

50

STATES OF SOLAR

Q3 2024 Quarterly Report
Executive Summary



NC CLEAN ENERGY
TECHNOLOGY CENTER

DSIRE *insight*

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The NC Clean Energy Technology Center is a UNC System-chartered Public Service Center administered by the College of Engineering at North Carolina State University. Its mission is to advance a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies, practices, and policies. The Center provides service to the businesses and citizens of North Carolina and beyond relating to the development and adoption of clean energy technologies. Through its programs and activities, the Center envisions and seeks to promote the development and use of clean energy in ways that stimulate a sustainable economy while reducing dependence on foreign sources of energy and mitigating the environmental impacts of fossil fuel use.

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PREVIOUS EDITIONS AND OTHER 50 STATES REPORTS

Full editions of and annual subscriptions to the 50 States of Solar may be purchased [here](#).

The 50 States of Solar is a quarterly publication. Previous executive summaries and older full editions of *The 50 States of Solar* are available [here](#).

The NC Clean Energy Technology Center also publishes the *50 States of Grid Modernization*, the *50 States of Electric Vehicles*, and the *50 States of Power Decarbonization* on a quarterly basis. Executive summaries of these reports may be found [here](#). Please contact us for older issues of the 50 States of Solar.

ABOUT THE REPORT

PURPOSE

The purpose of this report is to provide state lawmakers and regulators, electric utilities, the solar industry, and other stakeholders with timely, accurate, and unbiased updates on state actions to study, adopt, implement, amend, or discontinue policies associated with distributed solar photovoltaics (PV). This report catalogues proposed and enacted legislative, regulatory policy, and rate design changes affecting the value proposition of distributed solar PV during the most recent quarter, with an emphasis on the residential sector.

The 50 States of Solar series provides regular quarterly updates of solar policy developments, keeping stakeholders informed and up to date.

APPROACH

The authors identified relevant policy changes through state utility commission docket searches, legislative bill searches, popular press, and direct communication with stakeholders and regulators in the industry.

Questions Addressed

This report addresses several questions about the changing U.S. solar policy landscape:

- How are state legislatures, regulatory authorities, and electric utilities addressing fast-growing markets for distributed solar PV?
- What changes to traditional rate design features and net metering policies are being proposed, approved, and implemented?
- Where are distributed solar markets potentially affected by policy or regulatory decisions on community solar, third-party solar ownership, and utility-led residential rooftop solar programs?

Actions Included

This report series focuses on cataloging and describing important proposed and adopted policy changes affecting solar customer-generators of investor-owned utilities (IOUs) and large publicly-owned or nonprofit utilities (i.e., those serving at least 100,000 customers). Specifically, actions tracked in these reports include:

- Significant changes to state or utility **net metering** laws and rules, including program caps, system size limits, meter aggregation rules, and compensation rates for net excess generation
- Changes to statewide **community solar** or **virtual net metering** laws and rules, and individual utility-sponsored community solar programs arising from statewide legislation
- Legislative or regulatory-led efforts to study the **value of solar, net metering**, or **distributed solar generation policy**, e.g., through a regulatory docket or a cost-benefit analysis
- Utility-initiated rate requests for **charges applicable only to customers with solar PV** or other types of distributed generation, such as added monthly fixed charges, demand charges, stand-by charges, or interconnection fees
- Utility-initiated rate requests that propose a 10% or larger increase in either **fixed charges** or **minimum bills** for all residential customers
- Changes to the legality of **third-party solar ownership**, including solar leasing and solar third-party solar power purchase agreements (PPAs), and proposed **utility-led rooftop solar** programs

In general, this report considers an “action” to be a relevant (1) legislative bill that has been passed by at least one chamber or (2) a regulatory docket, utility rate case, or rulemaking proceeding. Introduced legislation related to third-party sales is included irrespective of whether it has passed at least one chamber, as only a small number of bills related to this policy have been introduced. Introduced legislation pertaining to a regulatory proceeding covered in this report is also included irrespective of whether it has passed at least one chamber.

Actions Excluded

In addition to excluding most legislation that has been introduced but not advanced, this report excludes a review of state actions pertaining to solar incentives, as well as more general utility cost recovery and rate design changes, such as decoupling or time-of-use tariffs. General changes in state implementation of the Public Utility Regulatory Policies Act of 1978 and subsequent amendments, including changes to the terms of standard contracts for Qualifying Facilities or avoided cost rate calculations, are also excluded unless they are related specifically to the policies described above. The report also does not cover changes to a number of other policies that affect distributed solar, including solar access laws, interconnection rules, and renewable portfolio standards. Details and updates on these and other federal, state, and local government policies and incentives are available in the NC Clean Energy Technology Center’s Database of State Incentives for Renewables and Efficiency, at www.dsireusa.org.

EXECUTIVE SUMMARY

OVERVIEW OF Q3 2024 POLICY ACTION

In the third quarter of 2024, 42 states plus DC and Puerto Rico took a total of 157 actions related to distributed solar policy and rate design (Figure 1). Table 1 provides a summary of state actions related to DG compensation, rate design, and solar ownership during Q3 2024. Of the 157 actions cataloged, the most common were related to DG compensation rules (51), followed by residential fixed charge and minimum bill increases (48), and community solar (36).

Table 1. Q3 2024 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	51	32%	25 + DC, PR
Residential fixed charge or minimum bill increase	48	31%	27 + DC
Community solar	36	23%	20 + DC
DG valuation or net metering study	16	10%	12 + DC, PR
Residential demand or solar charge	4	3%	3
Third-party ownership of solar	2	1%	1
Utility-led rooftop PV programs	0	0%	0
Total	157	100%	42 States + DC, PR

Note: The "# of States/ Districts" total is not the sum of the rows, as some states have multiple actions. Percentages are rounded and may not add up to 100%.

TOP FIVE SOLAR POLICY DEVELOPMENTS OF Q3 2024

Five of the quarter's top policy developments are highlighted below.

Appalachian Power Files Net Metering Successor Tariff With Virginia Regulators

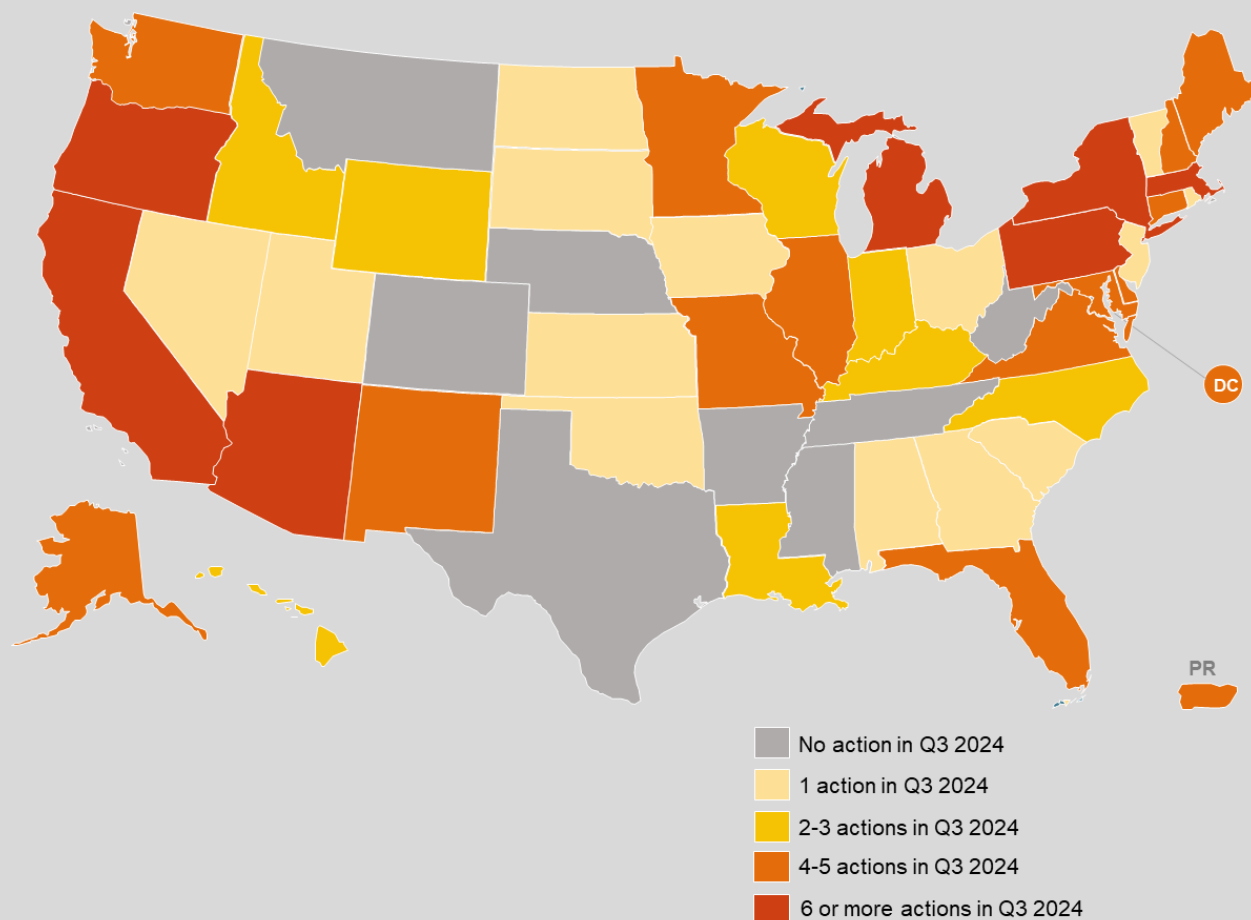
Appalachian Power Company submitted a new Net Metering Service II program to the state Corporation Commission for approval. The new program would net generation and consumption on an hourly basis, with excess generation credited at the avoided cost rate. Existing Net Metering Service I customers could stay on their rate for 25 years, which utilizes monthly netting.

Connecticut Regulators Approve New Rules for Multi-Family Net Metering

The Public Utilities Regulatory Authority authorized new rules for multi-family building participation in the Residential Renewable Energy Solutions Program; previously, multi-family

buildings fell under the non-residential program. The new rules outline how owners of master-metered properties (i.e., properties where tenants do not have a relationship with the utility) must pass on net metering benefits to tenants via qualified building upgrades.

Figure 1. Q3 2024 Action on DG Compensation, Rate Design, & Solar Ownership Policies, by Number of Actions



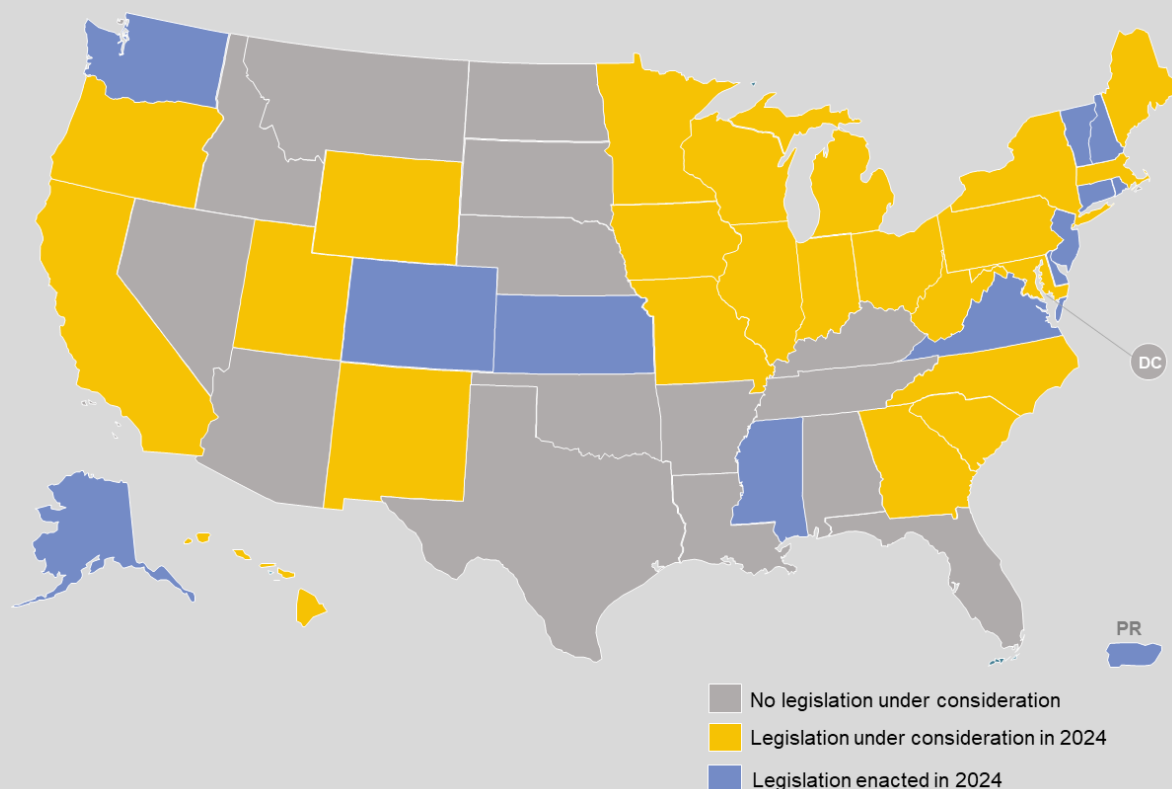
California Governor Vetoes Changes to Multi-Tenant and Public School Net Metering

The Governor of California rejected a bill that would have overturned the California Public Utilities Commission’s decision and allowed 15-minute interval netting for non-residential customers, including public schools and multi-tenant building owners, under the Virtual Net Energy Metering Tariff and Net Energy Metering Aggregation Tariff. Instead, the current buy-all, sell-all mechanism for non-residential participants in these tariffs will continue, pursuant to the Commission’s November 2023 decision.

Florida Municipal Utility Details Planned Residential and Solar Rate Design Changes

The Orlando Utilities Commission launched a new website outlining its PeakSHIFT multi-year rate re-design. The utility plans a gradual shift of its net metering credit from the retail energy and retail fuel rates to only the retail fuel rate. It will also implement a new graduated distribution charge for residential and small commercial customers, based on their peak demand.

Figure 2. DG Compensation, Rate Design, and Solar Ownership Legislation Under Consideration in 2024 (as of early October 2024)



Alaska Regulators Propose Aggregate Cap Increase for Net Metering

The Regulatory Commission of Alaska began a new discussion regarding the aggregate capacity limit for net metering. The proposed changes would increase the cap from 1.5% to 20% of the electric utility's average retail demand. The Commission opened the proceeding at the request of the Commission Staff, who argued that increasing the cap would be an easier process than utilities requesting case-by-case exceptions.

THE BIG PICTURE: INSIGHTS FROM Q3 2024

States Refining Multi-Family Building Participation in Net Metering

More states are beginning to integrate multi-family buildings into their residential net metering programs, spurred by a combination of equity considerations, Solar for All implementation, and a general desire to increase customer access to solar. **California's** legislature passed a bill that would have allowed non-residential participants in virtual net metering and net metering aggregation, such as public schools and multi-tenant building owners, to net production and consumption in 15-minute intervals, as opposed to a buy-all, sell-all structure; however, the Governor vetoed the bill. **Connecticut** regulators approved new rules for multi-family participation in the state's residential net metering program; originally, multi-family buildings fell under the non-residential program. Puget Sound Energy in **Washington** proposed a new net metering schedule for multi-family buildings that would allocate solar energy credits to multiple occupants of a single location.

States Reviewing Size Caps for Solar Systems

States are also revising size limits for net metering systems. Many revisions are increasing size limits, allowing larger systems to participate in these programs. Evergy **Kansas** submitted updated tariffs in compliance with recently enacted legislation that increases the maximum system size to a flat 150 kW for all customers, in addition to a limit based on the customer's expected load. **Michigan** regulators clarified that a 2023 bill implemented a maximum aggregate site size of 550 kW, along with a maximum system size of 110% of annual electricity consumption. In **Minnesota**, regulators are discussing the definition of "capacity," specifically whether a net metering system's capacity should be based on nameplate capacity or actual export capacity at the point of interconnection. **Washington's** Puget Sound Energy is aiming to remove the minimum and maximum size under one of its PV compensation rates – the current range is 100 kW to 120% of annual load.

States Re-Examining Previously Approved Solar Compensation Mechanisms

Solar compensation credit values and methodologies go through regular changes, but this quarter, several changes have been spurred by disagreements over previous decisions, as opposed to routine updates or general reviews. The **Arizona** Corporation Commission is reviewing the state's Resource Comparison Proxy rate methodology, which functions as the net metering credit rate; the proxy rate is limited to an annual 10% decrease, but the Commission wants to fully lower it to equal the true avoided cost. The **Minnesota** Public Utilities Commission denied petitions regarding a previous decision about community solar credit valuation; it upheld its previous decision to implement a value of solar-based credit for the new community solar program. The **Wyoming** Appellate Court overturned a Public Service Commission ruling that had lowered a cooperative utility's net metering credit from the retail rate to the avoided cost rate, on the grounds that avoided cost was not a just or reasonable rate for compensation.

FULL REPORT DETAILS & PRICING

FULL REPORT DETAILS

Content Included in the Full Quarterly Report:

- Detailed policy tables describing each pending and recently decided state and utility action regarding:
 - Net Metering
 - Distributed Solar or DG Valuation
 - Community Solar
 - Residential Fixed Charge and Minimum Bill Increases
 - Residential Solar Charges (Demand Charges, Standby Charges, & Grid Access Charges)
 - Third-Party Ownership
 - Utility-Led Rooftop Solar
- Links to original legislation, dockets, and commission orders for each policy action
- Summary maps of action for each policy category above
- Excel spreadsheet file of all actions taken during the quarter and separate Powerpoint file of all summary maps available upon request
- Qualitative analysis and descriptive summaries of solar policy action and trends
- Outlook of action for the next quarter

WHO SHOULD PURCHASE THIS REPORT

The 50 States of Solar allows those involved in the solar and electric utility industry to easily stay on top of legislative and regulatory changes. The report provides a comprehensive quarterly review of actions, an undertaking that would take any one business or organization weeks of time and thousands of dollars in staff time. At a cost of \$500 per issue (or \$1,500 annually), the 50 States of Solar offers an invaluable time and financial savings. With direct links to original sources for all actions, customers may stay on top of legislative and regulatory developments between quarterly reports.

Solar Installation and Manufacturing Companies

- Identify new market opportunities, as well as changing and risky markets
- Stay on top of state policy developments relevant to your business

- Give your own team a head start in tracking legislative and regulatory proceedings

Investor-Owned and Public Power Utilities

- Learn about the approaches being taken by other utilities facing similar challenges
- Stay on top of relevant state policy developments
- Utilize an objective source of information in legislative and regulatory proceedings

Investors and Financial Analysts

- Identify new investment opportunities and emerging areas of growth, as well as risky investments
- Access rate data that is often buried in regulatory filings

Advocacy Organizations

- Learn about the diverse solar policy and rate proposals in other states
- Learn about the outcomes of other state’s policy and rate decisions
- Utilize an objective source of information in legislative and regulatory proceedings

Researchers and Consultants

- Access valuable data requiring an immense amount of time to collect first-hand
- Identify research needs to inform solar policy and rate design proceedings
- Cite an objective source in your own research and analysis

PRICING

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Subscription Type	Annual Subscription	Single Report
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