

Brattleboro Thermal Utility, Inc.

September 26, 2007; rev. 9/29/07; rev. 10/4/07; rev. 4/9/08

Originally submitted by the O&F Committee¹ for consideration by all active “BDE” members

Accepted unanimously with one abstaining by the larger “BDE group,” October 3, 2007

Modified to reflect registration of Brattleboro Thermal Utility, Inc., April 9, 2008

Resolution

Subject (The Brattleboro Thermal Utility, or “BTU,” Project)

Creation of a community energy system for the town of Brattleboro generating both electricity and thermal energy, using biomass as a fuel, for the benefit of multiple stakeholders and the town as a whole.

Drivers

The Ownership & Financing (O&F) Committee has continually referred back to the challenges that have been driving this project since its beginning in early 2007:

- Rising heating fuel and electricity costs;
- Volatile and unpredictable energy prices and supplies;
- Long-term concerns about global energy scarcity and its political implications;
- The need for more investment, jobs, and prosperity in the local economy, including jobs in the local and regional sustainable production of biofuels;
- The need to retain and circulate cash generated in the local economy, and enjoy its multiplier effects, instead of exporting it to purchase expensive energy from distant sources;
- The need to move to less polluting, carbon-neutral modes of energy generation;
- The opportunity to benefit from ancillary projects that could be colocated or affiliated with a district energy system.

Success Criteria

Based on the above drivers, the BTU project will have achieved its purpose when the following criteria have been satisfied:

1. Brattleboro has a good supply of low-cost thermal energy for heating and cooling.
2. Brattleboro has the ability to generate electrical power, which can be sold to the grid but also act as a backup supply of electrical power in scarcity situations.
3. Brattleboro has lower dependency on outside thermal and electric energy sources than it does currently.
4. Brattleboro develops energy generation capabilities that support local businesses and jobs, utilize local skills and capabilities to their maximum feasible extent, and lead to their further development.

¹ During the time this resolution was developed, the O&F Committee has effectively consisted of B. Barton, M. Bosworth, J. & J. Davidson, R. Foley, H. Freeman, B. Gardner, E. Gould, R. Meima, A. Wilson.

5. Brattleboro, through its energy generation capabilities, makes itself a more attractive community for outside businesses to relocate to.

6. Brattleboro develops energy generation capabilities that reduce the environmental impact of energy production, particularly in relation to greenhouse gases.

Goal

Emerging from this discussion of challenges, drivers, and success criteria, the following goal is expressed for Brattleboro:

The goal of BTU is to create a district energy system using a modern biomass-fueled combined heat and power (CHP) plant to deliver (A) thermal energy via a buried, insulated hot/cold-water pipe network to businesses, municipal and school buildings, homes, and other consumers, and (B) electric energy directly into the shared grid.²

General Ownership and Financing Considerations

This is a long-term, relatively risky project to serve the common good. The owning entity must be able to tolerate its risks over a long period of time with stable, consistent management, and raise sufficient capital appropriate for its risk profile. Serving the common good must be central to the entity's mission. It should be possible to disaggregate certain parts of the project with lower risk, and seek investor/operators for those parts that can partner with the owning entity.

Resolution

The Ownership and Financing Committee of the Brattleboro Thermal Utility, Inc. resolves to pursue the original goal as expressed above, and grow Brattleboro's district energy system from a single core network largely serving municipal and commercial customers until it eventually serves most of the private residences in the densely settled sections of Brattleboro.

The O&F Committee notes that this is now an established, mature technology in many parts of the developed world, although it is not well-known in the US, where development has lagged.

Key steps to be taken as the Committee pursues this vision include:

1. securing the auspices of legitimate, influential entities whose purpose includes the common good;
2. formation of a non-profit public benefit corporation for project management purposes;
3. naming of board members;
4. determination of bylaws and policies;
5. obtaining seed funding;
6. appointment of an experienced professional project manager;
7. completion and review of a feasibility study;

² It is noted that this technology has become very common in Northern Europe over the past several decades. In Sweden, for example, about 50% of all indoor spaces and 75% of all apartments are heated by district heating, and the Swedish District Heating Association estimates that, at current oil price levels, it would be profitable for as much as 75% of total indoor heating to be provided by district heating systems.

8. establishment of a Brattleboro energy district with the support of the State Legislature;
9. contracting with a plant investor/operator that can take the lead in plant design, permitting, construction, and operation;
10. obtaining public capital infrastructure financing;
11. contracting with the entities that can design and build the thermal distribution network;
12. active participation in the creation of a sustainable and bondable biomass fuel delivery system in this region;
13. commercial provision of heating and cooling services to customers, and electricity to the grid.

The O&F Committee resolves to facilitate and, as needed, coordinate the process described above until the non-profit corporation, its board, and its project manager can assume responsibility for this. All other committees and individuals associated with the BDE Project are invited to play an active part in this.

Board Of Directors

(This section added April 9, 2008 subsequent to the formal registration of BTU, Inc. as a non-profit Vermont corporation.)

Chair: Ralph Meima, MBA Program Director, Marlboro College Graduate Center

Vice-Chair: Paul Cameron, Director, Brattleboro Climate Protection

Treasurer & Chair, Ownership & Financing Committee: Michael Bosworth, President, West Brattleboro Association

Secretary: Alex Wilson, President & Founder, Building Green, Inc.

Chair, Project Oversight Committee: Prof. Rick Foley, Keene State University

Chair, Stakeholder Relations/Research Committee: Bruce Gardner, Brattleboro Development Credit Corporation

Members at large:

Eli Gould, Owner, Ironwood Brand, Inc.

Walter Schwartz

Tom Simon, Allard Lumber Co.

Legal Counsel (ex officio):

Stephen Phillips, Esq., Kristensen, Cummings, Phillips & Carroll