

## Webster/Yerrick Photovoltaic System Group Net Metering Overview, 5/25/2015

On August 6<sup>th</sup>, 2009, the 12.25 kW DC photovoltaic (PV) system on our barn roof began operation and began feeding power to the CVPS (now GMP) grid. On July 30, 2010, the five AllSun Trackers (totaling 20.1 kW DC) in our field began producing power as well. Because we use quite a bit less electricity than these systems produce, we filed paperwork with the Vermont Public Service Board to become a “group” eligible for “group net metering.”

Simply put, “net metering” means that the utility (GMP in our case) deducts any electricity a customer **produces** from the electricity that customer **uses** and the customer pays the difference. I.e., the kWh usage portion of a customer’s electricity bill is reduced by the amount of electricity the customer produces. (Note: The customer still pays the other portions of the bill, such as the monthly service charge and the energy efficiency charge, though these charges may be offset by any excess kWh credits.) The customer can “carry over” credits for any excess kWh’s produced over and above the kWh’s used for up to a year and apply those credits to future bills.

“Group Net Metering” is very similar, but instead of simply deducting the electricity produced from one customer’s electricity usage, several customers may combine their bills and the total electricity produced is deducted from the total of the electricity used by all the customers in the “group.”

### Some Details about Group Net Metering:

- Any customers in GMP’s service area may choose to form a group.
- The group representative (in this case, Steve Webster) notifies GMP who are members of the group and provides GMP with a list of their electricity meter numbers.
- Each month, GMP reads all the meters and sends the members’ invoices to the group’s representative. (At the moment, this requires that the members change their GMP billing mailing address to that of the group representative. **Note:** Members may always view their invoices online on GMP’s web site.)
- The electricity produced by the PV system is deducted from the total amount of electricity used by all members, and the representative pays the difference, as well as the additional charges such as monthly service charges and energy efficiency charges. These other charges may be offset by any excess kWh credits.
- As with simple net metering, any excess kWh’s produced each month may be carried over and applied to bills in future months for up to one year.
- Each month, each member of the group pays the system operators for the kWh’s they’ve used, the monthly service charge, and any other charges such as the power cost adjustment and the energy efficiency charge that they would pay if they were not members of the group.
- Similar to GMP’s “cow power” program, the group members **may** choose to pay a little more than the current retail rate for electricity in order to help cover the cost of the PV system. At the moment, the current retail rate for electricity is \$0.14741/kWh. Some group members are currently paying \$0.15500/kWh and some are paying \$0.16500/kWh.
- For all members, their price is fixed and will not change until at least 2020. I.e., if the price of electricity increases, the members will continue to pay the same price for their electricity, even if it is less than the current retail price for electricity

- At the end of 2020, we may need to adjust the rates. The PV system operators will notify all group members at least 2 months before the rate change and any members may choose to withdraw from the group at that time.

### **Some Operational Details of our Group:**

- **The Short Version:**
  - All members will deposit funds in an interest-bearing escrow account so that the PV system operators will always have enough money to pay the bills.
  - Each month the PV system operators will pay all the group members' bills.
  - Each month the PV system operators will generate an invoice for each group member detailing his/her electricity usage and charges. (See Appendix A)
  - Each month all members will deposit funds in the group's operating bank account instead of paying GMP.
  - All members will have access to spreadsheets that detail the accounting and will receive statements of how much of their electricity usage was provided by the PV system.
- **Escrow Account:** To join the group, each member will contribute an amount of money equal to 1.5 times their highest monthly electricity bill from the past year and the PV system operators will deposit this in an interest-bearing escrow account.
  - The purpose of this escrow account is to ensure that the PV system operators will always have enough money on hand to pay the group's electricity bills.
  - This money will be held in an interest-bearing escrow account separate from the operating account, and any interest earned will be prorated based on the amount each group member has contributed.
  - At the moment, the interest rate is so low that each member earns only a few cents each month on their funds in escrow. Therefore, the interest is accumulated in the account and will be paid to the members if and when they leave the group. Should the interest rates increase significantly, the group may decide to apply the escrow interest to current bills, probably once a year.
  - Should a member's monthly bill exceed the amount that is in the escrow account, the PV system operators may request that an additional deposit be made.
- **Monthly Bill Payment:** Each month the PV system operators will send each group member an invoice for his/her monthly electricity usage and other charges. (See Appendix A) Each member will deposit funds in the group's operating bank account to cover his/her bill. Ideally, this deposit will be done electronically.
  - Optionally, a group member may deposit enough money to cover multiple months' bills if s/he finds that more convenient. Any extra deposits will remain the property of the member and may be withdrawn at any time by requesting to do so to the PV system operators.
  - The PV system operators will be the only people who can withdraw money from the account, and can only do so for the purpose of paying the group's electricity bills or to return any advance payments to group members, if they so request.
  - The PV system operators agree to pay all bills on time. Should the PV system operators ever pay any bills late for unforeseen and unavoidable reasons, the operators will pay any late fees or penalties.

- **Late Payment of Bills by Group Members:**
  - Should a group member not pay his or her monthly electricity bill on time, the PV system operators will be authorized to withdraw the amount of the bill from that member's share of the escrow account.
    - If this occurs, the PV system operators **may** notify GMP that the member is no longer a member of the group and should in the future be billed for his or her electricity directly by GMP.
    - The group member is liable for bills paid by the PV system operators through the date that GMP changes the billing address back to the group member's address.
    - If this occurs, the PV system operators will return to the member any remaining share of the member's escrow funds, after all bills have been paid, including prorated interest to date.
- **Return of Funds:**
  - An arrangement will be made with the bank and/or the PV system operators' lawyer and/or the PV system operators' trustee to return any money in the operating and escrow bank accounts to the members should the PV system operators both die.
  - Copies of paperwork documenting this arrangement will be made available to each group member.
  - The PV system operators will return any funds in the accounts to the member(s) should the operators sell their property, should the PV system stop producing electricity, should the group disband, should a member decide to withdraw from the group, or should a member be removed from the group by the operators.
- **Leaving the Group:**
  - Members may choose to withdraw from the group at any time with two months advance notice.
    - To do so, they would notify the PV system operators in writing and the PV system operators would notify GMP that they should remove the member from the group at the end of the current or the following billing cycle.
    - The PV system operators will return any remaining funds deposited by the member, with accrued interest, as soon as the last bill for that member has been paid.
  - If for some reason the PV system operators need to reduce the number of members in the group (e.g., the PV system does not produce enough electricity to supply all the group members), the operators will give any affected members at least two months advance notice.
    - The operators will notify GMP that the member(s) is/are no longer members of the group, and GMP will return to billing the member(s) directly.
    - The PV system operators will return any remaining funds deposited by the member, with accrued interest, as soon as the last bill for that member has been paid.

- **Accounting Records:**
  - The PV system operators will maintain a spreadsheet for each of the bank accounts that all group members can view online.
  - These spreadsheets will document all deposits, withdrawals, and interest earned and will display each member's share of the funds on deposit.
- **Group Membership Options:**
  - **Base Level:** Members will pay the monthly service charges, power cost adjustments, energy efficiency charges, and any other standard GMP charges—the same charges that they would have paid to GMP if they were not members of the group. Members will also pay \$0.14741 per kWh used. The price per kWh will be fixed and will not increase until at least 2020.
  - **Premium Levels:**
    - In addition to the standard monthly charges, members may optionally choose to pay an extra charge per kWh to help the system operators build up a fund to cover system expenses.
    - **Premium Level 1:** A member may opt to pay an additional  $\frac{3}{4}$  cent (approximately) per kWh of electricity—i.e., \$0.155 per kWh.
    - **Premium Level 2:** A member may opt to pay an additional  $1\frac{3}{4}$  cents (approximately) per kWh of electricity—i.e., \$0.165 per kWh.
    - **Premium Level 3:** A member may opt to pay an additional  $2\frac{3}{4}$  cents (approximately) per kWh of electricity—i.e., \$0.175 per kWh.
  - The PV system operators will attempt to sign up enough members such that total annual electricity usage by all the members will be slightly higher than total annual PV electricity production. (FYI, if the total annual PV electricity produced exceeds the total annual electricity consumed, the excess production MAY be retained by GMP.) The objective will be to ensure that all group members get all or at least the vast majority of their electricity from the PV system.
  - All group members will be given an “I get my electricity from the sun” bumper sticker, if they request one.
- **PV System Operators' Agreement:** Each group member will be issued a signed copy of the following agreement:
  - The PV system operators (Steve Webster and Barbara Yerrick) hereby agree to:
    - Behave in accordance with all the procedures listed in the **Webster/Yerrick Photovoltaic System Group Net Metering Overview, 5/25/2015.**
    - Specifically, the PV systems operators agree to:
      - Pay all group electricity bills in full and on time.
      - Maintain accurate accounting records accessible to all group members online.
      - Use all funds in the operating and escrow accounts only for the purposes described in the **Webster/Yerrick Photovoltaic System Group Net Metering Overview, 5/25/2015.**
      - Return a group member's share of any funds in the accounts at the request of the member, after all the member's prior and current bills have been paid.



## Appendix A: Sample Member Monthly Invoice

**Member Name****4/10/2015**

kWh Used	167
PV kWh	167
PV Contribution	100%

Billing Period: 3/12/2015 to 4/10/2015

# Days 29

Service Charge Rate/Day \$0.43000

**Service Charge \$12.47**

kWh Rate \$0.16500

**kWh Charge \$27.56****Electric Assistance Program Fee \$1.50**

Power Cost Adjustment Rate/kWh \$0.00000

**Power Cost Adjustment \$0.00**

Energy Efficiency Rate/kWh \$0.01173

**Energy Efficiency Charge \$1.96****Vermont Yankee Revenue Sharing \$0.00****Current Bill \$43.49**