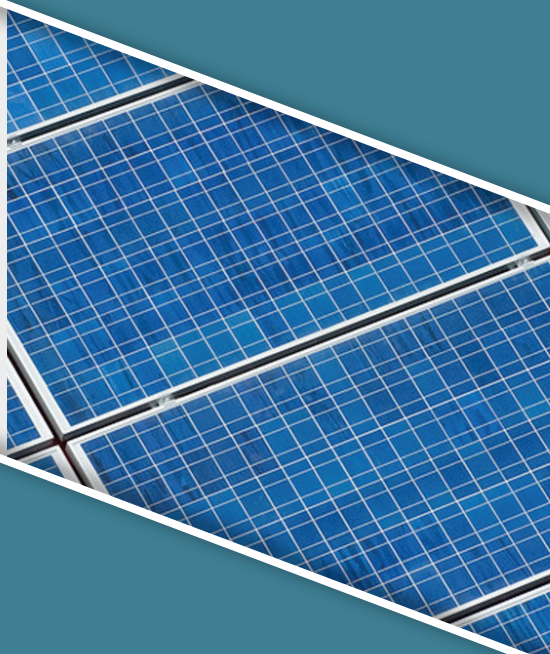


50 States of SOLAR

Q2 2020 Quarterly Report
Executive Summary



NC CLEAN ENERGY
TECHNOLOGY CENTER

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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* and the *50 States of Electric Vehicles* 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 Q2 2020 POLICY ACTION

In the second quarter of 2020, 40 states plus DC took a total of 156 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 Q2 2020. Of the 156 actions cataloged, the most common were related to DG compensation rules (54), followed by community solar (36), and residential fixed charge and minimum bill increases (27).

Table 1. Q2 2020 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	54	35%	26 + DC, FERC
Community solar	36	23%	17 + DC
Residential fixed charge or minimum bill increase	27	17%	20 + DC
DG valuation or net metering study	20	13%	13 + DC
Third-party ownership of solar	13	8%	6
Residential demand or solar charge	4	3%	3
Utility-led rooftop PV programs	2	1%	2
Total	156	100%	40 States + DC

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 Q2 2020

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

Petition Filed with FERC Regarding Federal Jurisdiction over Net Metering

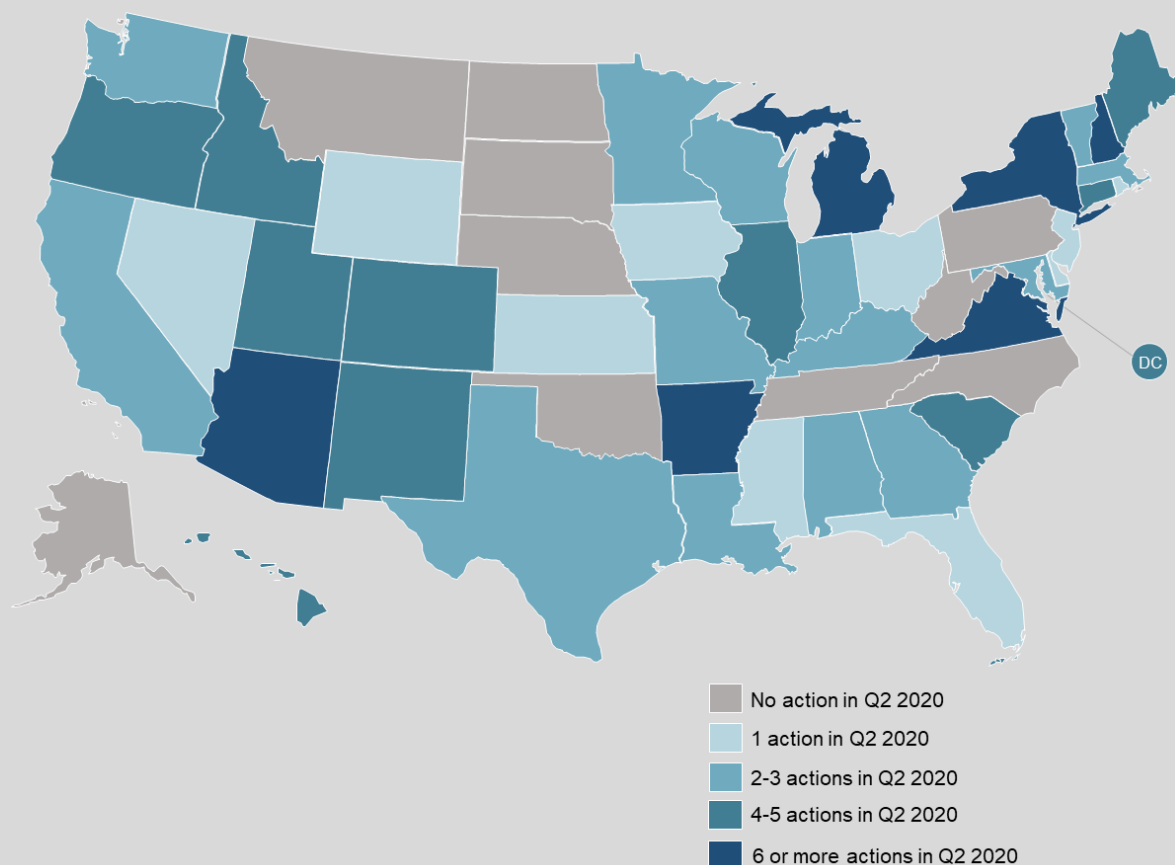
The New England Ratepayers Association filed a petition for a declaratory order related to net metering with the Federal Energy Regulatory Commission (FERC) in April 2020. The petition requests that FERC declare that there is exclusive federal jurisdiction over wholesale energy sales from generators on the customer side of the retail meter and that rates for these sales should be priced according to the Public Utility Regulatory Policies Act.

Arkansas Regulators Issue Decision to Continue Retail Rate Net Metering

In June 2020, the Arkansas Public Service Commission issued a decision retaining retail rate net metering for residential and non-residential customers without a demand component until

December 31, 2022, at which point utilities may request approval of alternative net metering rate structures. The decision also adopts a Grid Charge for non-residential demand component customers, which is initially set at \$0.

Figure 1. Q2 2020 Action on DG Compensation, Rate Design, & Solar Ownership Policies, by Number of Actions



Kentucky Power Files Net Metering Successor Tariff Proposal

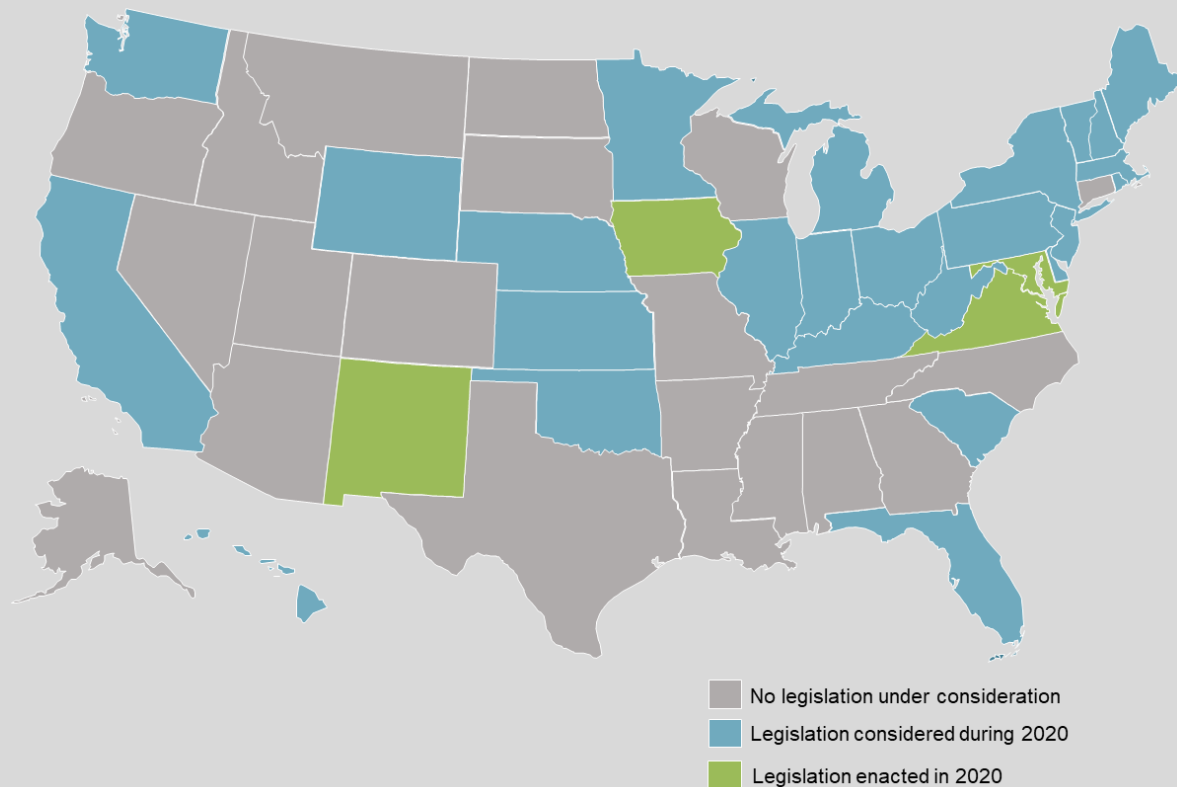
As part of its general rate case application filed in June 2020, Kentucky Power requested approval for a net metering successor tariff. The proposed tariff includes two daily netting periods (8 am to 6 pm and 6 pm to 8 am) and credits all excess generation at 3.659 cents per kWh. The proposal also includes grandfathering for existing net metering customers for up to 25 years.

Hawaii Launches Phase 2 of the Community-Based Renewable Energy Program

The Hawaii Public Utilities Commission launched Phase 2 of the state’s Community-Based Renewable Energy program in April 2020. Phase 2 increases the size of the existing program

substantially, from 8 MW to 235 MW. The first tranche of small projects will use the same credit rates as Phase 1 of the program, while project developers will propose their own credit rates in their bids for larger projects.

Figure 2. States Considering DG Compensation, Rate Design, and Solar Ownership Legislation During 2020 (as of 7/7/2020)



Illinois Commerce Commission Opens Proceeding to Set DG Rebate Value

In April 2020, the Illinois Commerce Commission opened an investigation to set the value for the residential DG rebate that will eventually replace retail rate net metering in the state, pursuant to the Future Energy Jobs Act. Ameren Illinois claims that it has reached the 3% DG penetration rate, which triggers the required process to set the rebate value. The non-residential DG rebate is currently set at \$250 per kW.

THE BIG PICTURE: INSIGHTS FROM Q2 2020

Broad Opposition to Federal Jurisdiction Over Electricity Sales from Customer-Generators

The spotlight was on the Federal Energy Regulatory Commission (FERC) during Q2 2020, as the Commission considered a petition filed by the New England Ratepayers Association requesting a declaratory ruling that FERC has jurisdiction over electricity sales from customer-generators. If approved, this petition would have the effect of dismantling state net metering policies and imposing uniform federal rules for the treatment of excess generation. Stakeholders have expressed broad opposition to the petition, with over 50,000 comments filed in opposition from consumers, state utilities commissions, the National Association of Regulatory Utility Commissioners, the American Public Power Association, the National Rural Electric Cooperative Association, and many others. Relatively few groups filed comments in support of the petition, and no investor-owned utilities filed comments on the petition. FERC dismissed the petition on procedural grounds in July 2020.

States Establishing Future Triggers for Net Metering Successor Tariff Development

Rather than making immediate reforms to net metering programs, many states are establishing dates or levels of installed DG capacity (and sometimes both) that trigger the development of a net metering successor tariff. In Arkansas, utilities may propose alternative compensation structures beginning in 2023, while the Iowa Utilities Board will begin to develop a value of solar methodology for compensation after July 1, 2027. In Illinois, the process to determine the value of the DG rebate program replacing retail rate net metering is triggered when a utility reaches 3% installed DG capacity. Still, other states have established dates or capacity thresholds when net metering successors will go into effect.

States and Utilities Considering Metering and Billing Infrastructure Issues Related to DG Compensation Programs

As states and utilities consider more granular compensation structures for DG customers, billing and metering infrastructure issues are also being addressed. In Michigan, Indiana Michigan Power requested approval for a temporary modification to its recently approved inflow-outflow tariff that would apply the outflow credits to the entire monthly bill instead of the monthly bill minus the customer service charge. This change was requested in order to give the utility time to update its billing system. Idaho Power also requested approval for a temporary change to its small general service net metering tariff, allowing customers to avoid a second meter investment, as the tariff requirement is likely to be reevaluated soon. In Kentucky, Kentucky Power filed a net metering successor tariff proposal that utilizes two daily netting periods, with the intention of moving toward hourly netting in the future if the utility's proposed advanced metering infrastructure deployment is approved.

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
50 States of Solar Report	\$1,500	\$500
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All-Tech Subscription <i>(Includes 50 States of Solar report, 50 States of Grid Modernization report, & 50 States of Electric Vehicles report; plus biweekly legislative & regulatory tracking; policy data sheets, & quarterly webinars for solar, grid modernization/energy storage, & electric vehicles)</i>	\$10,500	N/A

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