## **Community Choice Aggregation** A Tool for Municipalities





#### **About The Solar Foundation**

Founded in 1977 and based in Washington, DC, The Solar Foundation is an independent nonprofit working to demonstrate the global benefits of solar energy through research and education.

#### NEW - CCA Fact Sheet:

http://www.thesolarfoundation.org/sites/thesolarfound ation.org/files/TSF\_CCAfactsheet\_Final.pdf





#### **About the SunShot Solar Outreach Partnership**



The SunShot Solar Outreach Partnership (SolarOPs) is a U.S. Department of Energy (DOE) program designed to increase the use and integration of solar energy in communities across the US.



## Individual Consultations

If your community has identified a specific need or barrier to local solar development and is looking for guidance, the Solar Outreach Partnership may be able to provide assistance.

To learn more, email your request to: <u>solar-usa@iclei.org</u>



## Agenda

- Introduction
- What is CCA? Sharon Durling
- What happened in Cincinnati? Scott Stiles
- What about the utilities? Brenda Fargo
- Questions
- Additional resources



#### **Speakers**

Sharon Durling – Program Consultant,

Northern Illinois Municipal Electric Collaborative

Scott Stiles – Assistant City Manager,

The City of Cincinnati

Brenda Fargo – Government Aggregation Manager,
 FirstEnergy Solutions



# Community Choice Aggregation



#### **Sharon Durling**

#### Municipal Aggregation Program Consultant, NIMEC

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## **CCA in Illinois: The Backstory**

1990s: Illinois began deregulation of electric supply to *increase consumer choice* 

- Delivery still by EU (Electric Utility)
- Supply from multiple options
- Illinois Power Agency (IPA) created to contract supply on behalf of accounts that didn't switch to new supplier



## **CCA** in Illinois: Deregulation







#### Residents weren't switching to lower cost suppliers





In 2009, Illinois legislature enables municipalities to "pool together" or aggregate resident and small commercial electric load

Purpose: Help residents save money by switching entire community to lower cost suppliers via "opt-out" program



## **CCA** Process

- Public Hearings
- Voter Referendum
- Plan of Operation and Governance
- Load usage, customer data
- RFQs, RFPs
- Accept bid, select term, negotiate contract
- Notify electric accountholders
- Process opt outs; enroll with new supplier



### **Benefits of CCA**

- Lower cost than through IPA
  - -Price inefficiencies
  - "Wholesale" vs "retail" pricing
- Renewable Energy Certificates (RECs)
  - I. Municipality mandates purchase
  - 2. Individual accounts may "opt-in" to buy



## **NIMEC Results in Illinois**

- Implemented programs for > 95 cities, villages and counties
- Population served > 1,500,000
- Annualized savings: \$175 million
- Household savings: \$150 \$350/yr Percent savings: 40% - 48%
- Significant participation: only 1% to 5% of eligible ratepayers "opted out" of CCA



#### **RECs purchased via CCAs**

30% of municipalities contracted for 100%
5% of municipalities contracted 25% or 50%
65% of municipalities created "opt in" for accountholders to purchase 100%

#### \*Minimum RECs required by Illinois law for all ratepayers: 7%



## **Scott Stiles**

#### Assistant City Manager, City of Cincinnati

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# **City of Cincinnati**

- The City of Cincinnati, located in SW Ohio along the Ohio River, has a population of approximately 300,000 within a tri-state metro population of 2,000,000
- In May 2011, Cincinnati City Council approved a motion for electric aggregation to be placed on the November ballot
- Voters approved the ballot measure in November 2011
- Existing electricity provider was Duke Energy, based in Charlotte, NC
- Approximately 60,000 residential customers were to be potentially affected
- At the time, residents were paying a fixed price of **\$0.0598/kWh**



## **CCA Process**

- In February 2012, an RFP was sent out that requested pricing for both a Conventional Retail Electric Service Produce and a Green Product backed by Renewable Energy Certificates
- In March 2012, the City applied for, and received approval, from the Ohio Public Utilities Commission to enter into a government electric aggregation program
- City Manager convened a 7-member screening committee, comprised of senior City staff and community representatives charged with reviewing proposals and recommending a vendor
- In March 2012, the screening committee received 7 proposals from vendors offering both conventional and green pricing





Est Savings per household		
	24 mo	24 mo 100%
Proposer	Conventional	Green
DPL Energy Resources	\$ 127.68	\$ 110.88
Duke Energy Retail Sales	\$ 31.84	\$ 26.05
Constellation NewEnergy	\$ 143.62	\$ 132.10
First Energy Solutions	\$ 156.30	\$ 133.14
AEP Retail	\$ 85.85	\$ 74.25
Direct Energy	\$ 104.64	\$ (24.96)
Cin Bell Energy	\$ 91.20	\$ 84.48



## Outcome

- In April 2012, City Manager selected First Energy Solutions' 100% renewable electricity green product at \$0.0468/kWh
- Length of term 24 months (June 2012 May 2014)
- FES will retire one renewable energy credit (REC) for each MWh of net electrical sales
- FES will work with the City's Office of Environmental Quality to provide support for various energy efficiency projects
- Saved the average eligible household about \$133/yr. on their electricity bill; a 23% savings compared to the Duke Energy standard service offer
- Believe that Cincinnati became the first major city in the U.S. to go with a 100% green supply of electricity for its residents and small businesses.
- By switching 60,000 accounts to renewable energy, Cincinnati's carbon footprint was reduced by approximately 550,000 tons per year. That's the equivalent of taking 104,000 cars off the road.



## Lessons Learned in Cincinnati

- Stakeholder communication is critical given the complex nature of commodity billing
- Understand the interests of your community
- May need the assistance of outside legal and utility consultants to properly prepare an RFP and to evaluate proposals
- Ensure that the supplier you select can meet the customer service expectations of your community post-aggregation
- Community Choice Aggregation can result in significant savings for residents



#### Brenda Fargo Manager, Governmental Aggregation FirstEnergy Solutions fargob@fes.com 330-315-6898





#### **Aggregation in Ohio**

- Since Ohio's electric restructuring law took effect in 2001, hundreds of counties, cities, villages and townships have passed ballot issues approving governmental aggregation for their communities.
- Ohio's two largest governmental aggregators report that residential and small-business customers in their member communities have collectively saved more than \$100 million through opt-out governmental aggregation programs.
- Governmental aggregation programs have accounted for about 90 percent of all Ohio residential customers and 60 to 70 percent of all commercial customers switching to alternative generation suppliers.



# **Ohio Aggregation Process**

#### **Aggregation Projected Timeline**





#### **CCA** Availability





#### **Aggregation Activities in other States**

- Illinois 150+ communities including Chicago
- California Marin Energy Authority
- Massachusetts Cape Light Compact
- New Jersey Plumsted Township
- Rhode Island REAP Rhode Island Energy Aggregation Program



#### What are Renewable Energy Credits?

- Renewable Energy Credits (or "Renewable Energy Certificates" or "RECs") represent energy generated by renewable means, such as wind, solar, methane, hydro, etc as well as their environmental benefits.
- Each certificate represents proof that one megawatthour of electricity was produced by a renewable energy resource.
- REC's can be traded or sold, and the owner of the REC's can claim to have purchased renewable energy.
- RECs are a way to support and incentivize the development of renewable energy.



#### **Renewable Energy Credit Process**

#### Figure I **Renewable Generation Source RECs Pathway** Electricity and RECs can be, and often are, sold separately renewable generation source 1 REC = 1000 kilowatt-hours (or 1 megawatt-hour) RECs are tracked through contract arrangements, or REC tracking systems Electricity and RECs can be distributed over Certified and verified products diverse geographical ensure that only one buyer can areas of renewable electric generation **RECs** offset greenhouse gas emissions associated with purchased electricity do at the point of use

#### Point of Use

Once your organization makes a claim, your REC cannot be sold. Your organization must retire its RECs to prevent double claims in the future

RECs represent the right to claim the attributes and benefits of the

claim each 1000 kilowatt-hours (REC)

RECs represent the same attributes at the point of generation as they

#### **Electricity Pathway**

Placing renewable electricity on the grid has the impact of reducing the need for fossil fuel-based electricity generation to serve consumer demand

Electrons that make up commodity electricity are physically the same and cannot be tracked independently

> Since all electrons are equal, it is difficult to know what source produced your electricity

RECs help address this challenge



### Cincinnati Program

 Renewable Energy Credits (REC's) to be retired in amounts equal to 100% of the load of the Cincinnati Program

Sources

- University of Cincinnati Methane
- Cincinnati Zoo Solar
- Wind
- Hydro





#### **Supplier Perspective**

- What makes electric aggregation attractive to suppliers?
  - Lower Cost to Acquire Customers
  - Stable, Predictable Load
  - Potential for longer term Contracts



## **Questions?**

- Please enter your questions in the webinar dialog box
- Please include your name and organization if you wish to be identified
- Follow up questions/comments can be sent to <u>awinn@solarfound.org</u>



## **Additional Resources**

- Fact Sheet: Community Choice Aggregation
  - TSF/DOE Solar Outreach Partnership
- <u>The Local Energy Aggregation Network</u>
  - Non-profit focused on promoting new CCAs
- Municipal Electric Aggregation in Massachusetts
  - Massachusetts Department of Energy
- <u>Community Choice Aggregation Pilot Project Guidebook</u>
  - California Energy Commission
- To inquire about individual local government consultations, email your request to

   <u>solar-usa@iclei.org</u>

