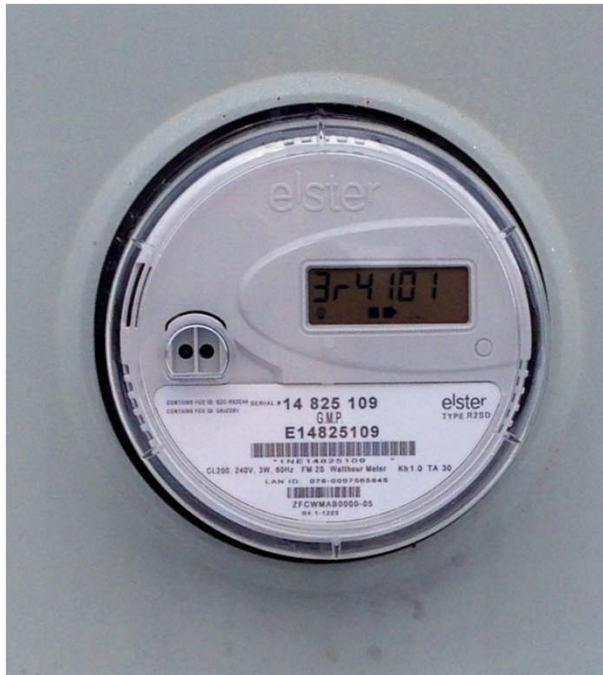


# Net Metering



Net metering systems permit a customer to own and operate a generator, usually on the customer side of the meter.

The amount of electricity generated by the customer offsets the amount of generation for which a customer is billed and the customer receives credit for any excess generation.

Net metering systems are a form of distributed generation.

# Original Statute: 1998 No. 136

## Sec. 1: Legislative Findings

The general assembly finds that net metering of small systems for self-generation of electricity is in the public interest in order to:

- (1) Encourage private investment in renewable energy resources;
- (2) Stimulate the economic growth of this state; and
- (3) Enhance the continued diversification of the energy resources used in this state.

# Original Statute: 1998 No. 136

- ▶ Net metering systems must be renewable and use PV, wind, or fuel cell, or must use anaerobic digestion of waste produced substantially on the farm
- ▶ On-bill kWh credit for excess generation that reverts to utility each January 1
- ▶ Cap for individual system: 15 kW
- ▶ Cap for farm system: 100 kW
- ▶ PSB may simplify Sec. 248 process and waive criteria that are “not applicable”
- ▶ Cumulative capacity cap of 1.0 percent of utility’s 1996 peak demand

# Amendments

Seven times since 1998:

- ▶ 2000 No. 157, Sec. 17
- ▶ 2002 No. 145, Sec. 5
- ▶ 2006 No. 208, Sec. 12
- ▶ 2008 No. 92, Sec. 14
- ▶ 2010 No. 159, Sec. 1
- ▶ 2011 No. 47, Sec. 1
- ▶ 2012 No. 125, Secs. 1, 3, 4, 5

# Topic 1: System Capacity

- ▶ 2000: Farm systems increase to 125 kW; PSB may allow up to five individual systems per year  $> 15$  but  $\leq 100$  kW
- ▶ 2002: Farm systems to 150 kW; up to 10 individual systems yearly  $> 15$  but  $\leq 100$  kW
- ▶ 2006: PSB “shall expand the scope of the net metering program” and is to consider expanding the cap for individual systems
- ▶ 2008: Sets cap at 250 kW for individual, farm, and group systems; adds CHP systems using non-renewable fuels up to 20 kW
- ▶ 2011: Sets cap at 500 kW, except non-renewable CHP

## Topic 2: Cumulative Capacity

- ▶ 2002: Cumulative capacity cap to be 1.0 percent of utility's peak demand in 1996 or most recent calendar year, whichever is greater
- ▶ 2006: PSB “may raise” the 1.0 percent cumulative capacity cap
- ▶ 2008: Cumulative cap moved to 2.0 percent
- ▶ 2011: Cumulative cap moved to 4.0 percent

# Topic 3: Farm and Group Systems

- ▶ 2000: Farm system must be on a farm and use agricultural waste products from farming
- ▶ 2002: Allows farm system to offset multiple meters; includes specifics on billing and crediting for multiple meter farm systems and information farm system must provide utility
- ▶ 2008: Adds group net metering systems to farm system provisions; group system must be located on property of a group member and members must be on the same utility
- ▶ 2011: Converts farm systems to group systems; direct billing of system members

## Topic 4: Credits for Excess Generation

- ▶ 2002: kWh credits for farm systems to remain on bill for 12 months before reverting to utility
- ▶ 2006: kWh credits for individual systems to remain on bill for 12 months before reversion
- ▶ 2011: Converts kWh credits to monetary credits, applicable to all charges on the bill
- ▶ 2012: States how credits for customers using nonstandard meters are to be calculated; when calculating credits, use highest block rate if the rate schedule has inclining block rates



# Topic 5: Solar Net Metering Systems

- ▶ 2011: Adds registration process for solar systems of 5 kW or less; CPG is deemed issued if no objection within 10 days
- ▶ 2011: Establishes “solar adder,” in effect crediting excess generation from solar systems at 20 cents/kWh
- ▶ 2012: Expands capacity of solar systems eligible for registration process to 10 kW

# Other Topics

- ▶ 2006: Net metering system may employ any renewable resource as defined under the renewable energy chapter
- ▶ 2010: Adds a facility for the generation of electricity consumed primarily by the Military Dept.; allows capacity of this system to be  $\leq$  2.2 MW; system does not count toward cumulative capacity cap

# Net Metering 1998 v. 2013

Year	System Capacity	Cumulative Capacity	Farm and Group Systems	Bill Credits	Solar
1998	<ul style="list-style-type: none"> <li>• 15 kW individual</li> <li>• 100 kW farm</li> </ul>	1.0 % of utility's 1996 peak demand	On farm that is source of waste	kWh credits that revert each Jan 1	Same process and credits
2013	<ul style="list-style-type: none"> <li>• 500 kW individual or group</li> <li>• 20 kW non-renewable CHP</li> <li>• 2.2 MW military dept.</li> </ul>	4.0 % of utility's peak demand in 1996 or most recent year, whichever higher	<ul style="list-style-type: none"> <li>• Group replaces farm</li> <li>• Multiple meters</li> <li>• Same utility</li> <li>• System on a member's premises</li> <li>• Direct billing</li> </ul>	<ul style="list-style-type: none"> <li>• Monetized credits</li> <li>• Apply to whole bill</li> <li>• Revert after one year</li> <li>• Highest block of inclining block rates</li> </ul>	Registration for solar $\leq 10$ kW  Solar adder

# Net Metering Deployment “Snapshot” through 2013

- Total capacity since 1999: approximately 39.3 MW (submitted applications)
- 1045 applications in 2013, for about 14.3 MW
- 763 applications in 2012, for about 9.1 MW

Data on this page from Vt. Dept. of Public Service

Utility/Statewide	Percent Peak
Barton	0.00
BED	3.2
Enosburg	0.98
GMP	3.75
Hardwick	4.96
Jacksonville	0.58
Johnson	0.00
Lyndonville	0.18
Ludlow	0.00
Morrisville	5.9
Northfield	1.12
Orleans	0.00
Readsboro	0.00
Stowe	1.28
Swanton	0.14
VEC	4.06
WEC	8.41
<i>Statewide</i>	<i>3.62</i>