Aggregate Net Metering: Opportunities for Local Governments

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Abstract

Aggregate Net Metering is the practice of allowing one or more customers to combine their electrical meters for the purpose of net metering. Because local governments typically have many electric accounts and meters, aggregate net metering is one of the most relevant aspects of solar policy to local government solar projects. As with basic net metering regulations, state laws surrounding aggregate net metering vary widely, and can unfortunately limit a local government's ability to take advantage of such an arrangement. This report summarizes the variations in state laws that determine whether or not meter aggregation is an option for local governments, explores the unique opportunities that it can extend to public-sector PV projects, and describes the important details that must be considered when promoting or pursuing such a policy.

Disclaimer

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Table of Contents

List of Figures

List of Tables

Background: Solar Net Metering

Electric customers that generate their own electricity from a solar photovoltaic (PV) or other renewable energy system often participate in a billing arrangement called *net metering*. In a net metering arrangement, the customer is billed by the utility only for the net consumption of electricity during a billing period (e.g., a month). It is typically implemented using a single, bi-directional electricity meter that rolls forward when the customer is pulling electricity from the grid and backward when the customer is exporting electricity to the grid. In effect, net metering allows the customer to offset electricity consumption at one time with excess generation at another time. Consumption and generation of electricity are valued at the same rate – the retail rate a customer pays, or another similar rate.[a] The resultant electricity cost savings help the customer recoup the cost of the PV system and often represent one of the most significant sources of "value" for PV systems.[i] In most cases, state laws require that the system be located on the customer's side of the meter and be sized so that it does not produce more electricity than is needed to meet on-site demand over the course of a year.

Though some utilities have voluntarily elected to offer net metering to their customers, most often, net metering is governed by state laws and regulations. These laws vary widely throughout the 43 states that currently have a net metering standard (Figure 1).[ii] For example, state net metering laws and regulations differ on the following characteristics:[iii]

- Types of technologies eligible to net meter
- Customer sectors eligible to net meter
- Types of utilities that must offer net metering
- Individual system capacity limits for net-metered systems
- Cumulative capacity limit across all net-metered systems
- Methods for calculating, crediting, or reimbursing Net Excess Generation (NEG) credits

Net metering has historically taken place under a somewhat restrictive arrangement, where a single system must be physically connected to the electric grid behind a single customer electric meter. While this arrangement can work well for some electric customers and on-site generation systems (including local government systems), many customer sites that are well-suited for PV installations are not suitable to be net-metered, or vice versa. For instance, a local government may want to offset load in an older building that cannot support the weight of a PV system, or on a building with a roof that will need to be replaced before the life of the PV system has expired. A building with significant electricity load might have too much shading or might not have enough roof space to site a large enough system to significantly offset the on-site electricity consumption. Alternatively, the best site for a PV system might be located on a capped landfill, a brownfield, or on undeveloped land where there is currently little or no electricity demand. Because a system cannot be sized to exceed demand at the site, these sites are not appropriate for traditional net metering.

[a] Some states offer alternative billing policies, including "dual metering" or "net purchase and sale metering," which typically only pay a wholesale or avoided cost rate to customer generators. This rate is lower than the retail rate, and policies that only pay a customer generator at the wholesale or avoided cost rate do not meet the definition of net metering as the term is generally defined.

Aggregate Net Metering

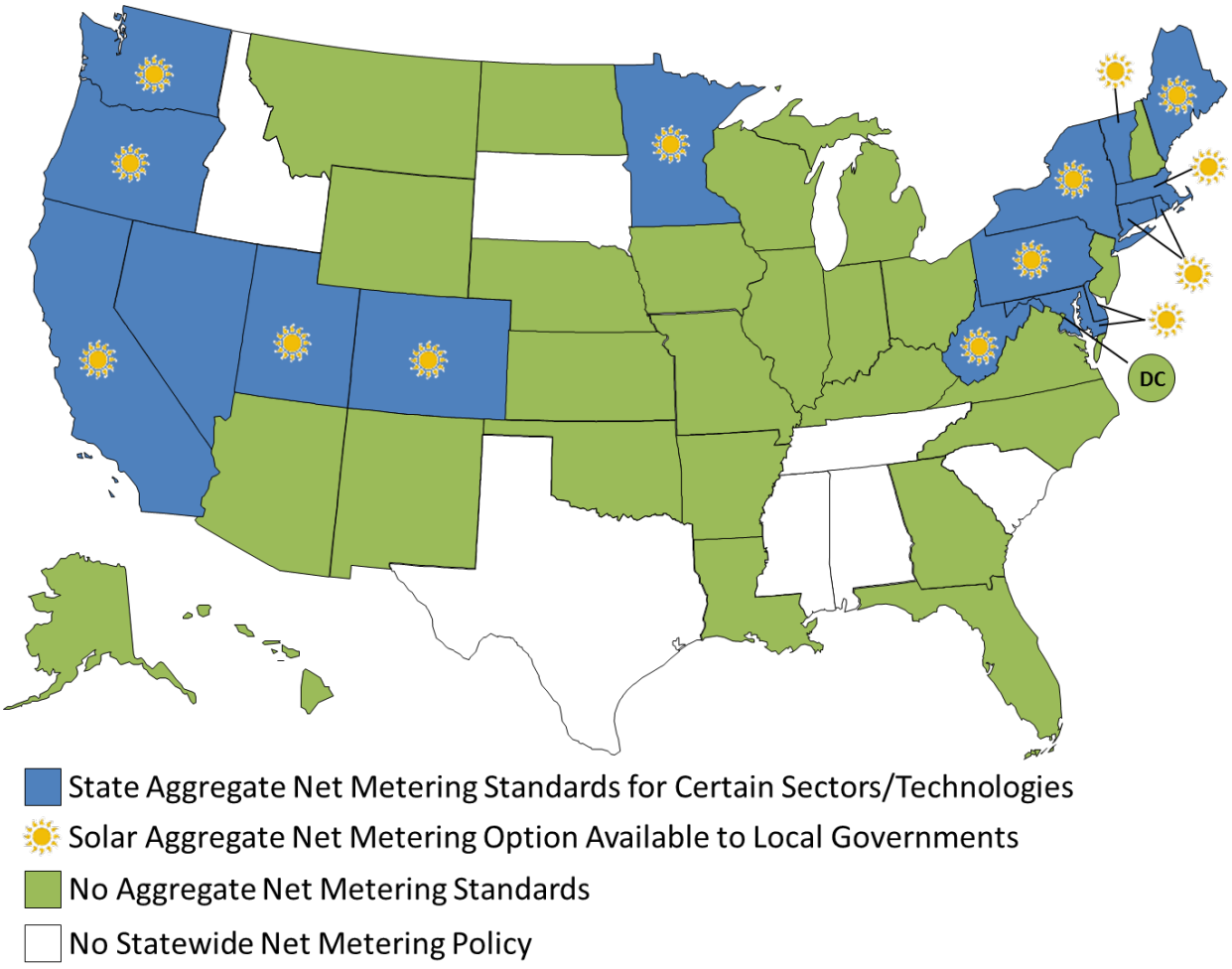
Aggregate net metering (ANM) is a variation on traditional net metering that expands options for customers who wish to install PV or other renewables. Specifically, ANM is a net metering arrangement that allows for a single generating system to be used to offset electricity use on multiple meters, without necessarily requiring a physical connection between the system and those meters.[iv, b]

While aggregate net metering has the potential to benefit many different types of customers, it can be particularly beneficial for customers with multiple meters and/or electric accounts, such as a local government. In addition to potentially removing at least some of the obstacles associated with site limitations, it may also allow the customer to benefit from economies of scale in system sizing, and allow the use of underutilized roof space or land in system siting.

However, as with standard net metering laws, regulations surrounding meter aggregation vary from state to state, and these details play a decisive role in determining the opportunities that aggregate net metering may offer to a local government or other electric customer. Currently, of the 43 states with net metering laws, only 17 states have specific rules requiring utilities to offer some form of meter aggregation (Figure 1). The other 26 states and Washington, DC do not specify rules for meter aggregation, but this does not mean the arrangement is disallowed by the state. For example, Illinois allows utilities to offer meter aggregation, but does not require it and does not set any specific standards for such arrangements.[v] Utilities in states without meter aggregation standards could potentially offer meter aggregation, but it is not common. Furthermore, some states that offer meter aggregation only require certain utilities (usually investor-owned utilities) to offer the service. For instance, in Maine, all utilities are required to offer net metering to their customers, but only investor-owned utilities are required to offer ANM. Other utilities may offer it at their discretion.[vi]

[b] States use varied terminology to describe different types of meter aggregation, such as virtual, group, neighborhood, remote, or community net metering depending on the characteristics of the policy; this report may use different terminology than a specific state's rules or regulations in order to consistently define and characterize types of policies.

Figure 1: Aggregate Net Metering Policies in the U.S.



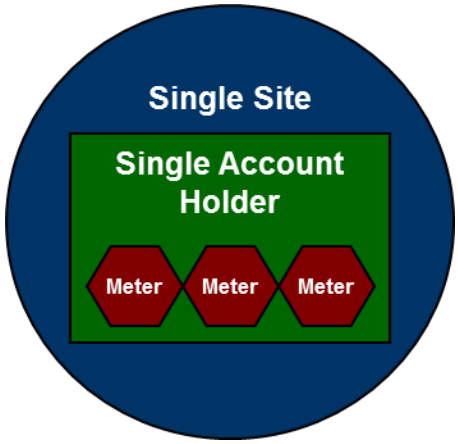
Types of Meter Aggregation

Varieties of ANM can be grouped into four distinct arrangements characterized by the number of customers and the number of sites allowed: *Basic Meter Aggregation*, *Tenant Meter Aggregation*, *Multi-Site Aggregation*, and *Virtual Net Metering*.

Basic Meter Aggregation: Single Customer, Single Site (Figure 2[vii])

At the most basic level, a single customer may be able to offset multiple billing meters located on the same property (or adjacent/adjoining properties) with credits from a single PV system. This type of arrangement, *Basic Meter Aggregation*, may be especially relevant for municipalities, universities, or agricultural customers that have several buildings in a close proximity to one another, and with a separate meter for each building. Except in some states that allow third-party ownership,[c] state laws that allow *Basic Meter Aggregation* require that the owner of the system (also known as the Host Customer) be the owner of all of the meters, and that the property be owned or leased by that same customer.

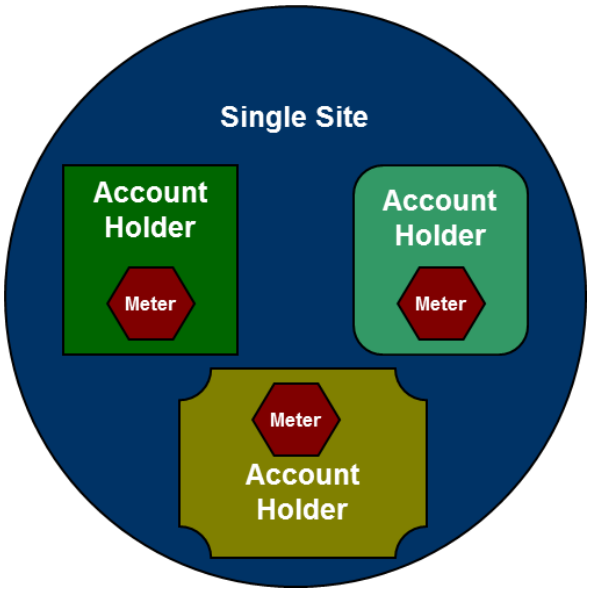
Figure 2: Basic Meter Aggregation



Tenant Aggregation: Multiple Customers, Single Site (Figure 3[viii])

Some states allow for different customers to aggregate meters, but only if the customer meters are located on the same or contiguous property. This is most relevant for multi-family residential buildings and other multi-tenant buildings (e.g., a shopping mall or office building complex) where individual meters are owned by different customers instead of a landlord. A residential "neighborhood" system may also be able to utilize *Tenant Aggregation*. If state laws allow for different customer sectors to aggregate meters, a local government that shares an office building with other organizations could take advantage of this arrangement by pooling together for a PV system. California is currently the only state that offers *Tenant Aggregation.*[ix]

Figure 3: Tenant Meter Aggregation

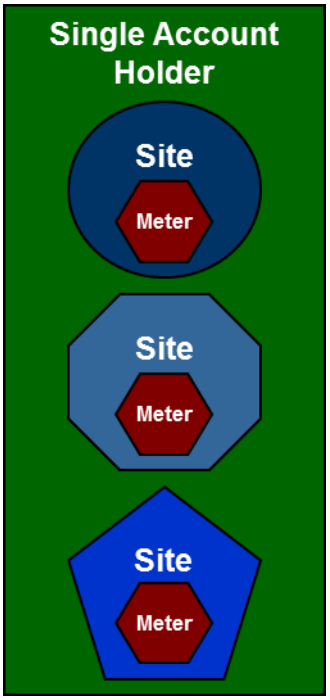


[c] Third-party ownership is a system ownership model where the owner of the host property on which a PV system is installed does not actually own the PV system itself. Instead, a third-party owns and maintains the system. See the Database of State Incentives for Renewables and Efficiency (DSIRE) 3rd-Party Solar PV PPA map for information regarding state-by-state policies: http://dsireusa.org/documents/summarymaps/3rd_Party_PPA_map.pdf

Multi-Site Aggregation: Single Customer, Multiple Sites (Figure 4[x])

A handful of states also allow a single customer to aggregate meters located in geographically disconnected areas. *Multi-Site Aggregation* is especially useful in a case where a municipality owns land that would be a good site for PV (e.g., a large piece of vacant land), but that site has a minimal load, while other higher load sites are less suitable for PV (e.g., a downtown office building). The municipality could use the electricity generated by an optimally-sited PV system to offset load at the office building. States with *Multi-Site Aggregation* often still have some type of proximity requirement for the system relative to the metered electric loads. For example, Pennsylvania requires metered properties to be located within 2 miles of the customer-generator's property and be located within a single electric distribution company service territory.[xi]

Figure 4: Multi-Site Meter Aggregation

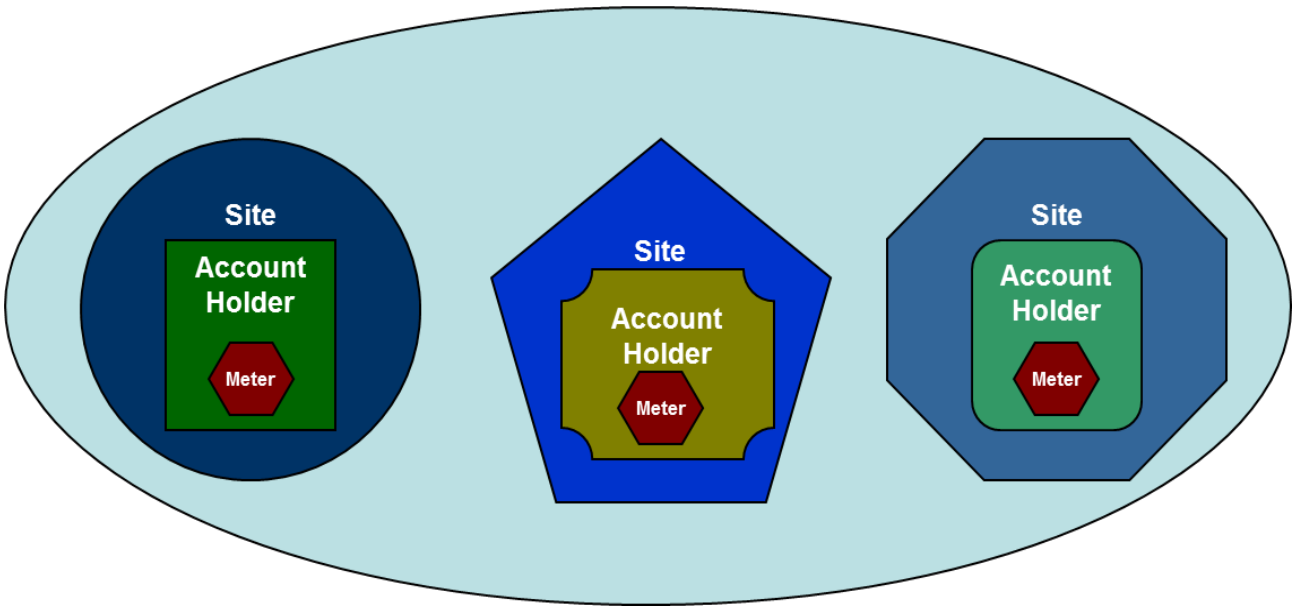


Virtual Net Metering: Multiple Customers, Multiple Sites (Figure 5[xii])

The most flexible meter aggregation arrangement, *Virtual Net Metering* allows several customers to participate in meter aggregation even if they are located on non-contiguous properties. This is an important element of any Shared Renewable Energy program, also sometimes referred to as Community Solar or Solar Garden programs. Typically, these arrangements are subscriber-based, with a controlling organization that owns the net-metered system. One exception to this is Massachusetts, which allows municipal customers to simply allocate net metering credits to any other municipal customer (so long as it is in the same utility and ISO-NE Load Zone). Rules governing *Virtual Net Metering* arrangements vary widely by state, including rules for the number of customers that can subscribe and the minimum or maximum share of a system each customer can have. As with *Multi-Site Aggregation*, states may also limit the number of customers or require that the meters be located within a certain distance, utility territory, or load zone of the system. Allowing for *Virtual Net Metering* in effect also allows for *Tenant Aggregation* and *Multi-Site Aggregation.*

For local governments, *Virtual Net Metering* may be most useful for combining meters that are on different accounts all owned by the same municipality or a third party. This type of arrangement, where a municipality receives net metering credits from a system that is owned by a third party, can be especially important because a municipality cannot take advantage of tax-based incentives. In a *Virtual Net Metering* arrangement, a private entity could own the system and receive a tax credit (thus reducing the cost of the project), while allowing a local government to subscribe to the system and receive net metering credits. Additionally, a local government that wants to invest in a larger system in order to take advantage of economies of scale could utilize *Virtual Net Metering* to allow other entities to subscribe to that system.

Figure 5: Virtual Net Metering



Other Variations

Within these four different types of meter aggregation, states' rules and regulations have a number of different requirements and limitations. The specific characteristics of these regulations can determine whether or not meter aggregation will be a beneficial arrangement for a local government.

System Eligibility

Most states' ANM options are available to the same technologies that are eligible for net metering. However, a few states have special options available for specific technologies. New York allows only solar, wind, farm-based biogas, and micro-hydroelectric systems to participate in *Multi-Site Aggregation*.[xiii] Additionally, Colorado and Minnesota's *Virtual Net Metering* options are limited to solar PV.[xiv, xv] Nevada has a very limited ANM option for hydro facilities and a specific class of wind projects.[xvi]

A state may also place different size restrictions on an ANM facility than those placed on standard net metering facilities. Net metering in California is generally limited to facilities of up to 1 megawatt (MW),[xvii] but local governments that participate in *Multi-Site Aggregation* can have systems of up to 5 MW.[xviii] Colorado has no limit for standard net metering for IOU customers as long as the system does not exceed 120% of the customer's demand,[xix] but *Virtual Net Metering* systems are limited by the 120% rule *and* a specific capacity limit of 2 MW.[xx]

Customer Eligibility

As with system eligibility, most customers that are eligible for net metering are also eligible for meter aggregation. Eight states limit eligibility to specific customer sectors, including two states that limit meter aggregation to municipal customers only (Table 1). Only Nevada and Massachusetts limit ANM to municipal customers; Nevada excludes municipalities from ANM,[xxi] and Massachusetts only excludes municipal customers from participating in "neighborhood net metering," but still allows government

entities to allocate virtual net metering credits to other such customers. Private entities can also allocate credits to government entities.[xxii]

Though all types of customers may technically be eligible for state meter aggregation options, ownership and location requirements may make ANM only feasible for certain types of customers. For example, because *Basic Meter Aggregation* requires a customer to have multiple meters on contiguous property, most residential and smaller commercial customers would not be able to take advantage of this arrangement. *Basic Meter Aggregation* would typically only be suitable for government, agricultural, university, or larger commercial and industrial customers. Other limitations discussed below may also limit access for certain customer classes or sectors.

All states require that the owners of the aggregated meters be customers of the same utility. This requirement eases administrative burden and prevents other unnecessary complications.

Rate Class Requirements

Utility customers are divided into various customer rate classes (residential, commercial, industrial, etc.) and are typically charged different rates because they use electricity differently in terms of time of day, capacity needs, and volume. Each customer class is assigned a specific tariff or rate schedule based on their electric service requirements, including the set rates and fees applicable to that customer class.[xxiii] A small administrative building at a public park will use less electricity and will use that electricity at different times of the day compared to a large convention center. The rate schedule can even vary by individual meter depending on the terms of the utility tariff as well as the preferences of the customer. Not all rate schedules are available to all customer sectors.

For example, South Carolina Electric and Gas (SCE&G) has 28 different rate schedules available to customers, including a different rate schedule for Municipal Power Service, School Service, Municipal Street Lighting, Underground Street Lighting, and various Time-of-Use services. These rate schedules have different per-kWh charges. Some schedules have different charges for electricity consumed at different times of the day and different times of the year, including charges for a certain amount of peak demand.[xxiv]

Table 1: Basic Technology and Customer Limitations for States

State	Aggregation Type	Customer Sector Limitations	Rate Class Requirements
CA	Basic[d]	None	Not addressed/no additional requirements
CA	Multi-Site	Local Governments Only	All meters must be on a time-of-use tariff
CA	Tenant	Multi-Tenant Properties Only	Not addressed/no additional requirements
CO	Basic	None	All meters must be on the same rate schedule
CO	Virtual	None	Not addressed/no requirements
CT	Virtual[d]	Municipal, State, and Agricultural Customers and Critical Facilities Only	Not addressed/no additional requirements
DE	Multi-Site	None	Meters may be aggregated regardless of rate class
DE	Virtual	None	Not addressed/no additional requirements
ME	Virtual	None	Not addressed/ no additional requirements
MD	Multi-Site	Agricultural, Non-profit, and Municipal Government Only	Not addressed/no additional requirements
MA	Virtual (Neighborhood)	Residential Ownership Only; Commercial Customer May Subscribe	Not addressed/no additional requirements
MA	Virtual (Credit Allocation)	None	Not addressed/no additional requirements
MN	Basic[d]	None	Not addressed (to be determined)
MN	Virtual[d]	None	Not addressed (to be determined)
NV	Basic	Hydro Facility Owners Only; Specific University Wind Application	Not addressed/not applicable
NY	Multi-Site	Non-Residential and Agricultural Customers Only	Not addressed/no additional requirements
OR	Basic	None	Meters that are on different rate schedules are able to be aggregated
PA	Multi-Site	None	Meters may be aggregated regardless of rate class
RI	Basic	None	Not addressed/no additional requirements
RI	Multi-Site	Municipal Customers Only	Not addressed/no additional requirements
UT	Basic	None	Meters must be on the same rate schedule
VT	Virtual	None	Not addressed/no additional requirements
WA	Multi-Site	None	Meters can be aggregated regardless of rate class, but meters shall not change rate class as a result of aggregation.
WV	Multi-Site	None	Meters may be aggregated regardless of rate class

[d] Further rules must be established for these policies.

Most local government electric customers will have a mix of small, medium, and large loads, with meters on several rate schedules in various locations. A single large building could have multiple meters on different rate schedules. Some states choose to limit the ability to aggregate meters that are on different rate schedules (Table 1). While allowing net metering credits to be passed between meters on different rate schedules provides expanded opportunities for customers, it can also create additional administrative and billing complications. For instance, it may be difficult to devise and implement a system for assigning credits between time-of-use accounts and general service accounts, and the difference in the value of credits between different accounts may give rise to concerns that the system is prone to strategic "gaming." Hypothetically, customers could be incentivized to deliberately site a system on a property with high volumetric rates in order to pass monetary credits to other meters with lower volumetric rates. Limiting ANM on the basis of rate schedule avoids the need to create potentially elaborate rules to address these issues. Provisions limiting aggregated meters to a single rate schedule may limit the usefulness of meter aggregation for some customers, as it may not be possible (or advisable) for all meters to be on the same rate schedule.

ISO Load Zone

Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) oversee generation and transmission in a specified region, often coordinating the wholesale market across numerous states. There are seven RTOs and ISOs in the US: California ISO, Southwest Power Pool, Electric Reliability Council of Texas, Midcontinent ISO, PJM Interconnection, New York ISO, and ISO New England.[xxv] Within an ISO or RTO region, the geographic area will be divided into several different load zones, each with its own wholesale electricity price. In order to prevent customers from strategically siting systems to take advantage of different electricity rates, and to prevent unnecessary administrative burden, both Massachusetts and New York require that all meters be located within the same ISO load zone.[xxvi, xxvii]

Customer Quantity and Other Participation Limitations

For *Virtual Net Metering*, many states set a minimum or maximum number of customers that can participate (Table 2). In addition, a state might require a minimum capacity for each subscriber, limit the percentage share a customer can own, or limit the ownership capacity in relation to the customer's own electric consumption. For example, both Colorado and Minnesota limit each individual customer to a 40% share in the system. Colorado requires that each customer must own at least 1 kW of capacity, and Minnesota requires each customer own at least 200 watts.[xxviii, xxix]

Geographical Proximity Requirements for Meters

For *Basic Meter Aggregation* and *Tenant Aggregation*, customer meters are required to be on a single property or contiguous properties. This means that if a customer owns several adjoining properties, meters on those properties can be aggregated. Many states' rules allow meters to be aggregated across roads or other easements or right-of-ways that may cross through a customer's otherwise contiguous property. This is an especially important provision for customers that have properties located on either side of a street. However, whether or not aggregation is allowed for a continuous string of properties or

properties intersected by roads (or other easements) depends on the state's definitions of "contiguous," "adjoining," and/or "facility site." [e]

Table 2: Multiple Customer Aggregation: Customer Minimums and Maximums by State

State	Aggregation Type	Customer Quantity Minimum or Maximum
CA	Tenant	No minimum or maximum
CO	Virtual	10 customer minimum
CT	Virtual	Up to 10 additional customer accounts (11 including generator account)
DE	Virtual	No minimum or maximum
ME	Virtual	10 customer maximum
MA	Virtual (Neighborhood)	10 customer minimum
MA	Virtual (Credit Allocation)	No minimum or maximum
MN	Virtual	5 customer minimum
VT	Virtual	No minimum or maximum

For all types of ANM, meters in any aggregation arrangement must be located within the same utility service territory where applicable. States may have additional geographical proximity requirements for both *Multi-Site Aggregation* and *Virtual Net Metering* (Table 3), including Pennsylvania and West Virginia which both have a 2-mile requirement, [xxx, xxxi] and Colorado which, in most cases, requires all accounts to be located within the same municipality as the facility.[xxxii]

Load Requirement

One important distinction for ANM rules is whether or not a generating system must be located on-site with a customer load. Allowing a net-metered system to be placed on a site with no load allows for much more flexibility in siting a system. For example, a municipality that owns a brownfield with no electricity use on site would not typically be allowed to construct a PV system and sell the electricity back to the utility. However, in certain states with meter aggregation, the local government could offset the electricity used at an office building with the electricity generated at the brownfield PV site. Both Maine and Delaware allow a stand-alone facility to be aggregated with other meters,[xxxiii, xxxiv] but Massachusetts requires that the site with the generating system have some on-site load, but has no minimum requirement for the amount of load.[xxxv] Whether or not a state requires on-site load may be unclear or unstated in state laws; a local government interested in this type of arrangement should contact their utility or the public service commission to determine whether or not their arrangement would be eligible for meter aggregation.

[e] For example, in New Jersey, the statutes specify that properties "shall be considered contiguous if they are geographically located next to each other, but may be otherwise separated by *an* easement, public thoroughfare, transportation, or utility-owned right-of-way…" (emphasis added) (N.J. Stat. § 48:3-51). The use of the word "an" limits a property to only one easement. In the Board of Public (BPU) Utilities Docket Number EX11120885V, a project developer argued that this definition was limiting certain projects with multiple easements on a property. This wording remains unchanged in the statutes and cannot be changed by the BPU, and thus still prohibits such projects. See the comments in the case here: http://www.nj.gov/bpu/pdf/rules/%28F%29%20R.2013%20d.pdf

Table 3: Multiple Location Aggregation: Meter Proximity Requirements by State

State	Aggregation Type	Meter Proximity Requirements
CA	Multi-Site	Benefiting accounts must be located in the boundaries of the local government
CO	Virtual	Benefiting accounts must be located in the same municipality as the facility. If a subscriber lives in a county with a population of less than 25,000, he or she may subscribe to a facility in an adjacent county that are serviced by the same utility
CT	Virtual	No requirement
DE	Multi-Site	No requirement
DE	Virtual	No requirement
ME	Virtual	No requirement
MD	Multi-Site	No requirement
MA	Virtual (Neighborhood)	Must be located in a geographical area within a municipality that is recognized by the residents as including a unique community of interest; Must be within a single ISO-NE load zone
MA	Virtual(Credit Allocation)	Must be within a single ISO-NE load zone
MN	Virtual	Geographical requirements to be determined
NY	Multi-Site	Meters must be in the same load zone
PA	Multi-Site	Metered properties must be located within 2 miles of the system's property
RI	Multi-Site	No requirement
VT	Virtual	No requirement
WA	Multi-Site	No requirement
WV	Multi-Site	Meters must be located within 2 miles of the boundaries of the customer-generator's property or contiguous property

Credit Allocation

When a PV system generates more electricity than the customer uses in any given billing period, the NEG credits are allocated to the customer on its utility bill. Generally, these credits are carried forward on each utility bill until the customer uses more electricity than the PV system generates, and then the credits are used. However, this basic mechanism becomes more complicated when multiple customers are factored into the credit allocation. Rules for how credits are calculated and allocated to different customers vary from state to state. In most cases, utilities only apply NEG credits to charges that use kilowatt-hours as the billing determinant; all other charges or fixed-fees are billed to each individual meter. In addition, some states require a utility to reimburse the customer for NEG credits at the end of an annualized period. States have different rules for calculating this reimbursement, and again, the methodology for distributing it amongst various customers can also differ. It is important to check the rules and procedures for allocating NEG credits to make sure a proposed project is arranged in such a way that it receives the optimal amount of credits.

Issues to Consider

For many local governments, uncertainty surrounding meter aggregation rules may be the biggest impediment to such arrangements. It is always best to work with the utility or the utilities commission in order to determine whether or not y a meter aggregation project fits within the current boundaries of the law. If it is determined that your utility does not currently offer meter aggregation, or the rules are too limiting for most projects, a local government can have a strong influence in changing rules and regulations to allow for meter aggregation. For governments with a municipal utility, the local government can work directly with the utility to change any net metering rules. For governments that are customers of investor-owned utilities, a local government can have a strong influence on the state utilities commission by working together with other large customers that would also benefit from ANM. The type of meter aggregation that a local government should pursue depends on the available sites for solar, the optimal site's proximity to other buildings, the size or electricity demand of the local government, whether or not the municipality wishes to collaborate with other sectors, and the number of different customer accounts and rate schedules applicable to the municipality.

Allowing for meter aggregation, from *Basic Meter Aggregation* to *Virtual Net Metering*, gives more customers access to renewable energy and opens up new markets to renewable energy developers. However, ANM policies need to be properly designed and worded such that they provide fair and equal opportunities to all types of customers, provide easy access for customers, and are easily administered by utilities. Local governments interested in meter aggregation projects should consider the following issues when examining state rules and regulations:[xxxvi, xxxvii]

- Determine which sectors are eligible under different types of ANM.
- Consider the definition of an eligible property for states that allow *Basic Meter Aggregation* or *Tenant Aggregation*. The use of the word "contiguous" as opposed to "adjacent" or "adjoining" may be key, as will the definition of "contiguous." Determine whether or not the policy allows for meter aggregation on properties separated by roads, easements, or public thoroughfares.
- Find out whether the utility or customer owns Renewable Energy Credits (RECs) from the PV system. If the customer owns the RECs, determine how the RECs will be allocated to different meters.
- Analyze how NEG is credited and reimbursed to customers.
    - Credits that are visible on a customer's utility bill allow the customer to see the true benefit of the system as well as the amount of money they are saving over time. Watch for other metering arrangements that credit a participant with a direct payment outside of a utility bill – this could present problems for project participants. Payments outside of a utility bill could be considered taxable income and could be considered a violation of securities regulations.[xxxviii]
    - Determine which charges and fees will be offset with generation credits.
    - Consider how NEG credits are carried forward. NEG may be carried forward month-to-month at the retail rate or as a kWh credit; utilities may reimburse customers at the end of an annualized period at either the retail, wholesale, or avoided-cost rate; or credits may rollover indefinitely. All of these factors affect costs and income for the system

owner and metered accounts, and can ultimately affect the cost-effectiveness of the system.

- Determine whether or not participating meters must be on the same rate schedule.
- Determine what distance or geographical limitations exist and whether or not this limits project options. Make sure all accounts that will participate in a project are in the same utility service or distribution territory as applicable.
- Make sure that an owner of a *Virtual Net-Metered* or *Tenant* system will not be regulated as a utility (i.e., make sure non-utility entities can own a *Virtual Net-Metered* system).

More guidance on model language for meter aggregation, including guidance for bill credits and program administration, can be found in The Interstate Renewable Energy Council's *Net Metering Model Rules* and *Model Rules for Shared Renewable Energy Programs*.

Conclusions

Aggregate Net Metering is one of the most powerful solar policy tools for local governments, opening up new opportunities for solar installations and project partners. Most states do not have standards for ANM, and those that do have widely varying rules. Complicated regulations or limiting rules can make it harder for local governments to utilize ANM arrangements. However, clear, fair policies can allow local governments to choose the best site for their solar projects, take advantage of economies of scale, and still benefit from net metering. Using the resources above, local governments can work with legislators, utilities commission staff, and other stakeholders to improve ANM options for all utility customers.

Endnotes

[i] "Solar Powering Your Community: A Guide for Local Governments." Second Edition. Solar America Communities. Department of Energy. January 2011. Accessed June 2013. http://www4.eere.energy.gov/solar/sunshot/resource_center/sites/default/files/solar-powering-your-community-guide-for-local-governments.pdf

[ii] "Net Metering Policies." Database of State Incentives for Renewables and Efficiency. March 2013. Accessed May 2013. http://dsireusa.org/documents/summarymaps/net_metering_map.pdf

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[v] § 220 Ill. Comp. Stat. 5/16-107.5

[vi] Code Me. R. 65-407-313

[vii] "A Proposal to Expand Net Metering to Enable Community Renewable Energy Projects in NJ." Sun Farm Network, 9 September 2008. Accessed June 2013. http://www.njcleanenergy.com/files/file/Committee%20Meeting%20Postings/inx/SFN_Community_Net_Metering_Proposal_090908.pdf

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[xv] Minn. H.F. 729, 88th Legislature

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