

SUMMARY OF 2011 CHANGES TO THE ILLINOIS NET METERING STATUTE: 220 ILCS 5/16-107.5

The 2011 ComEd energy bill represents a big step backwards for retail-rate net metering in Illinois. While the new statute nominally moves the eligible system size from 40KW to 2MW and the participation cap from 1% to 5% of a utility's peak load, other restrictions built into the legislation render these changes meaningless. Prior to the new legislation, Illinois had good net metering rules for renewable energy systems sized below 40KW and ELPC and other advocates had been working to increase the eligible system size. Instead of improving the statute, the changes in the 2011 legislation limit eligibility for retail-rate net metering to residential and small commercial customers in the short term, and ultimately sunset its availability for all customers (most likely within 1-3 years).

Competitive Versus Non-Competitive Customer Classes

Under the new legislation, utility customer classes that have been declared competitive by the Illinois Commerce Commission (ICC) are not eligible for retail-rate net metering. Although the legislation applies to all Illinois customers, this memo summarizes how the changes impact customers in Commonwealth Edison service territory.

Which ComEd customers are in a competitive class today?

Illinois law says that a customer class is eligible to be declared competitive by the ICC when 33% of customers in that class have switched to an alternative retail electric supplier (an ARES) and when there are at least three ARES offering those customers supply services. All non-residential customer classes with over 100KW of peak load were declared competitive in 2007. A fast food restaurant is an example of a non-residential establishment with a peak load of approximately 100KW, so anything with heavier electricity demand is already ineligible for retail-rate net metering.

Which ComEd customers will soon be in a competitive class?

As of November 2011, there are three remaining non-competitive customer classes: residential, watt-hour non-residential, and small commercial. The following table summarizes key information about these customer classes.

Small Commercial (definition: <100KW peak load)	Watt-Hour Non-residential (<2000 kWh monthly consumption)	Residential
Non-residential with electricity demand equal or smaller than that of a fast-food restaurant (approx)	Mom and Pop-type shop with monthly electrical consumption equivalent to that of a large house	All residential properties, including multi-family with less than 6 units
Approximately 181,000 customers in ComEd service territory	Approximately 81,000 customers in ComEd service territory	Approximately 4.4 million customers in ComEd service territory
25% taking service from an ARES as of Oct 2011	14% taking service from an ARES as of Oct 2011	4.7% taking service from an ARES as of Oct 2011
Eligible to be declared competitive: within one year (expected)	Eligible to be declared competitive: within two years (expected)	Eligible to be declared competitive: within three years (expected)

Source for total number of ComEd customers per class and switching statistics:

<http://www.icc.illinois.gov/electricity/switchingstatistics.aspx> - ComEd 2011 filing (Nov. 15, 2011).

Switching rates have been very rapid over the last year and the pace is only expected to accelerate as competitive suppliers ramp up marketing efforts and municipal aggregation becomes more common. There are now at least twenty ARES offering supply services to the residential market in ComEd service territory and many more than that participating in the non-residential market. All signs indicate that within three years, it is likely (though not certain) that all customer classes may be eligible to be declared competitive. Because retail-rate net metering is only available to customers in non-competitive classes, and all classes are expected to be declared competitive within a short timeframe, this legislation basically sunsets retail-rate net metering in Illinois.

What does this mean for customers in competitive classes?

After a customer class has been declared competitive, all customers with systems of any size are treated the same way that the previous version of the statute treated customers with systems over 40KW. In other words, customers with grid-tied renewable energy systems must pay taxes, fees and utility delivery charges on the *gross* amount of electricity supplied to the customer (rather than net), must install and pay for a dual-channel meter, are compensated monthly for excess kilowatt-hour credits at the “avoided cost” rate rather than the retail electricity rate (this can mean a difference of 4-5 cents per kWh) and are not eligible to roll forward excess credits from one month to the next. For competitive-class customers on time-of-use rates, net kWh produced will be valued at the time-of-use rate applicable to that same period. This may be a good option for customers to consider, given that solar produces energy during peak power price periods.

What does it mean for customers in non-competitive classes right now?

The new legislation adds additional layers of complexity to how different customer types are treated with respect to net metering, even within the customer classes that are currently non-competitive. Net metering features vary depending on whether a customer is on a fixed-price rate versus an hourly rate, and whether delivery charges are assessed on a demand-based (KW)

tariff or a consumption-based (kWh) tariff. We provide more details about these distinctions in the Appendix.

It is important to note that the legislation is silent about whether existing net metering customers are “grandfathered” into an extended net metering program after their customer class is declared competitive. This issue will need to be resolved in the rulemaking process.

How does this compare with the previous generation of the net metering statute?

In a nutshell:

- Any customer in a competitive class (currently anyone with over 100KW peak load) is no longer eligible for retail-rate net metering, regardless of system size. In the previous iteration of the statute, all customers were eligible for retail-rate net metering for systems 40KW and below.
- As the residential, watt-hour and small commercial customer classes are declared competitive (likely within 1-3 years) they too will become ineligible for retail-rate net metering.
- In the meantime, residential, watt-hour and small commercial customers are now nominally eligible for systems up to 2MW, but because of roof-space limitations, service panel technical limitations, and size-to-load limitations, this change is effectively meaningless. In other words, a residential or small commercial customer may be technically eligible for a 2MW system, however, net metering facilities must be sized to “offset the customer’s own electrical requirements” and small facilities have nowhere near the electricity needs, much less the roof-space, to support anywhere near a 2MW system.
- The new language caps total net metering participation at 5%, rather than 1% in the original statute. This change is meaningless because the customer class restrictions severely limit the “market” for net metering. In fact, it is likely that all customer classes will be declared competitive and thus ineligible for retail rate net metering long before the program reaches anywhere near 5% of peak demand.

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APPENDIX – NET METERING VARIATIONS FOR NON-COMPETITIVE CUSTOMER CLASSES

The new net metering statute outlines the following rules for different types of customers in non-competitive customer classes. These rules are only applicable for customers until their customer class is declared competitive, at which point they revert to the rules for competitive customer classes described on page 2.

CUSTOMER TYPE 1

If you are:

Section (c)(1)

- 1) Not in a competitive class, so all residential, watt-hour non-residential, small commercial.
- 2) On a kWh-based tariff (residential and watt-hour only)
- 3) Not on hourly pricing

Then:

- 1) Section (c)(1). You get a bi-directional meter at the expense of the utility provider (be it the utility or an ARES)
- 2) Section (d)(1) with reference to (e-5). You're charged for the net amount of electricity consumed at the same rate you would be charged if you were not a net metering customer (no extra fees).
- 3) Section (d)(2). 1:1 kWh credit for net electricity supplied to electricity provider over the course of a billing period (a month)... carries over month to month and expires at the end of the year.

Interpretation:

- This is retail-rate net metering for residential and watt-hour customers on flat rates. Small commercial customers will be on a demand-based rate, so see Customer Type 3.

CUSTOMER TYPE 2

If you are:

Section (d-5)

- 1) Not in a competitive class
- 2) On a kWh-based tariff (residential and watt-hour only)
- 3) On hourly pricing

Then:

- 1) Section (c)(3). If your meter doesn't already measure bi-directional flow, you will have to pay for the meter upgrade.
- 2) Section (d-5)(1) For the net amount consumed, you pay whatever your tariff would require if you were not a net metering customer
- 3) Section (d-5)(2) Your energy consumption/production is netted out hourly. For the net amount produced, you get a monetary credit which is the sum of a 1:1 kWh credit at the hourly energy price, plus a 1:1 kWh delivery credit that reflects all kWh-based delivery charges.

Interpretation:

- This is retail-rate net metering for residential and watt-hour customers on hourly rates. Small commercial customers will be on a demand-based rate, so see Customer Type 3.

CUSTOMER TYPE 3

If you are:

Section (c)(1)

- 1) Not in a competitive class
- 2) On a demand (KW) based tariff (small commercial)
- 3) Not on hourly pricing

Then:

- 1) Section (c)(2). You get a dual-channel meter paid for by the electricity provider (be it the utility or an ARES)
- 2) Section (e)(1). If you use more than you produce, the provider charges you for the net electricity you use, and for the taxes, fees and delivery charges that would otherwise be applicable to the **gross** amount of kWh supplied to the customer by the electricity provider.
- 3) Section (e)(2). If you produce more than you use, the provider will give you a 1:1 kWh credit that reflects the kWh-based charges in the customers electric service rate
- 4) Section (e)(3). kWh credit carries over month to month and expires at the end of the year.

Interpretation:

- These are small commercial customers billed for delivery service on a KW-basis. The delivery charge is applied to the maximum KW delivered for the month (the hour of highest demand), so this portion of the bill may or may not be affected by a solar array. For the portion of the bill that is kWh-based, net metering customers will be charged for the net energy they consume and will be responsible for delivery, taxes and fees associated with **GROSS** electricity consumption. For excess electricity sent back to the grid, they will receive per-kWh credit based on the rate attached to the per-kWh portion of the bill. It appears that these customers will get full retail rate credit for net excess generation, but only on the kWh-portion of the bill. Since all delivery charges are demand based, net metering isn't as valuable to these customers.

APPLIES TO CUSTOMER TYPES 1 AND 3

Section (e-5) applies to all non-competitive classes, on either kWh or KW-based rates, but not on hourly pricing. It says that the “customer remains responsible for all taxes, fees, and utility delivery charges that would otherwise be applicable to the **NET** amount of electricity used by the customer.” This appears to contradict Section (e)(1) where it says that customers on KW-based rates are charged for taxes, fees, delivery for **GROSS** amount of electricity used by the customer. It would be a better outcome if this discrepancy is resolved in favor of this section, rather than (e)(1).

THE NEW ILLINOIS NET METERING STATUTE:
220 ILCS 5/16-107.5

18 (220 ILCS 5/16-107.5)

19 Sec. 16-107.5. Net electricity metering.

20 (a) The Legislature finds and declares that a program to
21 provide net electricity metering, as defined in this Section,
22 for eligible customers can encourage private investment in
23 renewable energy resources, stimulate economic growth, enhance
24 the continued diversification of Illinois' energy resource

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1 mix, and protect the Illinois environment.

2 (b) As used in this Section, (i) "eligible customer" means
3 a retail customer that owns or operates a solar, wind, or other
4 eligible renewable electrical generating facility with a rated
5 capacity of not more than 2,000 kilowatts that is located on
6 the customer's premises and is intended primarily to offset the
7 customer's own electrical requirements; (ii) "electricity
8 provider" means an electric utility or alternative retail
9 electric supplier; (iii) "eligible renewable electrical
10 generating facility" means a generator powered by solar
11 electric energy, wind, dedicated crops grown for electricity
12 generation, agricultural residues, untreated and unadulterated
13 wood waste, landscape trimmings, livestock manure, anaerobic

14 digestion of livestock or food processing waste, fuel cells or
15 microturbines powered by renewable fuels, or hydroelectric
16 energy; and (iv) "net electricity metering" (or "net metering")
17 means the measurement, during the billing period applicable to
18 an eligible customer, of the net amount of electricity supplied
19 by an electricity provider to the customer's premises or
20 provided to the electricity provider by the customer.

21 (c) A net metering facility shall be equipped with metering
22 equipment that can measure the flow of electricity in both
23 directions at the same rate.

24 (1) For eligible customers whose electric service has
25 not been declared competitive pursuant to Section 16-113 of
26 this Act and whose electric delivery service is provided

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1 and measured on a kilowatt-hour basis and electric supply
2 service is not provided based on hourly pricing, this shall
3 typically be accomplished through use of a single,
4 bi-directional meter. If the eligible customer's existing
5 electric revenue meter does not meet this requirement, the
6 electricity provider shall arrange for the local electric
7 utility or a meter service provider to install and maintain
8 a new revenue meter at the electricity provider's expense.

9 (2) For eligible customers whose electric service has
10 not been declared competitive pursuant to Section 16-113 of
11 this Act and whose electric delivery service is provided
12 and measured on a kilowatt demand basis and electric supply
13 service is not provided based on hourly pricing, this shall
14 typically be accomplished through use of a dual channel
15 meter capable of measuring the flow of electricity both
16 into and out of the customer's facility at the same rate
17 and ratio. If such customer's existing electric revenue
18 meter does not meet this requirement, then the electricity
19 provider shall arrange for the local electric utility or a
20 meter service provider to install and maintain a new
21 revenue meter at the electricity provider's expense.
22

23 (3) For all other eligible customers, the electricity
24 provider may arrange for the local electric utility or a
25 meter service provider to install and maintain metering
26 equipment capable of measuring the flow of electricity both
into and out of the customer's facility at the same rate

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1 and ratio, typically through the use of a dual channel
2 meter. If the eligible customer's existing electric
3 revenue meter does not meet this requirement, then the
4 costs of installing such equipment shall be paid for by the
5 customer.

6 (d) An electricity provider shall measure and charge or
7 credit for the net electricity supplied to eligible customers
8 or provided by eligible customers whose electric service has
9 not been declared competitive pursuant to Section 16-113 of the
10 Act and whose electric delivery service is provided and
11 measured on a kilowatt-hour basis and electric supply service
12 is not provided based on hourly pricing in the following
13 manner:

14 (1) If the amount of electricity used by the customer
15 during the billing period exceeds the amount of electricity
16 produced by the customer, the electricity provider shall
17 charge the customer for the net electricity supplied to and
18 used by the customer as provided in subsection (e-5) of
19 this Section.

20 (2) If the amount of electricity produced by a customer
21 during the billing period exceeds the amount of electricity
22 used by the customer during that billing period, the
23 electricity provider supplying that customer shall apply a
24 1:1 kilowatt-hour credit to a subsequent bill for service
25 to the customer for the net electricity supplied to the
26 electricity provider. The electricity provider shall

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1 continue to carry over any excess kilowatt-hour credits
2 earned and apply those credits to subsequent billing
3 periods to offset any customer-generator consumption in
4 those billing periods until all credits are used or until
5 the end of the annualized period.

6 (3) At the end of the year or annualized over the
7 period that service is supplied by means of net metering,
8 or in the event that the retail customer terminates service
9 with the electricity provider prior to the end of the year
10 or the annualized period, any remaining credits in the
11 customer's account shall expire.

12 (d-5) An electricity provider shall measure and charge or
13 credit for the net electricity supplied to eligible customers
14 or provided by eligible customers whose electric service has
15 not been declared competitive pursuant to Section 16-113 of
16 this Act and whose electric delivery service is provided and
17 measured on a kilowatt-hour basis and electric supply service
18 is provided based on hourly pricing in the following manner:

19 (1) If the amount of electricity used by the customer
20 during any hourly period exceeds the amount of electricity
21 produced by the customer, the electricity provider shall
22 charge the customer for the net electricity supplied to and
23 used by the customer according to the terms of the contract
24 or tariff to which the same customer would be assigned to
25 or be eligible for if the customer was not a net metering
26 customer.

1 (2) If the amount of electricity produced by a customer
2 during any hourly period exceeds the amount of electricity
3 used by the customer during that hourly period, the energy
4 provider shall apply a credit for the net kilowatt-hours
5 produced in such period. The credit shall consist of an
6 energy credit and a delivery service credit. The energy
7 credit shall be valued at the same price per kilowatt-hour
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9 as the electric service provider would charge for
10 kilowatt-hour energy sales during that same hourly period.
11 The delivery credit shall be equal to the net
12 kilowatt-hours produced in such hourly period times a
13 credit that reflects all kilowatt-hour based charges in the
14 customer's electric service rate, excluding energy
15 charges.

16 (e) An electricity provider shall measure and charge or
17 credit for the net electricity supplied to eligible customers
18 whose electric service has not been declared competitive
19 pursuant to Section 16-113 of this Act and whose electric
20 delivery service is provided and measured on a kilowatt demand
21 basis and electric supply service is not provided based on
22 hourly pricing in the following manner:

23 (1) If the amount of electricity used by the customer
24 during the billing period exceeds the amount of electricity
25 produced by the customer, then the electricity provider
26 shall charge the customer for the net electricity supplied
 to and used by the customer as provided in subsection (e-5)

1 of this Section, provided that the electricity provider
2 shall assess and the customer remains responsible for all
3 taxes, fees, and utility delivery charges that would
4 otherwise be applicable to the gross amount of
5 kilowatt-hours supplied to the eligible customer by the
6 electricity provider.

7 (2) If the amount of electricity produced by a customer
8 during the billing period exceeds the amount of electricity
9 used by the customer during that billing period, then the
10 electricity provider supplying that customer shall apply a
11 1:1 kilowatt-hour credit that reflects the kilowatt-hour
12 based charges in the customer's electric service rate to a
13 subsequent bill for service to the customer for the net
14 electricity supplied to the electricity provider. The
15 electricity provider shall continue to carry over any
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17 excess kilowatt-hour credits earned and apply those
18 credits to subsequent billing periods to offset any
19 customer-generator consumption in those billing periods
20 until all credits are used or until the end of the
annualized period.

21 (3) At the end of the year or annualized over the
22 period that service is supplied by means of net metering,
23 or in the event that the retail customer terminates service
24 with the electricity provider prior to the end of the year
25 or the annualized period, any remaining credits in the
26 customer's account shall expire.

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1 (e-5) An electricity provider shall provide electric
2 service to eligible customers whose electric service has not
3 been declared competitive pursuant to Section 16-113 of this
4 Act and whose electric supply service is not provided based on
5 hourly pricing who utilize net metering at non-discriminatory
6 rates that are identical, with respect to rate structure,
7 retail rate components, and any monthly charges, to the rates
8 that the customer would be charged if not a net metering
9 customer. An electricity provider shall not charge net metering
10 customers any fee or charge or require additional equipment,
11 insurance, or any other requirements not specifically
12 authorized by interconnection standards authorized by the
13 Commission, unless the fee, charge, or other requirement would
14 apply to other similarly situated customers who are not net
15 metering customers. The customer will remain responsible for
16 all taxes, fees, and utility delivery charges that would
17 otherwise be applicable to the net amount of electricity used
18 by the customer. Subsections (c) through (e) of this Section
19 shall not be construed to prevent an arms-length agreement
20 between an electricity provider and an eligible customer that
21 sets forth different prices, terms, and conditions for the
22 provision of net metering service, including, but not limited
23 to, the provision of the appropriate metering equipment for
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non-residential customers.

25 (f) Notwithstanding the requirements of subsections (c)
26 through (e-5) of this Section, an electricity provider must

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1 require dual-channel metering for customers operating eligible
2 renewable electrical generating facilities with a nameplate
3 rating up to 2,000 kilowatts and to whom the provisions of
4 neither subsection (d), (d-5), nor (e) of this Section apply.
5 In such cases, electricity charges and credits shall be
6 determined as follows:

7 (1) The electricity provider shall assess and the
8 customer remains responsible for all taxes, fees, and
9 utility delivery charges that would otherwise be
10 applicable to the gross amount of kilowatt-hours supplied
11 to the eligible customer by the electricity provider.

12 (2) Each month that service is supplied by means of
13 dual-channel metering, the electricity provider shall
14 compensate the eligible customer for any excess
15 kilowatt-hour credits at the electricity provider's
16 avoided cost of electricity supply over the monthly period
17 or as otherwise specified by the terms of a power-purchase
18 agreement negotiated between the customer and electricity
19 provider.

20 (3) For all eligible net metering customers taking
21 service from an electricity provider under contracts or
22 tariffs employing time of use rates, any monthly
23 consumption of electricity shall be calculated according
24 to the terms of the contract or tariff to which the same
25 customer would be assigned to or be eligible for if the
26 customer was not a net metering customer. When those same

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1 customer-generators are net generators during any discrete

2 time of use period, the net kilowatt-hours produced shall
3 be valued at the same price per kilowatt-hour as the
4 electric service provider would charge for retail
5 kilowatt-hour sales during that same time of use period.

6 (g) For purposes of federal and State laws providing
7 renewable energy credits or greenhouse gas credits, the
8 eligible customer shall be treated as owning and having title
9 to the renewable energy attributes, renewable energy credits,
10 and greenhouse gas emission credits related to any electricity
11 produced by the qualified generating unit. The electricity
12 provider may not condition participation in a net metering
13 program on the signing over of a customer's renewable energy
14 credits; provided, however, this subsection (g) shall not be
15 construed to prevent an arms-length agreement between an
16 electricity provider and an eligible customer that sets forth
17 the ownership or title of the credits.

18 (h) Within 120 days after the effective date of this
19 amendatory Act of the 95th General Assembly, the Commission
20 shall establish standards for net metering and, if the
21 Commission has not already acted on its own initiative,
22 standards for the interconnection of eligible renewable
23 generating equipment to the utility system. The
24 interconnection standards shall address any procedural
25 barriers, delays, and administrative costs associated with the
26 interconnection of customer-generation while ensuring the

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1 safety and reliability of the units and the electric utility
2 system. The Commission shall consider the Institute of
3 Electrical and Electronics Engineers (IEEE) Standard 1547 and
4 the issues of (i) reasonable and fair fees and costs, (ii)
5 clear timelines for major milestones in the interconnection
6 process, (iii) nondiscriminatory terms of agreement, and (iv)
7 any best practices for interconnection of distributed
8 generation.

9 (i) All electricity providers shall begin to offer net
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metering no later than April 1, 2008.

11 (j) An electricity provider shall provide net metering to
12 eligible customers until the load of its net metering customers
13 equals 5% of the total peak demand supplied by that electricity
14 provider during the previous year. Electricity providers are
15 authorized to offer net metering beyond the 5% level if they so
16 choose.

17 (k) Each electricity provider shall maintain records and
18 report annually to the Commission the total number of net
19 metering customers served by the provider, as well as the type,
20 capacity, and energy sources of the generating systems used by
21 the net metering customers. Nothing in this Section shall limit
22 the ability of an electricity provider to request the redaction
23 of information deemed by the Commission to be confidential
24 business information. Each electricity provider shall notify
25 the Commission when the total generating capacity of its net
26 metering customers is equal to or in excess of the 5% cap

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1 specified in subsection (j) of this Section.

2 (l) Notwithstanding the definition of "eligible customer"
3 in item (i) of subsection (b) of this Section, each electricity
4 provider shall consider whether to allow meter aggregation for
5 the purposes of net metering on:

6 (1) properties owned or leased by multiple customers
7 that contribute to the operation of an eligible renewable
8 electrical generating facility, such as a community-owned
9 wind project, a community-owned biomass project, a
10 community-owned solar project, or a community methane
11 digester processing livestock waste from multiple sources;
12 and

13 (2) individual units, apartments, or properties owned
14 or leased by multiple customers and collectively served by
15 a common eligible renewable electrical generating
16 facility, such as an apartment building served by
17 photovoltaic panels on the roof.

18

19 For the purposes of this subsection (l), "meter
20 aggregation" means the combination of reading and billing on a
21 pro rata basis for the types of eligible customers described in
this Section.

22 (m) Nothing in this Section shall affect the right of an
23 electricity provider to continue to provide, or the right of a
24 retail customer to continue to receive service pursuant to a
25 contract for electric service between the electricity provider
26 and the retail customer in accordance with the prices, terms,

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1 and conditions provided for in that contract. Either the
2 electricity provider or the customer may require compliance
3 with the prices, terms, and conditions of the contract.
4 (Source: P.A. 95-420, eff. 8-24-07; 09700SB1652enr.)