



Illinois Power Agency Power Hour Webinar

Net Metering Updates and Implications for
Distributed Generation in Illinois

Agenda

- **Introduction to the IPA Power Hour Webinars**
- **Overview on Net Metering**
- **Background on Net Metering in Illinois**
- **What Illinois Net Metering Looks Like Today**
- **A Landscape Overview of State Net Metering Policies**
- **How Net Metering is Evolving**
- **Midwest Case Studies**
- **Illinois Transition to “Value-Based” DG Compensation**
- **Q&A and Conclusion**

- **Introduction and Scope**
- Power Hour is a series of educational and informative presentations on a wide range of clean energy topics and emerging issues
- Today's Power Hour:
 - During this webinar, we will provide an overview on net metering, history of net metering in Illinois, how net metering is evolving, look at states' net metering policies and look at Midwest case studies on net metering
 - This webinar is intended for general education and for CLE purposes only
 - We will not be answering questions about the draft Long-Term Plan or proposals the agency made in the draft, as is currently under development
- Future IPA Power Hour Webinars will cover other topics related to the clean energy economy in Illinois

Upcoming Webinars

IPA Power Hour 4: *Green Hydrogen-Exploring Pathways to Decarbonization*

Date: Friday, May 27, 2022

Time: 12 p.m.-1p.m. CDT

IPA Power Hour 5: *Buy/Lease/PPA- Comparing Models of Rooftop Solar Participation*

Date: Friday, June 24, 2022

Time: 12 p.m. -1p.m. CDT

IPA Power Hour 6: *Understanding Power Procurement for Residential and Small Commercial Customers of Illinois Electric Utilities*

Date: Friday, July 29, 2022

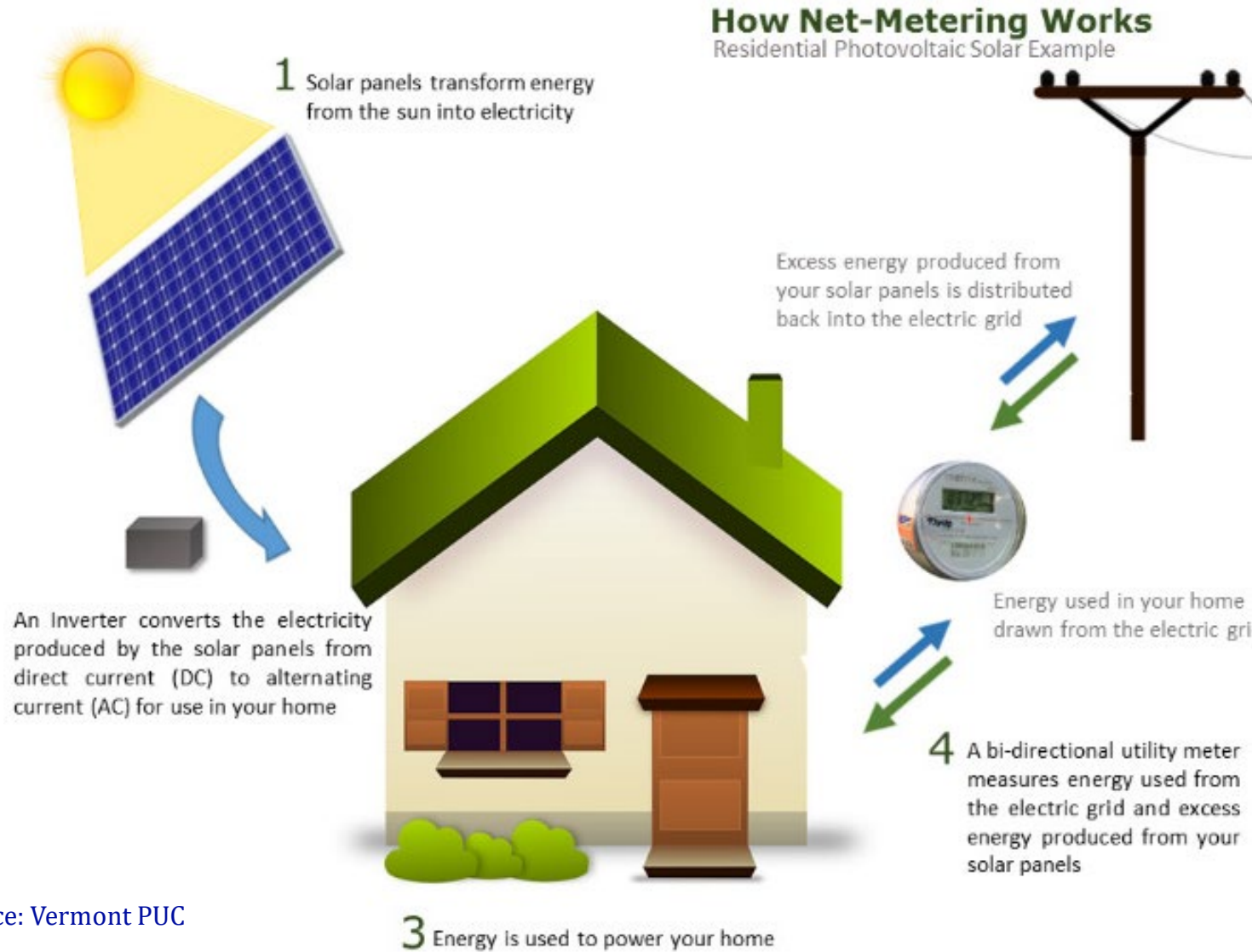
Time: 12 p.m. -1 p.m. CDT

Registration: <https://www2.illinois.gov/sites/ipa/Pages/Events.aspx>

- **Independent State Agency created in 2007**
- **Agency duties include**
 - Development and implementation of procurement plans for electricity supply for utility customers
 - Development and implementation of other renewable energy programs
 - Implementation of the Renewable Portfolio Standard
 - Development of Long-Term Renewable Resources Procurement Plan
 - Conduct competitive procurements for utility-scale projects
 - Manage programs for community solar and solar for homes and businesses

Overview on Net Metering

What is Net Metering?



What is Net Metering?

Net Energy Metering (NEM) is the process of measuring the difference between the energy supplied by a utility to a customer and the energy sent back to the utility from the customer's self-generated electricity

- “Net” = gross energy consumption – self-generated electricity
- Customer compensation typically in the form of a bill credit
- Different approaches for how to set that compensation level
- In Illinois currently we have “retail rate” net metering

What is Net Metering?

NEM policies compensate the customer for self-generated electricity

- Credits roll over to offset electricity usage in the winter as well
- Systems can be designed to offset all annual electric load, likely over producing in summer/underproducing in winter
- Net metering policies allow for the compensation of energy generated by a system at any time

What is Net Metering?

Public Utilities Act – 220 ILCS 5/16-107.5

- The PUA governs all utility rates and charges
- Utilities file tariffs with the Illinois Commerce Commission for approval of those rates
- Net metering provided for under Section 16-107.5
- Commonwealth Edison, Ameren Illinois and MidAmerican Energy Company each have their own Commission-approved net metering tariffs

History of Net Metering in Illinois

History of Net Metering in Illinois



P.A. 95-420, eff. Aug. 24, 2007

- Established net metering in Illinois under 16-107.5 of the PUA
- General Assembly found that *“a program to provide net electricity metering... can encourage private investment in renewable energy resources, stimulate economic growth, enhance the continued diversification of Illinois’ energy resource mix, and protect the Illinois environment.”*
- Electricity provider required to provide net metering at a rate identical to the rate structure and retail rate components for excess generation in a monthly billing period
- Excess credits carry over, expire at end of annual period
- Limits availability to systems not more than 2 MW on the customer’s side of the meter

History of Net Metering in Illinois



P.A. 97-616, eff. Oct. 26, 2011

- Modified 16-107.5
- Expanded definition of eligible renewable electric generating facility beyond those to include agricultural residues, untreated and unadulterated wood waste, landscape trimmings
- Allowed electricity providers to “consider” but not require meter aggregation for the purposes of net metering on a community owned solar project in (l)(1)
- Continue to see 1:1 crediting, rollover to end of annual period

History of Net Metering in Illinois



P.A. 99-0906, eff. June 1, 2017

- Future Energy Jobs Act (“FEJA”)
- Changes to 16-107.5(*l*) required net metering for community solar subscribers “at the subscriber’s energy supply rate ... equal to the subscriber’s share of the production of electricity...”
- Changed the trigger at 5% threshold to end retail rate net metering; customers that begin taking net metering from an electricity supplier that has already reached the threshold will only be eligible for netting of energy
- Retail rates include energy supply and delivery services

P.A. 99-0906 – FEJA

- 220 ILCS 5/16-107.6 – Distributed Generation Rebate - \$250 until the net metering customer generating capacity reaches 5%, at which time a successor rebate value would be in effect
- Required electricity providers whose total generating capacity of net metering customers reaches 3% to notify ICC, in anticipation of a change to the availability of net metering under 16-107.5 and the DG rebate value upon reaching 5%
- At the 5% threshold, customers would no longer receive retail rate net metering, but could obtain the DG rebate and supply netting

History of Net Metering in Illinois



P.A. 102-0662, eff. Sept. 15, 2021

- Climate and Equitable Jobs Act (“CEJA”)

*...to achieve the goals of this Act that robust options for customer-side distributed generation continue to thrive in Illinois, the General Assembly finds that a **predictable transition** must be ensured for customers between full net metering at the retail electricity rate to the distribution generation rebate described in Section 16-107.6.*

220 ILCS 5/16-107.5

P.A. 102-0662 - CEJA

- Removes the 5% threshold; January 31, 2024 deadline for the end of retail rate net metering for new customers
 - Customers on net metering by that date will continue to receive retail net metering through the lift of the system
- Customers that apply for net metering on or after January 1, 2025 will receive net metering credits at the supply charge; these customers will also be eligible for a DG rebate under changes to Section 16-107.6 of the Public Utilities Act
 - 16-107.6 largely rewritten under CEJA

What Illinois Net Metering Looks Like Today

Qualifying Systems – 220 ILCS 16-107.5(b)

- Eligible renewable electrical generating facility: *a generator, which may include the co-location of an energy storage system, that is interconnected under rules adopted by the Commission and is powered by solar electric energy, wind, dedicated crops grown for electricity generation, agricultural residues, untreated and unadulterated wood waste, livestock manure, anaerobic digestion of livestock or food processing waste, fuel cells or microturbines powered by renewable fuels, or hydroelectric energy*
- Community solar subscriptions (only available in the ComEd and Ameren service territories) – 220 ILCS 16-07.5(I)

Qualifying Systems – 220 ILCS 16-107.5(c)

- Metering requirements differ for customers whose electricity is provided and measured on a kilowatt-hour basis and those that are provided and measured on a kilowatt demand basis

Providing credits – 220 ILCS 16-107.5(d), (e)

- Customers charged on a kWh-basis whose generation exceeds the amount of electricity used by the customer over the billing period, the electricity provider provides a 1:1 credit on billing at the retail rate
- Same regime governs demand-based charges

Providing TOU credits – 220 ILCS 16-107.5(d-5)

- Customers charged on a kWh-basis who are on hourly pricing or time-of-use rates, the electricity provider will provide credit for excess generation during any hourly period or time-of-use period at the same price the customer would pay during that period

Community Solar Subscriptions – 220 ILCS 16-107.5(l)(1)

- Subscribing customers do not have the system behind their own meter; instead, customers receive supply credits for the value of the subscription level.



**ENVIRONMENTAL LAW
& POLICY CENTER**

Net Metering 2.0

*The Evolution of DG
Compensation Policies in
Illinois and across the Midwest*

**Illinois Power Agency “Power Hour”
April 29, 2022**

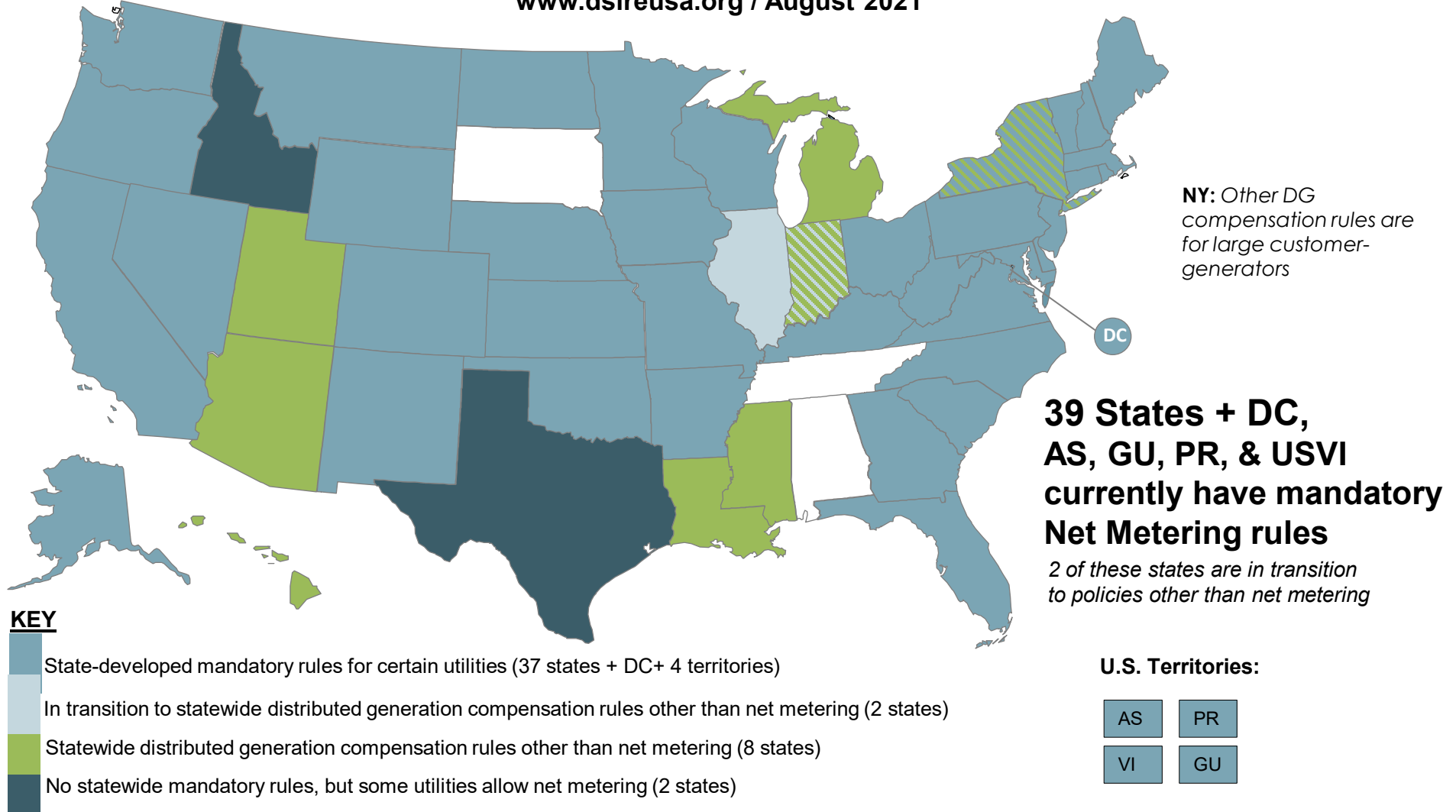


Today's Discussion

- A landscape overview of state net metering policies
- How net metering is evolving
- Midwest case studies
- Illinois transition to “value-based” DG compensation

Net Metering

www.dsireusa.org / August 2021

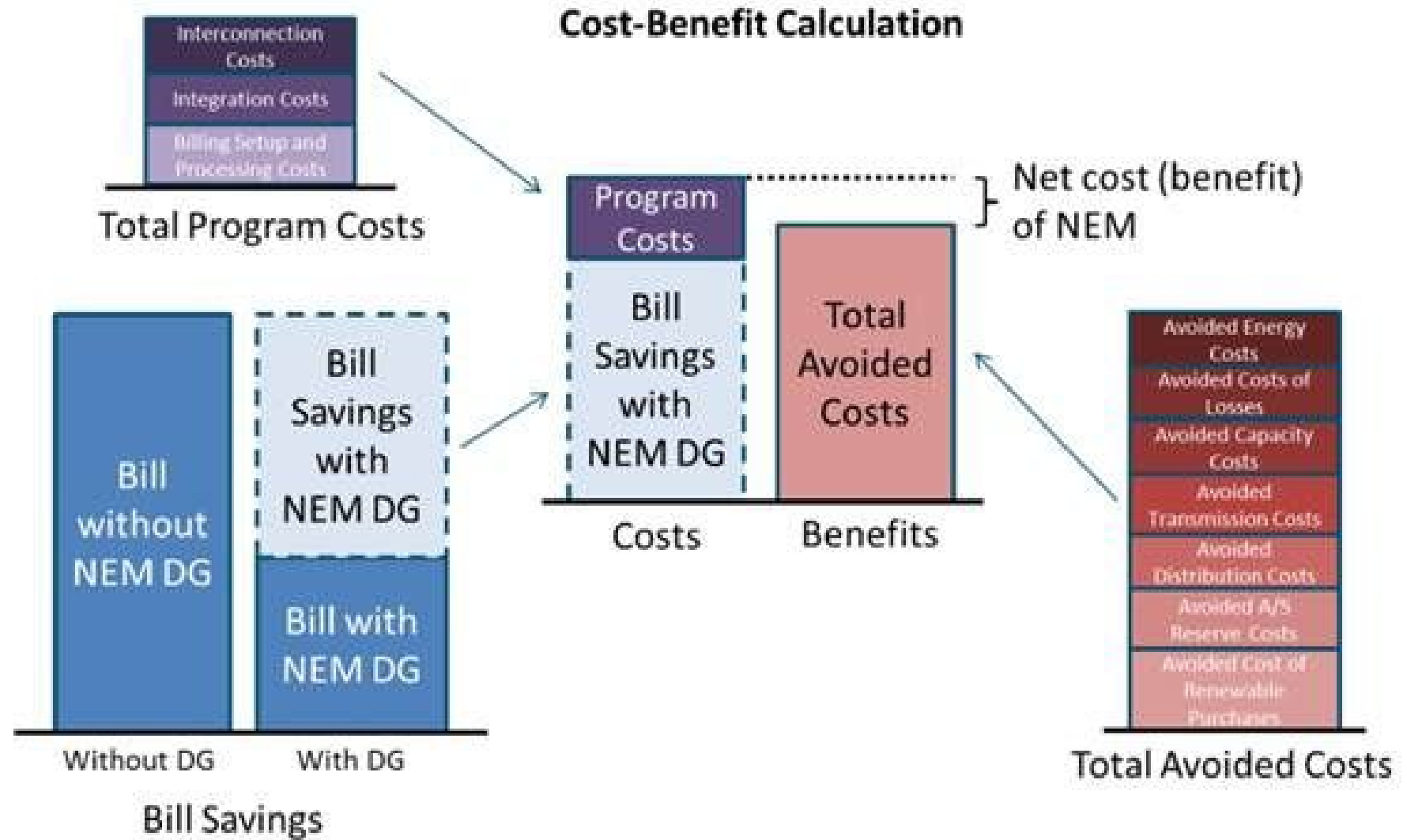




California: "Ground Zero" for NEM Reform

Formulation of the Cost-Benefit Calculation

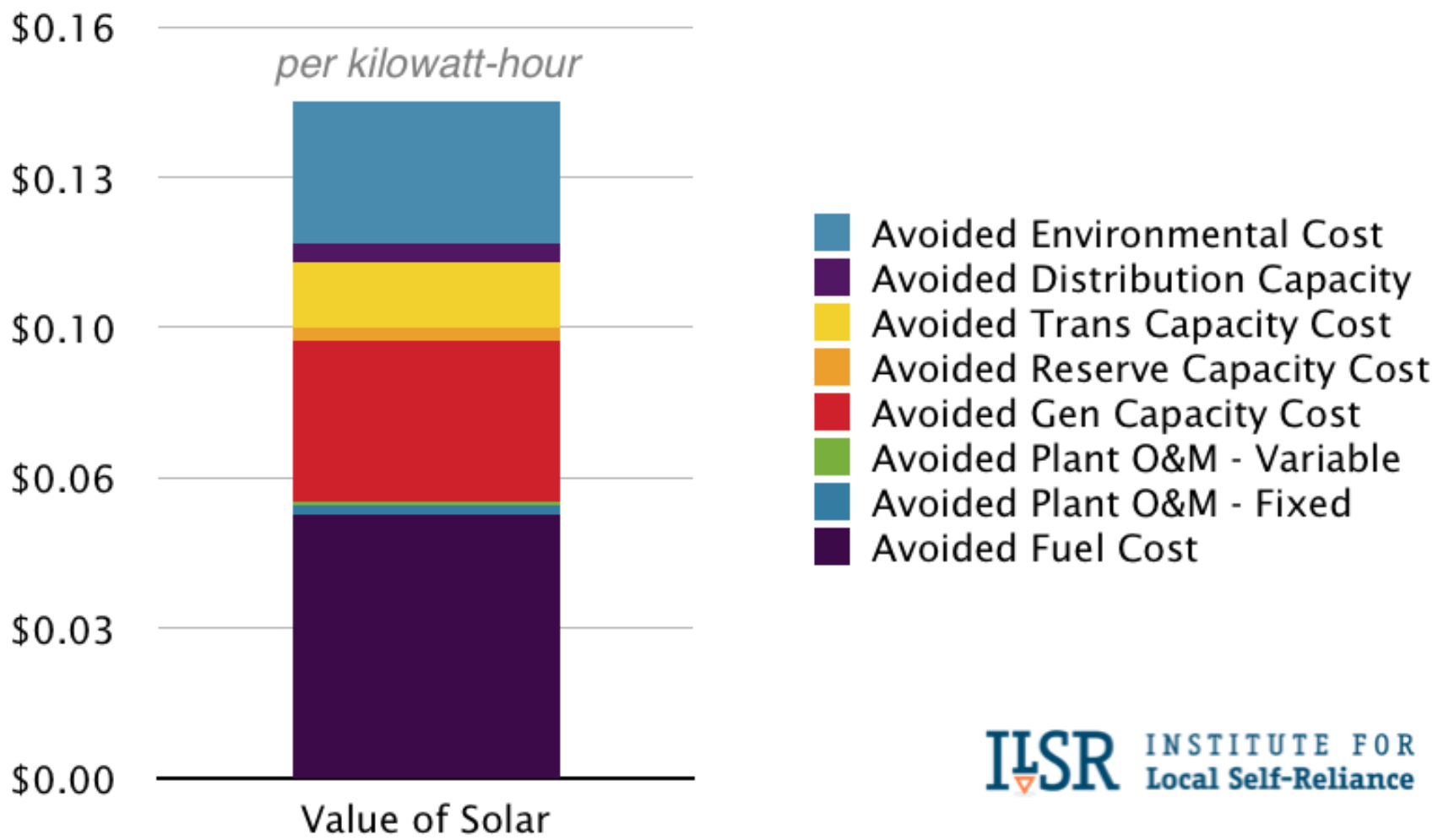
Anatomy of the NEM "cost-shift" dispute



(from E3's California Net Energy Metering Draft Cost Effectiveness Evaluation)

Alternative Framework: The “Value of Solar”

Figure B: Preliminary Minnesota Value of Solar (Xcel Energy)



Midwest Case Studies

- Indiana
- Iowa
- Michigan



Contrasting approaches:

Indiana: *“legislate and litigate”*

- IN Legislature replaced retail NEM with less favorable “EDG” tariff
- Dispute over methodology will likely end up in Indiana Supreme Court

Iowa: *“compromise and kick-the-can”*

- Stalemate on Iowa “solar tax” led to legislative compromise
- IUB will implement “value of solar” tariff when DG penetration hits 5% of statewide peak demand

Michigan: *“evolution and uncertainty”*

- Retail NEM replaced with “inflow/outflow” DG tariff
- Details litigated in each utility rate case

Illinois charts new course to “value-based” DER compensation

FEJA (2016) adopts “DG Rebate” with NEM transition at 5% DG penetration

CEJA (2021) adds guardrails and “grid planning” process to inform investigation of DER value

Illinois NEM under CEJA: 220 ILCS 5/16-107.5

Eliminates 2 MW system size cap. NEM systems can now be sized for *future* energy requirements.

Creates predictable transition by replacing 5% program cap with a specific “threshold date” (Jan. 1, 2025).

Creates safe harbor for all NEM customers registered before threshold date.

Establishes clearer rules for community solar bill crediting.

DG Rebate Prior to 2025

220 ILCS 5/16-107.6

Rebates available to qualifying DG systems < 5 MW that contain a “smart inverter” and accept utility’s tariffed inverter settings.

For non-residential customers, rebates set at \$250/kW of DG plus \$250/kWh nameplate for any associated energy storage.

Residential customers can *either* elect retail NEM or a DG rebate valued at \$300/kW of DG plus \$300/kWh nameplate of associated energy storage.

Once a rebate is issued, NEM bill credits provided only for “kilowatt-hour supply charges” (which include energy, capacity, transmission and PEA)

Illinois Transition to “Value-Based” Compensation: 220 ILCS 5/16-107.6(e)

By no later than June 30, 2023, the ICC must open a **statewide investigation** “into the value of, and compensation for, distributed energy resources.” The Commission must consider the utility’s **integrated grid plan** to help identify the value of DERs.

Investigation must establish a “base rebate” (i.e. “consistent across the state”) of no less than \$250/kW. Shall also establish additional compensation for “additive services” that may “vary by location, time, performance characteristics, technology types, or other variables.”

After Jan. 1, 2025 all retail net metering must transition to the value-based compensation framework.

Closing Thought: Local Solar+Storage Resources Have Great Value in Illinois!

Expanding Rooftop and Community Solar by 8.5 GW by 2030 AND Continuing to Build-Out Utility Scale Renewables...

Saves Illinois ratepayers \$3.44 BN

Reduces electricity rates by 43% compared to today

Creates nearly 63,000 more jobs by 2030

Reduces greenhouse gases by over 11% more

**LOCAL
SOLAR
FOR ALL**



Source: https://www.vibrantcleanenergy.com/wp-content/uploads/2021/05/VCE-CCSA_IL_Report.pdf

Thank you!

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Questions?



For more information, visit the IPA Website

www2.illinois.gov/sites/ipa/Pages/default.aspx