Steve Bernard
Director, Customer Service and Business Development
About CFU

• Municipally owned, serve the City of Cedar Falls and outlying areas.
• Provide electric, natural gas, water, cable TV, high speed data and soon phone services
• Take pride in supporting our innovative community through excellent service, while retaining low rates
Why a Community Solar Project?

• Cedar Falls is fairly progressive and CFU well-respected, so we thought a community-based project would take hold here.

• Solar provides a good balance to wind generation.
Our Objective

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
Our Concept

• CFU would coordinate construction of a large solar array, owned by a 3rd party (tax reasons)

• CFU would buy the energy from the owner through a long-term PPA (25 years)

• CFU would have the right, but not obligation, to purchase the array once construction tax benefits are exhausted

• Customers can participate by purchasing “units” (shares) in the array, which provides a monthly bill credit for 20 years.
Our Concept - Customer Participation

- Make an upfront payment to CFU
- Recover this over time through a monthly bill credit
- Bill credit based on the customers proportional share of the array, and based on the actual monthly production of the array
- Credit based on CFU’s “avoided” cost – CFU essentially replaces market energy with this solar energy purchase
Our Concept-CFU Economics

Long term financial model considering costs and benefits to CFU (our customers)

Costs
- CFU infrastructure (transformer, fencing)
- solar power purchase for up to 25 years
- buyout cost estimate at some future year
- ongoing O&M if we do buy it out

Benefits
- value of the energy & capacity we don’t buy off the market
- value of renewable energy credits
- customer contributions
Our Concept - CFU Economics

• Our objective is to make this a financial break even – so the costs and benefits are equal over time.

• The variable is the upfront customer contribution. We varied this in the model until the net present value = 0

• Thus in theory non-participating customers are not impacted.
Our Steps

Winter 2014/2015
• Identify the site
• Determine the structure of the deal for both the CFU energy purchase and customer deal
• Develop RFP and receive proposals from prospective solar developers

Spring 2015
• Began customer “pre-enrollment” campaign based on initial projected price of $399 per Unit. Each Unit represents 170 watts AC nameplate capacity.
Pre-enrollment campaign

Direct mail to every customer
Meetings with businesses
Multiple open houses
Press release and press invitation to open house, resulted in excellent coverage
TV advertising
Website and CFU newsletter articles
Social media
Service clubs
Farmer’s Market
UNI events
Direct Mail

We Want to Bring Simple Solar to Cedar Falls
Will You Join Us?
Solar power age dawns in C.F.

The project, expected to be up and running this fall, is called Simple Solar, according to Howard Bernard, director of customer service.

"We're calling it Simple Solar because we want to make it simple for people interested in solar energy to get access to it," Bernard said.

Instead of pitching it as a source of potential subscribers, the first of what CFU officials hope will be many during a two-month push to gauge interest for the project. "Our ability to do this is entirely dependent on customers who are interested," Bernard said.

According to Bernard, the city is allowing CFU to build an array of up to 200 panels at the site of the former Apple Valley Middle School, generating between 90 and 110 watts per panel.

The application deadline for subscribers is Friday, July 10.
Pre-enrollment campaign

The customer deal:
• $399 upfront per Unit (can pay over 12 months)
• Monthly bill credit for 20 years
• If customers move off CFU system or otherwise no longer pay a CFU electric bill, ability to transfer Units or sell them back to CFU
• Emphasized this isn’t a quick financial payback for customers. No guarantees.

Would we get enough interest? To build a 500 kW array, we’d need commitments for ~ 3000 Units.
Pre-enrollment campaign
Pre-enrollment campaign

• UNI helped tremendously by signing on to roughly 20% of the array’s capacity
• Customer pre-enrollments were excellent – 1300 households and businesses
• So – away we go!
Our Steps

Summer 2015

• We entered into negotiations with the preferred bidder

• Challenging, due to financing complexities, our quality requirements, and the relative immaturity of the solar market

• Based on customer interest, we negotiated for construction of the largest size for the 8 acre site, roughly 1500 kW AC (over 8,000 Units)
Our Steps

Fall 2015

• We finalized our customer agreement format, providing this to pre-enrolled customers, and are now accepting the “official” enrollment agreements from customers.

• Many of the customers are choosing to buy more Units, largely due to the price decrease from $399 to $270
Our Steps

Winter 2015/2016
• Formal customer enrollment continues and we get our billing system modifications made
• Construction is underway, with commercial operation date of April 1, 2016!

When complete
• Largest community solar array in the State of Iowa
• Will produce roughly 2,700 MWH per year