



Net Metering- Warrant Article 36

A Budget Saving Strategy

Annual Town Meeting
14 May 2012



Background

- Since October 2011, the Town of Ayer Green Communities Committee (GCC) conducted research into recommendations to the BoS for an approach to provide net-metering credits for the Town of Ayer Constellation/National Grid Electricity Accounts in order to:
 - reduce taxpayer expenses for the Town of Ayer's municipal electricity bills
 - and leverage time-limited Federal and State incentives for municipalities to partner with private solar energy partners
- Seeking your support for Warrant Article 36 that will allow BOS to enter into 20 year Net Metering contract, if in the best interest of the town.



Desired Outcomes

■ Cost

- Achieve cost benefits/savings through Net-Metering for 1-2 Mw equivalent of Town's Electricity Requirements

■ Schedule

- Enter into Net-Metering agreement in time to leverage State & Federal incentives
- Target Fall 2012 for receipt of Net-metering credits/savings

■ Performance

- Achieve maximum savings with minimal liability to Town
- Apply credits across all 39 Constellation/National Grid metered Town users
- Ability to provide Net-Metering credits by Fall 2012



GCC Investigations

- Options to leverage Federal and State Incentives
 - Net metering
 - Solar installation on town property
- Data investigation: Determine Town's energy requirements and usage
- Examine net metering opportunities
 - Conducted market research thru interviews with 3 solar installers
 - Interviewed other MA towns' officials who have conducted similar research or entered into agreements



Data Investigations

- Current cost of electricity to town
 - \$0.131/kwh to Constellation
 - \$0.040 to \$0.065/kwh to National Grid
 - Total of 17.1 to 19.6 cents per kwh
- 39 accounts with 2 billers each-Town will transition to single bill with National Grid
- Current yearly usage for town
 - 2.83MW

What is Net Metering?

- Net metering was established to make it easier for renewable energy facilities to sell their power
- How it works:
 - As facilities feed power back into the grid it generates “credits” those credits are allocated to other meters
 - Credits amount to the total value of: i) cost of power; and ii) certain utility fees (distribution charges, transmission charges and transition charges)
 - Power is at 1990’s lows of ~\$0.06-7 kWh
 - Utility fees increase each year and amount to ~\$0.07 kWh

About Net Meter Credits



1) Facility electric produces net meter credits



nationalgrid
www.nationalgrid.com

SERVICE FOR
DEBRA HERMAN

BILLING PERIOD
Mar 26, 2009 to Apr 27, 2009

ACCOUNT NUMBER
[REDACTED]

PLEASE PAY BY
Jun 5, 2009

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AMOUNT DUE
\$ 0.03

CUSTOMER SERVICE
1-800-322-3223

CREDIT DEPARTMENT
1-888-211-1313

POWER OUTAGE OR DOWNED LINE
1-800-465-1212

EMAIL BILLING INQUIRES
customerservice@us.ngrid.com

ADDRESS
PO Box 990
Northborough, MA 01532-0990

DATE BILL ISSUED
May 12, 2009

ACCOUNT BALANCE

Previous Balance	63.95
Payment Received on APR 2 (ACH)	THANK YOU - 63.95
Current Charges	+ 0.03
Amount Due Now ▶	\$ 0.03

➤ **PLANTING A TREE? PLANNING OUTDOOR PROJECTS?:** Prevent personal injury, property damage and service interruptions caused by accidentally digging into electric, gas, telephone, water, sewer or cable facilities. **Call 811 before you dig!**

DETAIL OF CURRENT CHARGES

Delivery Services

Service Period	No. of days	Current Reading	Previous Reading	Total Usage
Mar 26 - Apr 27	32	1572 Actual	1746 Actual	-174 kWh

METER NUMBER [REDACTED] NEXT SCHEDULED READ DATE May 26

RATE Residential Regular R-1

Customer Charge	6.30
Net Metering Credit	0.03802187 x -174 kWh -6.27
Total Delivery Services	\$ 0.03

2) Credits generated are sent to another bill via a "Schedule Z" filed with National Grid

Comparison of Municipal Owned Solar and Net Metering

■ Municipal Owned Solar Installation

□ Advantages

- Potential for greater income versus savings
- Energy independence and security

□ Risks

- Permitting timeline just delays cost savings attainable NOW without any guarantees that a permit will be approved
- Missed opportunity to take advantage of the 2% of peak power savings for solar projects linked to public activities
- Adapting a solar array design to Ayer's municipal spaces /land fill may be costly due to unknown soil conditions, potential environmental impacts and protecting the integrity of the landfill cap
- Risks associated with potential contractor not completing the project based on difficulties with financing

Comparison of Municipal Owned Solar and Net Metering - Continued

■ Net Metering

□ Advantages

- Net metering is obtained from already permitted or constructed projects
- Savings can begin in first billing cycle
- No risk to community from unknown impacts to landfill or environment
- No maintenance issues
- Only acquire and contract for the amount of savings appropriate to the town's energy conservation plan/way ahead
- No out of pocket expenses

□ Risks

- Predicting energy use in 20 years and contracting to purchase that amount.



Seeking Support for Art. 36

ARTICLE 36. AUTHORITY TO THE BOARD OF SELECTMEN TO ENTER INTO AND NEGOTIATE ENERGY POWER PURCHASE AND/OR NET METERING CREDIT PURCHASE AGREEMENTS.

To see if the Town will vote, pursuant to G.L. c.164, §134(a), to authorize the Board of Selectmen to initiate the process to aggregate the electric load of interested electricity consumers within the Town of Ayer and enter into agreements for services to facilitate the sale and purchase of electric energy and other related services, **for terms of more than three years, on such terms conditions as the Board of Selectmen deem in the best interest of the Town**; and to authorize the Board of Selectmen to take all actions necessary to administer and implement such agreements; or take any action thereon or in relation thereto.

Sponsor: Green Communities Committee Simple Majority Vote Required
Finance Committee: Will Report at Town Meeting



Summary

- Time-limited opportunity for MA municipalities to partner with Solar Energy Providers to obtain net-metering credits and achieve energy cost savings
- Market research indicates that responsible and reliable providers are available now
- Unanimously supported by FIN COM and endorsed by Energy Committee
- Please Support Town Warrant Article 36