Trends in Net Metering Successor Tariff Development Across the U.S.

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Autumn Proudlove
Sr. Policy Program Director
afproudl@ncsu.edu

Brian Lips
Sr. Project Manager
bclips@ncsu.edu
About the NC Clean Energy Technology Center

- UNC System-chartered Public Service Center administered by the College of Engineering at North Carolina State University
- Mission is to advance a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies, practices, and policies.
- Objective research, analysis, & technical assistance – no advocacy
- Manage the Database of State Incentives for Renewables and Efficiency (DSIRE – www.dsireusa.org)
About DSIRE Insight
Agenda

• What is net metering and why are changes under consideration?
• Net metering successor structures and trends
• States recently adopting changes to net metering policies
• States to watch for net metering reforms
What is Net Metering?

• Allows for the flow of electricity both to and from the customer
  – Typically one-to-one offsetting of electricity production and consumption
  – Monthly excess generation treated differently

• States began adopting net metering policies in the 1980’s
Customer Credits for Monthly Net Excess Generation (NEG) Under Net Metering

www.dsireusa.org / March 2015

Net Metering and Distributed Generation Compensation Policies

www.dsireusa.org / October 2020

No statewide DG compensation rules

Statewide DG compensation rules other than net metering

In transition from net metering to other statewide DG compensation rules

Per-kWh credit adjustors or non-bypassable charges

No statewide mandatory net metering rules, but some utilities offer net metering

State-developed mandatory net metering rules for certain utilities
Number of Solar Policy Actions 2015 - 2019

Number of States Taking Solar Policy Actions 2015 - 2019
Why are NEM Reforms Being Considered?

• **Concerns about cost-shifting**
  – Majority of fixed & demand-based costs for residential customers generally recovered through variable rates; bill reduced through NEM
  – Others suggest benefits of DG negate or reverse cost shift

• **Increasing solar capacity on the grid**
  – Increases the impact of any potential cost shift
  – Potential system impacts

• **Efforts to become more granular in solar valuation and compensation**
  – NEM is easy to understand, but a rough mechanism

• **Utilities reaching net metering aggregate caps**
  – Sometimes an impetus for considering changes
NEM Successor Tariff Structures

• Most states considering net metering successor tariffs have either (1) continued net metering or (2) moved to net billing
  – Net Billing: Electricity produced may be consumed directly on-site (effectively a retail rate credit); excess generation is credited at a separate rate
  – Net billing has many possible variations – netting period, credit rate
• Another possible structure is a “Buy-All, Sell-All” arrangement
• Other reforms include incentive components, additional fees (demand charges, standby charges, etc.) or making certain charge non-bypassable, and coordination with other utility programs
NEM Successor Tariff Structures

• **Net Metering:**
  – California (TOU, added non-bypassable charges)
  – New Hampshire (added non-bypassable charges)
  – Maine, Nevada (restored net metering after making changes)
  – New York (smaller projects – with additional fee)
  – Arkansas

• **Net Billing:**
  – Arizona, Louisiana, Mississippi, Utah
  – Indiana (in transition)
  – Michigan (being implemented in utility rate cases)
  – New York (larger projects – VDER)
Net Metering Policy Trends

- States considering changes to **export credit rates & netting period**
- Undertaking **studies** to inform net metering credit rate changes
- States and utilities considering **additional fees** for net metering customers (demand charges, standby charges, etc.)
- States establishing **transition points** (dates or capacity thresholds) for net metering reforms
Net Metering Policy Trends

- States grandfathering existing net metering customers under current rules
- Applying gradualism to net metering tariff changes
- Engaging stakeholders and efforts to reach compromise, with varying degrees of success
- Developing approaches to encourage use of battery storage
- States taking very different approaches, but overall most changes reducing solar value proposition not being approved
Authorized Changes (April 2019 – Present)
Arkansas

- Act 827 of 2015 and Act 464 of 2019

- PSC Issued Order in June 2020
  - Retained retail rate net metering
  - Allows utilities to request a demand component starting in 2023
  - Allows utilities to request an alternative net metering class and rate structure starting in 2023
  - Grandfathering for 20 years
Louisiana

- Commission proceeding opened in December 2015 to modify net metering

- Settlement Agreement approved in September 2019

- Transition to net billing
  - Exports credited at avoided cost rate (locational marginal prices)
  - Aggregate cap removed
  - Grandfathering for 15 years
Maine

- Buy-All, Sell-All adopted in March 2017
- State returns to net metering in July 2019
Michigan

- **S.B. 437** and **S.B. 438** of 2016 directed the PSC to develop a new DG tariff

- “Inflow-Outflow” (net billing) model recommended in 2018

- Utilities proposing inflow-outflow tariffs
New York

• Reforming the Energy Vision (REV)
  – Comprehensive transformation of the state’s retail electricity market

• Value of Distributed Energy Resources (VDER)
  – Approved initial value stack
    • Energy Value (LMP)
    • Capacity Value
    • Environmental Value
    • Demand Reduction
    • Locational System Relief Value

• Mass Market Net Metering Successor Approved in July 2020
  – Takes effect January 2022
  – Traditional net metering with added monthly Customer Benefit Contribution Charge
States to Watch
California

• “Net Metering 2.0” adopted in January 2016

• “Net Metering 3.0” proceeding opened in August 2020
  – Docket No. 20-08-020
Connecticut

- SB 9 (2018) transitions from NEM to net billing
  - Compensation rate and netting period to be decided by Commission; either real-time, day, or fraction of a day

- Commission opened new proceeding in June 2018

  - Allows netting period to be up to one month
Illinois

• The Future Energy Jobs Act (2016) phases out net metering, replacing it with DG rebates

• New Proceeding opened in April 2020
Kentucky

- Kentucky Power Company proposed ending net metering on January 1, 2021

- Transition to a program based on S.B. 100 (2019)
  - Two netting periods per day: 8 AM – 6 PM and 6 PM – 8 AM
South Carolina

- H.B. 3659 requires transition from net metering to “Solar Choice Tariffs” by June 1, 2021.

- Settlement agreement between Duke Energy and solar advocates:
  - Uses 4-period TOU rates
  - Monthly netting within each TOU period; critical peak exports netted against peak imports
  - Excess generation credited at avoided cost
Utah

- Net Metering closed to new DG customers on November 15, 2017; grandfathering through December 31, 2035.

- Interim net billing program has export credit rate of 9.2 cents/kWh with 15-minute netting

- Rocky Mountain Power proposed net billing program: average 1.526 cents/kWh export credit rate with 15-minute netting
Additional States to Watch

- Indiana
- North Carolina
- Virginia
- Washington
Questions?

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