Delaware Sustainable Energy Utility
Minutes of the Meeting of the Energy Programs Committee
109 S. State Street, Dover, DE 19901
April 16, 2015 at 9:00 AM

Welcome

Executive Director Tony DePrima called the meeting to order at 9:00 am. Present were Trey Paradee, Robert Underwood (sitting in for Secretary Small), Ismat Shah (telephone), Pamela Bakerian (telephone), Tony DePrima, Charles Wagner (telephone), Pam Frank, Gabel Associates, John White, ICF.

Mr. DePrima gave a short summary of the items on the agenda and mentioned he would like to advance both current agenda items to the Board.

1. Solar Resiliency Pilot Program (SRPP) - (Gabel & Associates) – Program Design – Mr. DePrima, indicated that he is looking for an affirmative to go forward with the Solar Resiliency Pilot Program. This program will introduce Delaware to solar energy with battery backup. The desire is to open the pilot program to emergency management facilities and school districts that often serve as emergency shelters or for first responders to have power. Mr. DePrima mentioned he entered into an agreement with Gabel & Associates to design a program and find interested parties in Delaware and take interested parties and combine them into an RFP to a solar developer who would develop the project.

Of the fifteen (15) applications received from schools, fire and police stations, six (6) were screened then selected for the SRPP totaling just over 4,100kw with an additional four totaling over 3,000kw that have also been qualified as suitable for solar. Mr. DePrima mentioned they were advised that this is a pilot program and there were no guarantees; that the program has various steps that could cause the program not to go forward.

Mr. DePrima introduced Pamela Frank of Gabel & Associates who gave an overview of the SRPP. The selected participants were screened thorough a site visit and determined to be technically sufficient by solar engineers and most will have solar carport canopies.

Mrs. Frank revealed that PJM a regional grid operator, now has a market available that incense batteries. It is in the frequency regulation market the rebate level support does not include money towards buy-down of batteries. The financial model of the Federal Investment Tax Credit, which can take on a battery for a new solar system; plus revenue from a frequency regulation market established by PJM and interested vendor financing can make the pilot program possible.

Mr. DePrima mentioned the municipalities who are regulated through legislation and cannot sell third party electric. The only municipality is Dover which has different options available to them.

Ms. Frank stated that the third party solar owner would contract directly to Dover and sell back directly to Dover. The end user would have a lease payment with the third party. If the parties start dropping out, the 4Mw could become 2Mw. Assistance will be needed to make this attractive to the third party vendors. The RFP process would be structured without a fixed amount. The DESEU would not have to pay more than what they need to, to make the project viable. The development community would compete for the level of subsidy they need. It is a blended rate and we will benefit from the scale. Ground arrays which average $2.50 a watt, carports are more expensive and will be roughly $3.50 a watt.

Responding to Mr. Paradee, Ms. Frank described the carports and Mr. DePrima mentioned that Del Tech has a carport just off Martin Luther King Blvd. in Wilmington.

Responding to Dr. Shah, Ms. Frank clarified that the $3.5M includes everything and it is an estimate. The numbers will come from the vendor community. Carport and large ground arrays cause the pricing to vary. The aesthetic design was estimated out at a higher level and is subject to change.

Ms. Frank mentioned that costs assumptions are influenced by types of applications. A target 15% IRR which assumes the combination of debt and equity which is how you make you money back from a solar system. Of the cost, 30% for the solar system comes back as a Federal Investment Tax Credit (FITC). In order to capture the FITC of 30% it must be in service by the end of December 2016. The FITC will move from 30% to 10% on January 1, 2017 unless Congress makes a change.

A vendor constructs the system and the owner or host site has no out of pocket upfront investment until after the first month of metered energy production. Their bill will be determined by the number of kW hours used during the first month which should be lower than their utility or third party supplier.

Responding to Mr. Paradee, Ms. Frank stated that the rate would not vary; a power purchase agreement covers 10-20 years. The DESEU should go with twenty year payment schedule agreements which will lower the numbers; vendors and host sites like the predictability. Going solar in this type of arrangement provides predictable electric costs the life of the agreement. The table in the memo shows what the check or support from DESEU would be over 15 years at 15%.

Modeling Results:
System Size 4146.81 kw - Assumed cost to install: $3.50/watt - Target IRR (levered): 15% - PPA Term: 15years

Savings on electricity	Support Required	Increase above $0.45/watt*
10%	$2,700,000	$ 834,000
15%	$2,850,000	$ 984,000
20%	$2,950,000	$1,084,000

(*The current offer from DESEU for 20 years of SRECs from Delaware solar projects less than 50 kw for the existing Upfront SREC Purchase.)

Mr. DePrima reminded the group that the table in the memo has $0.45 a watt which the Board has already approved for upfront purchase of SREC's. If we were going to buy SREC's for this project this level of support is higher than we are already using based on SREC auction prices. All are slightly over what we are paying now.

Ms. Frank mentioned, that they projects have battery back up support, so no fossil fuel is needed for a generator.

Mr. DePrima mentioned what happened after hurricane Sandy when no fossil fuel could be found for generators in New Jersey. A lot of the gas lines were shut off. Solar with battery backup provides power during such weather events.

Ms. Frank mentioned that over $14.5 million investment including the cost of the batteries, add the private and PJM rate payers offer towards Delaware resiliency. Potential support models of SREC purchase, buy downs/rebates, performance based Incentives and low cost capital.

Responding to Ms. Bakerian, Ms. Frank stated that the power purchase agreement document includes is a schedule every year what the charge will be. The inflation factor would be built into the RFP and be capped to whatever we agree too.

Dr. Wagner expressed concerns about back up power and emergency power and the need to separate back up and solar in conjunction with solar power.

Ms. Frank mentioned, facilities can have traditional back up power for solar and battery. The reason for solar with battery backup being pared is to capture the FITC a significant benefit which helps pay for a fuel free resiliency feature at an institution.

Ms. Frank indicated the next step would give all site participants an MOU which would require them to move forward in good faith if we can give them 10% on their electricity. We want a commitment from the participating parties and then get the RFP's out then come back to the board in late May for approval and level of incentive that would be required. One vendor would do all the projects.

Mr. DePrima mentioned the cost of the RFP project would be total $50,000. Ms. Frank indicated that Gabel's fee would be added to the developers cost.

Dr. Wagner motioned to authorize the Executive Director to move forward with a RFP for the Solar Resiliency Pilot Program, seconded by Dr. Shah and unanimously carried.

2. Assisted Home Performance with Energy Star (HPwES) (ICF) – Program Design

Mr. DePrima opened the discussion saying this came out of the mod to low income study to save energy. The group realized the rebates of the current program are not affordable to lower income to participate. The State's weatherization program helps people up to 200% of the poverty level. We would serve those 200 to 300% of poverty level for family income and increase rebate levels to 75% of the costs.

There are added costs to the HPwES would need to market this program, tracking and income qualify participants. ICF prepared a proposal that would amend the current contract to pay for added administrative costs and marketing.

Mr. DePrima introduced John White of ICFI who gave an overview of the proposed additions.

Mr. DePrima indicated that the administration cost would be $125,000 then projecting $314,800 for the incentives. Serving this population, this would be the most cost effective way for us to go by using same vendor and existing program.

Dr. Wagner motioned to move forward with ICF's program plan contract amendment, seconded by Ms. Bakerian and unanimously carried.

3. Old Business – None

Meeting Adjourned.