<td>196</td>
<td>$0.130</td>
<td>$25.50</td>
<td>196,141</td>
<td>1000</td>
<td>0.0%</td>
<td>0</td>
<td>$ -</td>
<td>0</td>
</tr>
<tr>
<td>Gas(^{d})</td>
<td>29.4%</td>
<td>220</td>
<td>$0.130</td>
<td>$28.64</td>
<td>165,251</td>
<td>750</td>
<td>0.0%</td>
<td>0</td>
<td>$ -</td>
<td>0</td>
</tr>
<tr>
<td>CCS Coal</td>
<td>0.0%</td>
<td>0</td>
<td>$0.300</td>
<td>$ -</td>
<td>0</td>
<td>500</td>
<td>0.0%</td>
<td>0</td>
<td>$ -</td>
<td>0</td>
</tr>
<tr>
<td>Utility PV(^{e})</td>
<td>6.0%</td>
<td>45</td>
<td>$0.100</td>
<td>$4.48</td>
<td>895</td>
<td>20</td>
<td>31.5%</td>
<td>236</td>
<td>$ 23.63</td>
<td>4,725</td>
</tr>
<tr>
<td>Rooftop PV(^{e})</td>
<td>2.6%</td>
<td>19</td>
<td>$0.100</td>
<td>$1.92</td>
<td>384</td>
<td>20</td>
<td>13.5%</td>
<td>101</td>
<td>$ 10.13</td>
<td>2,025</td>
</tr>
<tr>
<td>Wind</td>
<td>0.0%</td>
<td>0</td>
<td>$0.100</td>
<td>$ -</td>
<td>0</td>
<td>10</td>
<td>10.0%</td>
<td>75</td>
<td>$ 7.50</td>
<td>750</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>0.0%</td>
<td>0</td>
<td>$0.045</td>
<td>$ -</td>
<td>0</td>
<td>5</td>
<td>25.0%</td>
<td>188</td>
<td>$ 8.44</td>
<td>938</td>
</tr>
<tr>
<td>Battery(^{f})</td>
<td>0.0%</td>
<td>0</td>
<td>$0.250</td>
<td>$ -</td>
<td>0</td>
<td>40</td>
<td>20.0%</td>
<td>150</td>
<td>$ 37.50</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>750</td>
<td>$127.93</td>
<td>380,193</td>
<td>507</td>
<td>100.0%</td>
<td>750</td>
<td>$ 87.19</td>
<td>14,438</td>
<td></td>
</tr>
</tbody>
</table>

Cost/kWhe: $0.171 ↓

or this many pounds: 838

or this many pounds: 32

AZ Retail Competition and CCE

1) ACC is considering electric choice competition. Docket: RE -00000A-18-0405

2) ACC has hosted 2 workshops (Summer of 2019 and February 2020)
   - CCE has been a topic at both workshops

3) Two draft rules have been offered for consideration; both reference CCE but not meaningfully

Draft A (Olson) – TX retail model; third-party electric suppliers (not the utility) provide customer energy options and all customers are obligated to participate in the open market; usually short term contracts and very little consumer oversight and protection.

Draft B (Burns) – Modified from Option A to include both retail electric suppliers and regulated utilities. Includes a version of CCE whereby customers with monthly demand of at least 100kw could aggregate up to a threshold of 400kw; may be too small to compete and concept isn’t fully built out.

AZ4CC, LEAN and others are hoping the Commission will consider a “Draft C” that focuses on the wholesale CCE model.
ACC’s Possible Next Steps

1. **Adopt Wholesale CCE Model as a Policy Direction**
   - ACC Electric Docket #18-0405; Upcoming election is important!

2. **Commission an Independent Economic and Technical Feasibility Study**
   - Conducted by independent third-party expert/energy firm.
   - Assess feasibility and risk, rate competitiveness, and exit fee method/cost in AZ.
   - Recommendations to the ACC on wholesale market design, fair transmission rules, implications for resource adequacy and reliability.

3. **Open a CCE Rulemaking**
   - Study regulatory and statutory implications of CCE in AZ. Recommend statutory amendments if needed.
   - Presentations by stakeholders, independent experts, regulators from CCE states, and others.
Now is the time to take control of your energy future...

*CCE is the path forward.*

**Thank you!**

Shawn Marshall, Executive Director

[shawnmarshall@leanenergyus.org](mailto:shawnmarshall@leanenergyus.org)
[www.leanenergyus.org](http://www.leanenergyus.org)

Shelly Gordon, Founder
Arizonans for Community Choice
[www.az4cc.org](http://www.az4cc.org)