



Simple Solar

Solar Powering Iowa
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March 24, 2016



About CFU

- Municipally owned, serve the City of Cedar Falls and outlying areas
 - About 18,000 electric customers.
- Provide electric, natural gas, water, cable TV, high speed data and phone services
- Take pride in supporting our innovative community through excellent service, while retaining low rates



What is Community Solar to CFU?

- Allow for broad and active customer participation
 - All customer classes
 - Retail and wholesale
- Financially supported by customers with an interest and willingness to participate financially
- Be local and visible in our community



What is Community Solar to CFU?

- Complements generation portfolio
 - 112 MW peak load
 - Late peaking (3 PM – 8 PM)
 - 150 MW of other generation assets
- Showcase renewable energy locally
 - Grid impacts of utility-scale solar
 - Customer interest and experience



Our Concept – CFU Perspective

- CFU RFP for 3rd party solar developer to build, own, and maintain array
 - 3rd party would take ITC; CFU apply for IA PTC
 - CFU buys power via PPA for up to 25 years
- CFU would have the right, but not obligation, to purchase the array once construction tax benefits are exhausted



Our Concept – Customer Perspective

- Subscription model with upfront payment
 - Customer gets rights to energy output for 20 years from their proportional share of the array
 - Chosen for tax credit and fairness considerations
 - \$270 for one “unit”
 - About half of a solar panel
 - No further payments



Our Concept – Customer Perspective

- Customers can pay subscription via utility-bill
 - 12-month or one-time payment options
 - About 10 customers purchased up to 100% of their baseline usage



Our Concept

- Monthly credits appear as separate line item on monthly CFU utility bill
 - Estimated payback by 15 years
- Credit based on CFU's "avoided" costs
 - Value is reset annually
 - CFU is a direct LSE in MISO market and transmission owner (no all reqt's contract)
 - Avoided energy, transmission capacity, and generation capacity costs and adder



Our Concept – Customer Perspective

- Transferable/hassle-free
 - Customers can sell back (if moving), transfer, or donate units to other CFU accounts
 - Several customers donated units to other family members, tenants of rental properties, or non-profit organizations



Technology & Location

- Located within city park
 - Worked with City of Cedar Falls
 - Non-farmland (8 acres)
- Centralized fixed-tilt system chosen
 - Cheaper than rooftop/small DG
 - O&M, logistical, & scalability considerations
- Good learning opportunity for CFU
 - Focus on delivering customer services instead

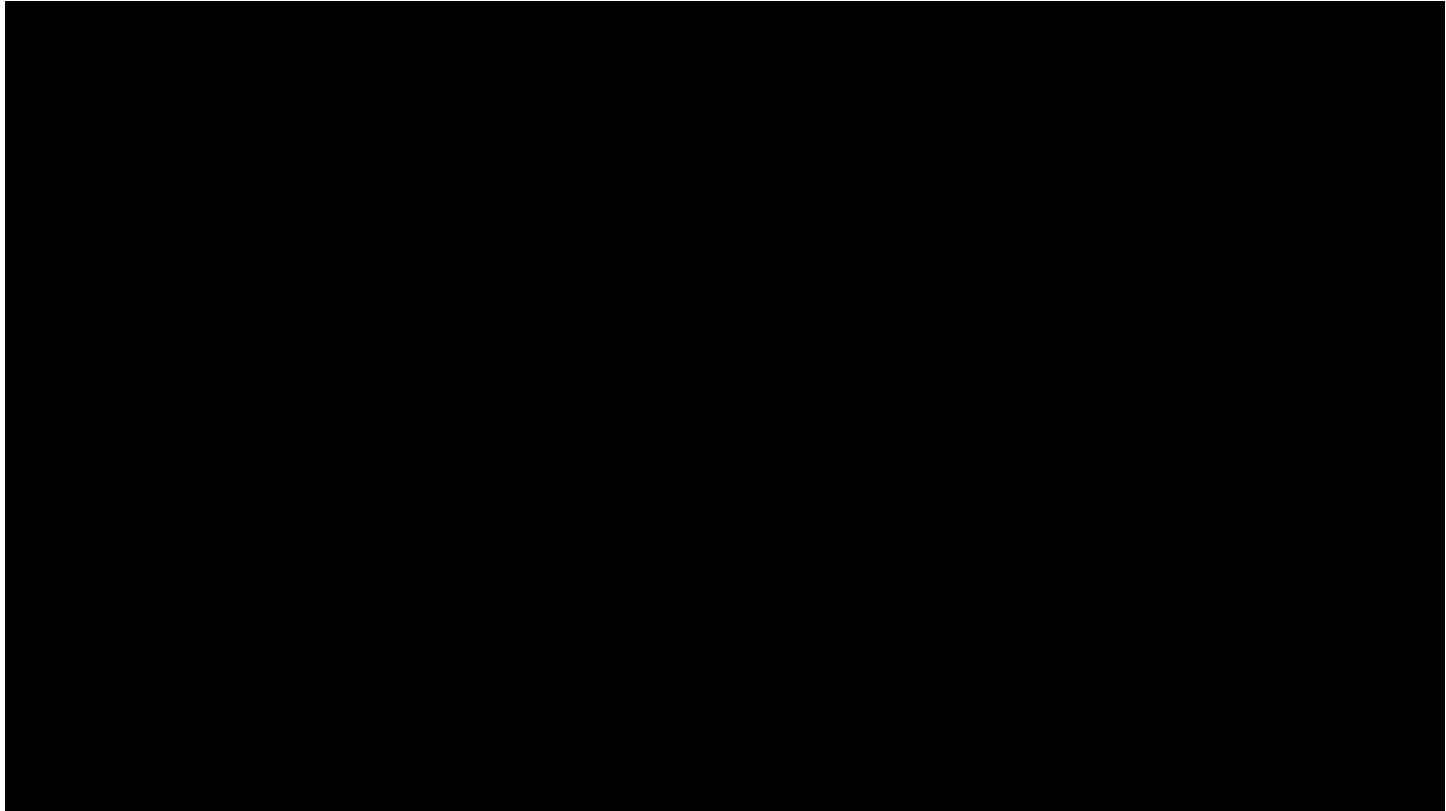


Status to Date

- Fall 2015: selected RER Energy as developer for array construction & ownership
- Largest community solar array in the State of Iowa
- Commercial online in April 2016
- Currently about 100% subscribed (~8700 units purchased)
 - Over 1,200 customers participating
 - ~5% of entire CFU customer base
- Projected to produce roughly 2,700 MWH per year



Now



What Worked?

- Two stages of enrollment
 - Early estimate when array size unknown
 - Final price after RFP price finalized
- Extensive local community marketing
- Implementation ourselves
- Embrace modularity
 - Kept our project simple and centralized
 - Can implement a more “complex” project(s) later



Key Themes

- Define expectations in RFP re: technology type, structure of initial or future ownership, any other financial or utility requirements
- Choose implementation path carefully
 - Marketing, billing systems, customer-facing services – who do you want to do this?
- Tax credits – monitor carefully
- Book even more time and resources for research

