Lunenburg Green Communities Committee on Energy Efficiency Conservation Block Grant Program

Briefing to the Selectmen

August 4th 2009

American Recovery and Reinvestment Act Stimulus Funding

- Energy Efficiency Conservation Block Grant Program
  - Competitive municipal grants for towns <35,000 (12.2M for 309 towns) (Capped at $150,00)
    - Solar PV
    - Other Clean Energy Technologies
    - Performance Contract buy-down
  - Competitive Technical Assistance Grants
    - Owners agents for Energy Reduction plans and Performance Contracts

Solar (Photo Voltaic)

- Candidate buildings
  - Public Safety Building
  - Turkey Hill Middle School
- Eligibility
  - Shovel Ready
  - Jobs Created
  - Greenhouse Gas Reduction
  - Funds Leveraged

Turkey Hill MS

- Site survey on July 10th
- Annual Electricity Cost $55K
- Current cost per KWH is $.205
- THMS usage varied 7,440 KWH in August and 33,360 KWH in April. (Annual Usage 270,240KW)
- Supports up to 404 panels (123KW)
- Expect to use Power Purchasing Agreement (PPA) (6 year Flip model)

THMS System Costs

- 196 Panels 210 Watt Panels Total 50,783 KWH
- System Costs $253,150
  - Less Mass Tech Collaborative Rebate ($133,404) $119,746
  - 6 year flip investment $119,746 (EECB Grant)
  - 1st Year Estimated Savings in Electricity $10,573
  - 3d Party owns the system and take Federal Tax Credits and federal and state depreciation
  - In year 6 we own the system with warranty transfer of inverter (10 year) and panels (25 years)

Public Safety Building

- Annual Electricity Cost $56K
- Usage consistently around 30,000 KWH per month.
- Supports up to 280 panels (85KW)
- Expect to use Power Purchasing Agreement (PPA) (6 year Flip model)

Public Safety Bldg Costs

- 156 Panels 210 Watt Panels Total 40,419 KWH
- System Costs $201,490
  - Less Mass Tech Collaborative Rebate ($106,944) $94,546
  - 6 year flip investment $88,452 (EECB Grant)
  - 1st Year Estimated Savings in Electricity $8,415
  - 3d Party owns the system and take Federal Tax Credits and federal and state depreciation
  - In year 6 we own the system with warranty transfer of inverter (10 year) and panels (25 years)

Energy Saving Reinvestment

- MGL 25A Section 11I Contracts for Energy management : Guaranteed energy savings contracts as a vehicle to fund a larger system (leverage the energy savings)
- First 4 years all energy saving to go to third party financier to pay for a larger system ($29,560).
- 175 panels 210 watts 45,342 KWH
- System Costs $226,029
  - Less Mass Tech Collaborative Rebate ($119,513) $106,516
  - 6 year flip investment $99,225
  - 1st Year Estimated Savings in Electricity $10,573
- Solar Domestic Hot Water system for Public Safety Building

Technical Assistance

- Performance Contract Owners agent ($10,000)
  - Passios ES (40K+)
  - Lunenburg High School (70K+)
  - Brooks House (5K+)
  - Ritter Admin Building (10K+)
  - Town Hall (10K+)
  - DPW Building (10K+)
    - Potential for a $150K + project in energy saving measures

Next Steps

- Request decision to submit a proposed project for the Public Safety Building/Turkey Hill MS in the Energy Efficiency Conservation Block Grant Program with $150K grant and 6 year flip PPA.
  - Turkey Hill Middle School – 78 KW
  - Public Safety Bldg- 32.7 KW
- Prepare grant application for submission in September.
- Prepare Procurement documents for RFQ for a PPA
- Prepare procurement documents for RFQ for a owner's rep for a Performance Contract