An Overview of Net Metering Reforms Across the U.S.

MI Power Grid DER Rate Design Kick-Off Meeting
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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 the 50 States of Solar

• Quarterly publication detailing state and utility distributed solar policy & rate design changes
  – Net Metering
  – DG Valuation/NEM Cost-Benefit Studies
  – Residential Fixed Charges & Minimum Bills
  – Residential Demand Charges & Solar Charges
  – Community Solar
  – Third-Party Ownership
  – Utility-Led Rooftop Solar
• Regulatory actions, bills passing at least one chamber
• States, IOUs, public power utilities with >100,000 customers

https://www.dsireinsight.com/publications
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 / March 2021

- No statewide DG compensation rules
- Statewide DG compensation rules other than net metering
- In transition from net metering to other statewide DG compensation rules
- No statewide mandatory net metering rules, but some utilities offer net metering
- State-developed mandatory net metering rules for certain utilities

- Per-kWh credit adjustors or non-bypassable charges
- Other DG compensation rules are for large customer-generators

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2020 Distributed Solar Policy & Rate Design Action

46 States + DC took action on distributed solar policy and rate design during 2020
Customer Credits for Monthly Net Excess Generation (NEG) Under Net Metering

2020 Proposed or Enacted Changes to Net Metering Policies by Type

- Aggregate Cap
- Credit Rates, Customer Class, or Successor Tariff
- Compensation for Net Excess Generation
- System Size Limits
- Other Changes to NEM Rules

34 States + DC took action on net metering during 2020
Net Metering Policy Trends

• States considering changes to **export credit rates & netting period**
  – Many different variations possible
  – Credit rates: retail rate, TOU rates, value of solar or DER, avoided cost, adders, locational rates, etc.
  – Netting intervals: monthly, instantaneous, 15 / 30 / 60 minute intervals, time-of-day netting, etc.
  – Almost all successor tariffs allow self-consumption
Net Metering Policy Trends

• Examples of Credit Rate/Netting Period Changes:
  – Arizona – Phasing down to avoided cost
  – California – TOU rates
  – Indiana – 1.25 times avoided cost rate
  – Louisiana – Avoided cost rate
  – New York – Value of DER rate (larger customers)
  – Utah – Rate includes value for avoided energy, generation capacity, T&D capacity, line losses, integration costs
  – Vermont – Credit rate adjustors

• Some states have elected to continue retail rate net metering
2020 Action on Distributed Solar Valuation and Net Metering Studies

17 States + DC took action on distributed solar valuation during 2020
Net Metering Policy Trends

- Undertaking **studies** to inform net metering credit rate changes
- Examples:
  - **Connecticut** - PURA value of DER study conducted to inform NEM changes
  - **Idaho** – PUC requiring utilities to conduct on-site generation studies before addressing NEM reforms
  - **New Hampshire** – Value of DER study expected March 2022, locational value of DG study completed
Net Metering Policy Trends

• States establishing **timelines to transition** to net metering successor tariffs

• Examples:
  – **Arkansas** – Utilities can propose alternatives beginning in 2023
  – **Iowa** – Value of solar rate to be developed after July 2027
  – **Indiana** – Utilities moving to new tariff once aggregate cap (1.5%) is reached
  – **South Carolina** – Successor to take effect June 2021
  – **Virginia** – Proceeding to be opened when utility reaches 3% installed net-metered capacity
  – **Washington** – Utilities may establish successor tariffs once aggregate cap (4%) is reached or June 30, 2029
10 Actions in 7 States related to demand or solar charges were under consideration during 2020.
Net Metering Policy Trends

• Strong movement away from mandatory residential demand charges
  – None proposed by IOUs in 2019 or 2020
  – Evergy demand charge overturned by KS Supreme Court

• Utilities proposing additional fees based on DG system capacity
  – Alabama Power (approved), New York (approved), Duke Energy (SC, pending), Dominion Energy (SC, pending), Evergy (KS, rejected)

• Interest growing in minimum bills as a DG rate design element
  – Duke Energy (SC), Evergy (KS), Virginia (shared solar)
Net Metering Policy Trends

• States **grandfathering** existing net metering customers under current rules
  – Time period varies, typically 15-20 years

• **Engaging stakeholders** and efforts to reach compromise, with varying degrees of success

• Considering **other DERs**, such as **storage**, as part of tariff design
  – States authorizing net metering for projects paired with storage
  – Innovative programs – Hawaii Smart Export, APS R-TECH, New York Hybrid Tariff
Net Metering Policy Trends

- States are taking very different approaches!
  - Credit rates
  - Netting interval
  - Grandfathering
  - Storage treatment
  - REC ownership
  - Credit rate changes or lock-in
  - Cost recovery
  - Additional fees or minimum charges
  - Carryover
  - System size
  - Aggregate cap
  - Incentives
  - Customer type
  - Metering
Thank You!

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