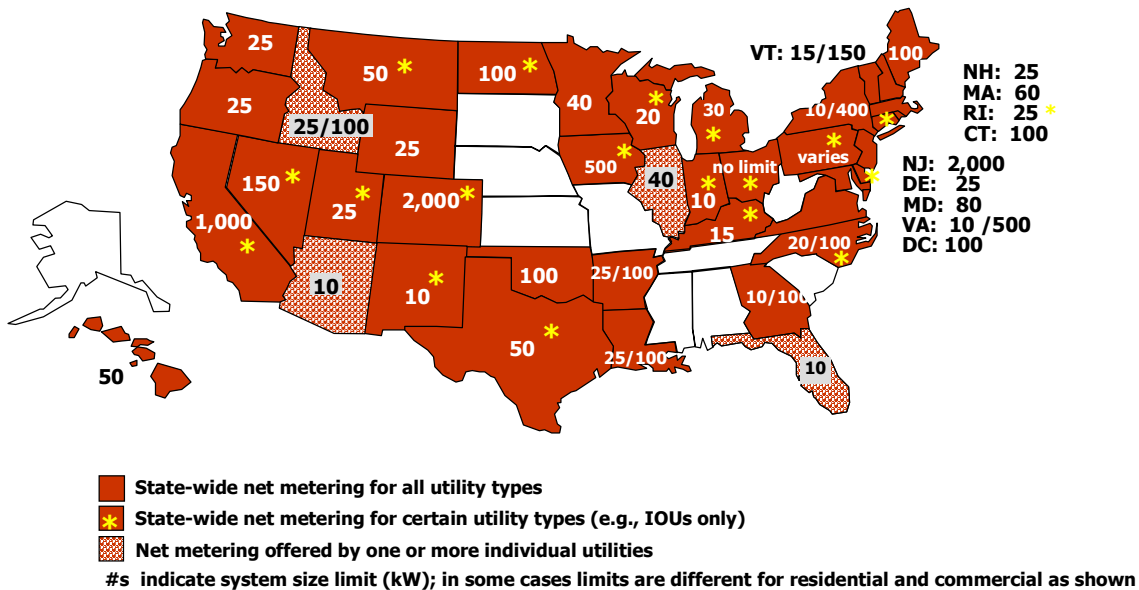


3.4 – States with Net Metering Policies

Net metering allows customers with generating facilities to turn their electric meters backward when their systems are producing energy in excess of their on-site demand. In this way, net metering enables customers to use their own generation to offset their consumption over a billing period. This offset means that customers receive retail prices for the excess electricity they generate. Without net metering, a second meter is usually installed to measure the electricity that flows back to the provider, with the provider purchasing the power at a rate much lower than the retail rate.

Most states have some type of net metering policy (**Figure 3.4.1**). Of the states that do have net metering policies (**Table 3.4.1**) the policies vary significantly in terms of the maximum amount of capacity a consumer is permitted to net meter varies from 10 kW to 2,000 kW. Some states only require certain types of utilities to offer net metering, exempting others.



Source: DSIRE database, January 2006
<http://www.dsireusa.org/library/includes/topic.cfm?TopicCategoryID=6&CurrentPageID=10>

Figure 3.4.1: Net Metering Policies by State

Table 3.4.1: Summary of State Net Metering Policies

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
Arizona – Salt River Project	10 kW / Residential	Photovoltaics	None	Purchased monthly by utility at average monthly market price minus a price adjustment of \$0.00017/kWh	(Utility guidelines)	Salt River Project
Arizona – Tucson Electric Power	10 kW / Commercial, Residential	Photovoltaics, Wind	500 kW peak aggregate	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	(Utility guidelines)	Tucson Electric Power
Arkansas	25 kW for residential systems; 100 kW for commercial systems	Solar, Wind, Biomass, Hydro, Geothermal, Fuel Cells, Microturbines	None	Granted to utility monthly	Yes	All utilities
California	1 MW (three biogas digesters up to 10 MW per unit may net meter) / Commercial, Industrial, Residential	Photovoltaics, Landfill Gas, Wind, Anaerobic Digestion, Fuel Cells	0.5% of a utility's peak demand (separate limit of 50 MW for SDG&E)	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	All utilities ¹
Colorado	2 MW / Commercial, Industrial, Residential	Solar, Landfill Gas, Wind, Biomass, Anaerobic Digestion, Small Hydro, Fuel Cells (Renewable Fuels)	None	Credited at retail rate to customer's next bill; at end of each calendar year, customer reimbursed for NEG at utility's average hourly incremental cost for the prior 12-month period	Yes	Colorado utilities serving 40,000 or more customers
Colorado – Fort Collins Utilities	10 kW / Residential	Photovoltaics, Wind	25 customers	Credited at retail rate to customer's next bill; granted to utility at end of	Yes	Fort Collins Utilities

¹ In California, all utilities – with the exception of Los Angeles Department of Water & Power (LADWP) -- must offer net metering to customers with PV and wind-energy systems. (LADWP offers net metering voluntarily.) In addition, investor-owned utilities must offer net metering to customers with fuel cells and biomass-energy systems.

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
				12-month billing cycle		
Colorado – Gunnison County Electric	10 kW / Commercial, Residential	Photovoltaics, Wind	50 customers	Purchased by utility at wholesale rate	Yes	Gunnison County Electric
Colorado – Holy Cross Energy	None / Commercial, Industrial, Residential	Photovoltaics, Wind, Biomass, Hydro, Geothermal	25 kW	Credited at retail rate to customer's next bill; purchased by utility at wholesale rate at end of 12-month billing cycle	Yes	Holy Cross Energy
Connecticut	100 kW for renewables; 50 kW for fossil fuels / Residential, Commercial	Solar, Landfill Gas, Wind, Biomass, Fuel Cells, Municipal Solid Waste, Small Hydro, Tidal Energy, Wave Energy, Ocean Thermal	None	Purchased by utility at spot-market energy rate	Yes	Investor-owned utilities only
Delaware	25 kW / Commercial, Residential	Solar, Wind, Biomass, Hydro, Geothermal	None	Varies by utility	Yes	All utilities (applies to municipal utilities if they opt to compete outside their limits)
District of Columbia	100 kW / Commercial, Industrial, Residential	Renewables (unspecified), Fuel Cells, Microturbines, CHP	None	Credited at retail rate to customer's next bill	Yes (under development)	All utilities
Florida – JEA	10 kW / Residential	Photovoltaics, Wind	None	Credited at retail rate to customer's next bill	(Utility guidelines)	JEA
Florida – New Smyrna Beach Utilities	10 kW / Commercial, Industrial, Residential	Photovoltaics	None	Credited at retail rate to customer's next bill	(Utility guidelines)	New Smyrna Beach Utilities
Georgia	100 kW for commercial systems; 10 kW for residential systems;	Photovoltaics, Wind, Fuel Cells	0.2% of a utility's annual peak demand	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing	Yes	All utilities

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
				cycle		
Hawaii	50 kW / Commercial, Residential, Government	Photovoltaics, Wind, Biomass, Hydro	0.5% of a utility's annual peak demand	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	All utilities
Idaho – Idaho Power	100 kW for large commercial and agricultural; 25 kW for residential and small commercial	Photovoltaics, Wind, Biomass, Hydro, Fuel Cells	2.9 MW (0.1% of utility's 2000 peak demand)	Purchased monthly by utility at retail rate for residential and small commercial customers; purchased at 85% of Dow Jones index price for non-firm energy for large commercial and agricultural customers	(Utility guidelines)	Idaho Power
Idaho – Utah Power & Light	100 kW for large commercial and irrigation; 25 kW for residential and small commercial	Solar, Wind, Biomass, Hydro	714 kW (0.1% of utility's Idaho retail peak demand in 2002)	Purchased monthly by utility at retail rate for residential and small commercial customers; purchased at 85% of Dow Jones index price for non-firm energy for large commercial and agricultural customers	(Utility guidelines)	Utah Power & Light
Idaho – Avista Utilities	25 kW / Commercial, Residential, Agricultural	Solar, Wind, Biomass, Hydro, Fuel Cells	1.52 MW (0.1% of utility's 1996 peak demand)	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	(Utility guidelines)	Avista Utilities
Illinois – ComEd Wind and PV Generation Program	40 kW / All retail customers	Photovoltaics, Wind	0.1% of utility's annual peak demand	Purchased monthly by utility at avoided-cost rate; customer receives an annual incentive payment for production	(Utility guidelines)	ComEd

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
Indiana	10 kW / Residential, Schools	Photovoltaics, Wind, Small Hydro	0.1% of a utility's most recent peak summer load	Credited at retail rate to customer's next bill	Yes	Investor-owned utilities
Iowa	500 kW / Commercial, Industrial, Residential	Photovoltaics, Wind, Biomass, Hydro, Municipal Solid Waste	None	Credited at retail rate to customer's next bill	No	Investor-owned utilities
Kentucky	15 kW Commercial, Residential, Nonprofit, Schools, Agricultural, Institutional, Government	Photovoltaics	0.1% of a utility's single-hour peak load during the previous year	Credit at retail rate to customer's next bill (no expiration)	Yes	Investor-owned utilities, cooperatives
Louisiana	100 kW for commercial and agricultural systems; 25 kW for residential systems	Photovoltaics, Wind, Biomass, Hydro, Geothermal, Fuel Cells (Renewable Fuels), Microturbines	None	Credited at retail rate to customer's next bill indefinitely	Yes	All utilities
Maine	100 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Fuel Cells, Municipal Solid Waste, CHP, Tidal Energy	None	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	No	All utilities
Maryland	200 kW (500 kW with MD PSC permission) / Commercial, Residential, Schools, Government	Photovoltaics, Wind, Biomass	34.7 MW (0.2% of state's adjusted peak load in 1998)	To be determined by MD Public Service Commission	Yes	All utilities
Massachusetts	60 kW / Commercial, Industrial, Residential	Renewables, CHP, Fuel Cells	None	Credited at average monthly market rate to customer's next bill	Yes	All utilities
Michigan	30 kW / Commercial, Industrial, Residential, Nonprofit, Schools,	Solar, Wind, Biomass, Hydro, Geothermal, Municipal Solid Waste	0.1% of a utility's peak load or 100 kW (whichever is greater)	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing	Yes	Various utilities (voluntary participation)

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
	Government, Agricultural, Institutional			cycle		
Minnesota	40 kW / Commercial, Industrial, Residential	Photovoltaics, Wind, Biomass, Hydro, Municipal Solid Waste, CHP	None	Purchased at average retail utility energy rate	Yes	All utilities
Montana	50 kW / Commercial, Industrial, Residential	Photovoltaics, Wind, Hydro	None	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	Investor-owned utilities
Montana – Montana Electric Cooperatives	10 kW / Commercial, Residential	Photovoltaics, Wind, Geothermal, Fuel Cells, Small Hydro	None	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	Most of MEC's 26 member cooperatives
Nevada	150 kW ² / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal	1% of a utility's peak capacity	Credited at retail rate to customer's next bill; no expiration ³	Yes	Investor-owned utilities
New Hampshire	25 kW / Commercial, Industrial, Residential	Photovoltaics, Wind, Hydro	0.05% of a utility's peak demand	Credited at retail rate to customer's next bill	Yes	All utilities
New Jersey	2 MW / Commercial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Fuel Cells (Renewable Fuels), Tidal Energy, Wave Energy	None	Credited at retail rate to customer's next bill; purchased by utility at avoided-cost rate at end of 12-month billing cycle	Yes	All utilities
New Mexico	10 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Fuel Cells, Municipal Solid Waste,	None	Credited to customer's next bill or purchased by utility at avoided-cost rate	Yes	Investor-owned utilities, cooperatives

² In Nevada, utilities are permitted to require customers with systems of more than 30 kW in capacity to install a second meter at the customer's expense.

³ In Nevada, it is unclear how NEG is treated for systems of more than 30 kW in capacity.

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
		CHP, Microturbines				
New York	400 kW for farm waste; 125 kW for farm-based wind; 25 kW for residential wind; 10 kW for solar	Photovoltaics, Biomass, Wind	Solar: 0.1% of a utility's demand in 1996; farm biogas: 0.4% of a utility's demand in 1996; wind: 0.2% of a utility's 2003 demand	Credited to customer's next bill – except NEG from wind systems over 10 kW, which is credited to customer's next bill at the utility's avoided-cost rate. All NEG purchased by utility at avoided-cost rate at end of 12-month billing cycle.	Yes	All utilities
North Carolina	20 kW residential; 100 kW non-residential	Photovoltaics, Wind, Biomass	0.2% of a utility's North Carolina retail peak load for the previous year	Credited at retail rate to customer's next monthly bill; granted to utility every June 1 and October 1	Yes	Investor-owned utilities
North Dakota	100 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Municipal Solid Waste, CHP	None	Purchased by utility at avoided-cost rate	No	Investor-owned utilities
Ohio	100 kW for microturbines; no limit for other systems / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Fuel Cells, Microturbines	1% of a utility's peak demand	Credited at utility's unbundled-generation rate to customer's next monthly bill	Yes	All competitive utilities
Ohio – Bowling Green Municipal Utilities	25 kW / Commercial, Residential	Photovoltaics, Wind, Hydro, Fuel Cells	None	Negotiated with utility	(Utility guidelines)	Bowling Green Municipal Utilities
Oklahoma	100 kW or 25,000 kWh/year (whichever is less) / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Municipal Solid Waste, CHP	None	Granted to utility monthly or credited to customer's next bill at utility's avoided-cost rate (varies by utility)	No	All utilities
Oregon	25 kW / Commercial,	Solar, Wind, Hydro, Fuel	0.5% of a utility's	Credited at retail rate to	Yes	All utilities

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
	Industrial, Residential	Cells	historic single-hour peak load	customer's next bill or purchased by utility at avoided-cost rate		
Oregon – Ashland Electric	None / Commercial, Residential	Photovoltaics, Wind	None	Purchased by utility monthly at retail rate (1,000 kWh/month maximum)	(Utility guidelines)	Ashland Electric
Pennsylvania (new rules under development)	Varies by utility / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro	Varies by utility	Varies by utility (granted to utility in most cases)	Varies by utility	All utilities
Rhode Island	25 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Fuel Cells, Municipal Solid Waste, CHP	1 MW (Narragansett territory)	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	No	Narragansett Electric
Texas	50 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Fuel Cells, Tidal Energy, Wave Energy, Microturbines	None	Purchased by utility monthly at avoided-cost rate	Yes	Most non-municipal utilities and non-cooperatives
Texas – San Antonio City Public Service	25 kW / Commercial, Residential	Photovoltaics, Wind, Biomass, Hydro, Geothermal, Tidal Energy, Wave Energy	None	Credited at retail rate to customer's next bill at utility's seasonal avoided-cost rate	(Utility guidelines)	San Antonio City Public Service
Texas – Austin Energy	20 kW / Commercial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Municipal Solid Waste	1% of utility's load	Credited to customer's next bill	(Utility guidelines)	Austin Energy
Utah	25 kW / Commercial, Industrial, Residential	Solar, Wind, Hydro, Fuel Cells	0.1% of a utility's 2001 peak demand	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	Investor-owned utilities, cooperatives
Vermont	150 kW for farm systems; 15 kW for	Photovoltaics, Wind, Biomass, Fuel	1% of a utility's 1996 peak demand	Credited at retail rate to customer's next	Yes	All utilities

Program	System Size Limit/ Customer Classes Eligible	Eligible Technologies	Limit on Total Capacity	Treatment of Net Excess Generation (NEG)	Interconnection Standards for Net Metering	Utilities Involved
	commercial and residential / Commercial, Residential, Agricultural	Cells	or peak demand during most recent calendar year (whichever is less)	bill; granted to utility at end of 12-month billing cycle		
Virginia	500 kW for non-residential; 10 kW for residential / Commercial, Residential, Nonprofit, Schools, Government, Institutional	Solar, Wind, Hydro	0.1% of a utility's annual peak demand	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	All utilities
Washington	25 kW / Commercial, Industrial, Residential	Solar, Wind, Hydro, Fuel Cells	0.1% of a utility's 1996 peak load	Credited at retail rate to customer's next bill; granted to utility at end of 12-month billing cycle	Yes	All utilities
Washington – Grays Harbor PUD	25 kW / Commercial, Industrial, Residential	Solar, Wind, Hydro, Fuel Cells	0.1% of utility's 1996 peak load	Purchased by utility annually at 50% of retail rate	Yes	Grays Harbor PUD
Wisconsin	20 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro, Geothermal, Municipal Solid Waste, CHP	None	Purchased by utility at retail rate (renewables) or avoided-cost rate (non-renewables)	Yes	Investor-owned utilities
Wyoming	25 kW / Commercial, Industrial, Residential	Solar, Wind, Biomass, Hydro	None	Credited at retail rate to customer's next bill; purchased by utility at avoided-cost rate at end of 12-month billing cycle	Yes	All utilities

Sources: The Interstate Renewable Energy Council (IREC) and the N.C. Solar Center (NCSC). "Connecting to the Grid" Project Web site, <http://www.irecusa.org/connect>; Database of State Incentives for Renewable Energy (DSIRE), <http://www.dsireusa.org>, March 2006. Additional information, including most legislative and regulatory source citations, is available via DSIRE.