## Case Study: Community Solar for Municipal Utilities

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#### **About CFU**

- Municipally owned, serve the City of Cedar Falls, IA (northeast IA)
- Provide electric, natural gas, water, cable TV, high speed data and soon phone services
- About 18,000 electric customers



### **CFU Community Solar Concept**

Develop a community solar project that would:

- Provide for broad customer participation
- Be financially supported by those customers with an interest and willingness to participate financially
- Be local and visible in our community
- Showcase renewable energy



# CFU Community Solar Project



- 1.5 MW fixed tilt installation
  - Online by April 1
- Customers pay upfront fee
  - Receive utility bill credits for 20 years
  - Credits for the energy output from their proportional share of the array
- Currently 96% subscribed



# CFU Community Solar Project



- CFU chose to handle all customer interaction
  - Marketing, customer enrollment, billing
  - Coordinated the location
- Third party (RER Energy)
  - Build and owns system
  - CFU purchases power via power purchase agreement (PPA)



#### **Fundamental Question**

- 1. Why are you interested in community solar?
  - Example 1: Meeting a requirement
  - Example 2: Voluntary project partially or fully funded by participating customers
  - Example 3: price-competitive generation resource needed for supply side reasons



#### **Fundamental Answer**

The project motivations can affect the type of community solar model chosen:

- Do participants pay upfront, or do they pay over time?
- Do you want to use utility staff or turnkey providers to implement the project?
- System size
  - Affects ownership model (PPA versus full purchase or other options)

### **Implementation Components**

- 1. Utility Staff versus third party providers
  - Marketing
  - Customer surveys to gauge interest
  - Customer enrollment and services
  - Billing system modifications
  - Site acquisition/construction
  - Rate design/financial modeling
  - Legal
    - Customer and developer agreements

#### **Community Solar Project Size**

- Municipal utilities cannot take many solar tax credits directly
  - Need to coordinate through a power purchase agreement or other option in order to pursue credits
- Your project size may affect your appetite for pursuing 3<sup>rd</sup> party ownership models/tax credits
  - Third party coordination adds to cost
  - < 500 kW vs 1+ MW</li>



### **Questions?**

