

Delaware Sustainable Energy Utility  
Minutes of the Meeting of the Energy Programs Subcommittee  
109 S. State Street, Dover, DE 19901  
June 18, 2014 at 2:00 P.M.

Welcome

Executive Director Tony DePrima called the meeting to order a 2:00 P.M. Present were Mr. Underwood (sitting in for Secretary O'Mara), Dr. Charles Wagner (telephone), Dr. Shah, Mr. DePrima, and Ms. Gardner.

**1. Solar/Geo Thermal – Incentive Program** – Mr. DePrima introduced Ms. Kim Willson and Mr. Robin Dutta, both from Skyline Innovations. Mr. DePrima explained the this program was introduced to the Oversight Board on May 15, 2014 as a commercial solar thermal; the board unanimously motioned to have the Executive Director develop a pilot program, with a focus on agriculture that is \$1M or less and forward to the Energy Programs Committee with recommendations on how to operate and administer the program.

Mr. DePrima explained that with the help of Mr. Underwood and his staff, it became evident that DE already has a program in place to provide subsidies for Solar Thermal programs; however, the rebates are capped at non-residential programs at \$10,000, which makes it very difficult for larger non-residential and institutional programs to participate. Secondly, the subsidies that exist are limited to only parts of Delaware. For the solar thermal heating market to take hold in Delaware, these two barriers must be removed.

It is recommended that the cap be set at \$200,000 and the rebates remain the same, although the Division is re-evaluating the rate and the SEU should allow the Division to make the final determination. The SEU would fund all rebates associated with commercial and non-profit applications on a state wide basis. The residential program would continue to be funded through the Green Energy Fund. When a grant for a non-residential or non-profit system is approved the SEU would be notified and rebates would be paid directly to Grantee. Rebates are paid after completion of the project. Certain quality control requirements will be put in place such as limiting projects to 80% of the thermal load, and requiring professional engineers to prepare energy savings calculations.

Secretary O'Mara expressed a concern of the lack of enrollment in the Geo Thermal Program, again, mainly due to a low cap. Therefore, in addition to funding solar thermal heating systems, we are proposing that we also fund geothermal heating systems. Large geothermal systems have the same barriers as do the solar thermal systems, the cap of \$30,000 is too low for large systems, and the incentives are not available throughout Delaware. We recommend that the cap for geothermal systems also be increased to \$200,000. The rebates would remain the same at \$800\ton for the first 2 tons and \$700/ton for over 2 tons for non-residential systems, and \$1000\ton for the first 2 tons and \$800/ton for over 2 tons for non-profit systems.

The proposed solution is to have the DESEU fund a program that is statewide and allows rebates with caps that are appropriately sized for large solar heating systems using the form and format of the existing program and lift the cap. This can be done with a minimal amount of administrative cost by partnering with the Delaware of Energy and Climate (the Division) to use the Green Grant administrative platform to launch the program.

Regarding program administration, the Division would not charge the SEU for administrating the program, but instead, the SEU would cover the expense of developing and maintaining a web site where all Green Energy Grant Applications would be processed. This would be integrated into the web site that

is being developed for the SEU's Joint Green Energy Program by InClima who maintains the SREC Delaware site. Last year the SEU Board authorized \$1.5 million for the Joint Green Energy Program where the SEU will be buying SREC's over the next two years. The total cost would be \$5000 per month. Approximately 50% can be attributed expanding the site to include the state portion of the grant program including Solar Thermal. It is recommended that \$1,000,000 be budgeted for this program. It is believed that this arrangement would go a long way toward integrating programs under one web portal and making the whole Green Energy Grant process more efficient.

Responding to Dr. Shah, Mr. Underwood and Mr. DePrima agreed that funds (5%) be set aside for measurement and verification. Additionally, reports would be provided to the board as to the funding status of the grants.

Mr. Shah motioned that the Solar/Geo Thermal Incentive Program be forwarded to the Oversight Board as presented, seconded by Mr. Underwood, and unanimously carried.

**2. DEMEC LED Street Light Conversion Program** – Mr. DePrima stated that Delaware Electric Municipal Electric Corporation (DEMEC) applied for and received a 0% interest USDA funding that would be available for some but not all of their municipalities. DEMEC received the official announcement in a letter from the USDA. This is the first USDA Rural Development Loan Award ever in the State of Delaware; however, the USDA loan has some limitations; the Cities of Newark and New Castle are not eligible for funding because they are in a region not considered rural by the USDA. Also the USDA loan is limited to covering 80% of a project's cost. DEMEC would like the SEU to provide 100% financing for the Cities of Newark and New Castle and 20% minimum financing for the Cities and Towns of Middletown, Smyrna, Clayton, Dover, Milford, Seaford, and Lewes. DEMEC estimates that the Cities of Newark and New Castle alone represent over 50% of the total anticipated project cost. DEMEC estimates the amount of loan financing needed from the SEU to be in the range of \$600,000 to just over \$1,000,000. Mr. DePrima explained that this is a unique project due to its breath in Delaware and its assistance to municipal governments and their citizens. For the USDA Loan DEMEC needs a non-binding Letter of Intent.

Dr. Wagner motioned to authorize the Executive Director to sign a Letter of Intent, setting aside \$1,000,000 in financing with a tentative interest rate of 1.99%, seconded by Dr. Shah and unanimously carried.

**3. Net Zero Energy Mobile Home Opportunities for Low-Moderate Families Study & Analysis** – Mr. DePrima explained that the Vermont Energy Investment Corporation (VEIC) is very similar to the DESEU, however they have been established for over 20 years and have been branching out beyond Vermont in providing services. The VEIC operates the Washington D.C. Sustainable Energy Utility. They have developed a project, Zero Net Energy (ZNE) Manufactured Homes to reduce housing energy demands for low and moderate income families in Delaware. VEIC is interested in expanding and has requested that the DESEU fund a pilot program.

Phase 1 of the pilot program would consist of hiring them to conduct Market Analysis in Delaware to determine the market size for the opportunity and any barriers that may exist in the marketplace. The tasks included in this phase are: review of the existing housing stock to determine quantity of homes and average energy usage; review of housing population income ranges to determine cost benefits of this type of home; review of the ownership structures for manufactured homes to identify how to change the housing stock; and finally stakeholder engagement with the DE SEU, State Energy Office, Weatherization

Assistance Providers, Low Income Advocates, Manufactured Home Associations and locally manufactured home providers and/or manufacturers. The budget estimate for this work is \$25,000 to \$30,000 and would require approximately 6 weeks to complete.

Phase 2 would consist of Pilot Design. If the analysis in Phase 1 indicates that there is a significant market and there are no major barriers; VEIC will begin Phase 2 which will focus on the supply chain, economic model and the development of a pilot program. The tasks in this phase would include: continued stakeholder engagement to move forward with this concept; investigation of outside funding sources that may be available to fund a pilot project; revision of open source manufactured home plans developed in Vermont to be the most cost effective for Delaware's climate; identification of a manufactured home supplier to build pilot homes; cost/benefit analysis for manufactured home owners; investigation of financing and ownership models; and a documented design for a pilot program. The design would include determination of the pilot size and location, incentive structure, financing structure, an estimate of the budget required to implement the pilot and an EM&V plan to verify the cost effectiveness of the pilot. The budget estimate for this work is \$150,000 to \$170,000 and would require 4 – 6 months to complete. The cost of Phase II would be further negotiated pending completion of Phase I.

Both Mr. DePrima and Mr. Underwood feel this program could greatly benefit the low to moderate income population in Delaware.

Dr. Wagner motioned to authorize \$200,000 be budgeted for this pilot program and to move forward with Phase 1 (\$30,000) of the program, with an emphasis preferably of Delaware based manufacturers, with the understanding that this item be brought back to the Board prior to beginning Phase 2 (\$170,000). The motion was seconded by Dr. Shah and unanimously carried.

## **7. Adjourn**

Meeting adjourned at 2:45 PM.