

Delaware Sustainable Energy Utility  
Minutes of the Meeting of the Energy Programs Committee  
109 S. State Street, Dover, DE 19901  
October 24, 2014 at 10:00 AM

Welcome

Mr. Robert Underwood, Program Administrator – Energy Program Division of Energy & Climate called the meeting to order at 10:00 A.M. Present were Dr. Ismat Shah, Dr. Charles Wagner (telephone), Ms. Pamela Bakerian (telephone), Secretary Dave Small (telephone), Representative Dennis Williams (telephone), Senator Harris B. McDowell, III (telephone), Mr. Tony DePrima, Ms. Joanne Bachmann, VEIC (telephone), Ms. Alison Hollingsworth, VEIC (telephone), Ms. Elizabeth Chant, VEIC (telephone), Ms. Lisa Gardner.

**1. Vermont Energy Investment Corporation (VEIC) – Phase I** – On June 18, 2014 the Energy Programs Committee unanimously motioned to move forward with Phase I for the VEIC pilot program which consisted of performing a 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 were as follows: 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.

Ms. Hollingsworth presented the *Market Analysis for Zero Net Energy Manufactured Home Replacements in Delaware* which was distributed to members of the committee prior to the meeting.

As a result of Phase I, conclusions and recommendations were as follows:

- There is a need for more energy-efficient, resilient, and affordable housing in Delaware.
- The barriers to effecting change in manufactured home financing in the short term create a positive impetus to look at modular housing, sited on owned land or land leased with secure long-term tenure.
- Such modular housing, built and sited to Zero Net Energy (ZNE) Manufactured Home (MH) standards, can reduce the net present value of housing and energy costs over a 30-year life by more than 25 percent, compared to manufactured homes built to the HUD standard.
- When compared to a new manufactured home built to HUD standards, the ZNE MH provides positive cash flow of nearly \$300 per month, starting in the first year, and continuing throughout a full 30-year life.
- There is sufficient market to create a ZNE MH pilot program and sufficient market in the long-term to justify the costs of a pilot program.
- The market of a pilot program would involve new purchases of homes on owned land or on land that is deeded by land trusts for very long-term tenures.
- The role that land trusts can play in transforming manufactured home parks to zero net energy communities can be catalytic; the type to change that could draw new sources of funds to the table.
- The economic development role of being able to use a Delaware-based company for production adds to the overall value of a project like this to the State of Delaware and its residents.

Phase 2 would consist of Pilot Design, 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.

After much discussion involving the typical life span of a ZNE MH versus typical life span of PV, Delaware based production companies, vacation homes and retirees, and Solar Shade Analysis, due to time constraints; it was the consensus of the members to reconvene the discussion.

Mr. Underwood motioned to reconvene for further discussion. The motion was seconded by Ms. Bakerian and unanimously carried.

Meeting adjourned at 11:15 AM.