

THE CASE FOR REFORMING NET METERING COMPENSATION: WHY REGULATORS AND COURTS SHOULD REJECT THE PUBLIC POLICY AND ANTITRUST ARGUMENTS FOR PRESERVING THE STATUS QUO

*By Harvey L. Reiter and William Greene**

Synopsis: Over the last few years there has been explosive growth in private rooftop solar installations. That growth has been fueled by a combination of tax incentives, rapidly dropping prices for rooftop photovoltaic systems, and, of central focus to this article, utility “net metering programs” intended to accommodate the use of solar power and other types of customer-generated electricity. But as the market for these products has taken off, regulators and investor-owned utilities as well as not-for-profit municipal utilities and rural electric cooperatives, have been grappling with the impact of their net metering policies on consumer electricity rates for non-solar ratepayers.

Under the typical net metering program, utility customers with rooftop solar installations sell electricity in excess of their needs to the utility. They are often paid for this energy at the same rate they are charged for the electric service they purchase and the two amounts are netted on the monthly bill. As the number of rooftop installations has grown, many utilities and their regulators have expressed two interrelated concerns: that existing net metering policies subsidize private solar by forcing non-solar ratepayers to pay fixed grid costs properly attributable to solar users, and that these policies give private solar an unfair advantage over larger scale (and lower cost) wholesale solar developers, other wholesale developers, and marketers of renewable energy. Manufacturers and marketers of rooftop solar installations have countered that the benefits of rooftop solar exceed the costs and that policies to cut back on the compensation paid to homeowners for electricity sold back to the utility stifle their ability to compete with the local utilities to supply power to consumers. And, at least one of these companies has argued that reducing net metering compensation violates antitrust laws.

Are reductions to net metering compensation programs justified as a matter of public policy? Regardless, can those dissatisfied with their compensation attack the reductions as “anticompetitive” under the antitrust laws? Or would such anti-

* Mr. Reiter and Mr. Greene are partners, respectively, in the Washington, D.C. and Minneapolis offices of Stinson Leonard Street LLP. Mr. Reiter serves as Executive Articles Editor of this Journal and Mr. Greene has served in various editorial and leadership positions with the ABA Section on Antitrust Law. The authors express their special thanks to Dr. Janice Beecher of Michigan State University’s Institute of Public Utilities, Paul Breakman of the National Rural Electric Cooperative Association, Professor Reza Debadj of the University of San Francisco Law School, Dr. Peter Fox-Penner of Boston University’s Questrom School of Business, and Ari Peskoe, of Harvard Law School’s Environmental Policy Initiative, for their thoughtful critiques of this article. The opinions expressed in this article, and of course, any mistakes, are solely those of the authors.

trust claims be barred under the state action doctrine or the filed rate doctrine? And does the applicability of the state action and filed rate doctrines depend on whether the reductions in net metering compensation are ordered by regulators, by municipal utilities or not-for-profit rural electric cooperatives?

This article examines these questions and reaches two primary conclusions:

- a reduction in the net metering compensation paid for solar power is justified as a matter of public policy because the practice of paying for solar power at the utility’s full retail rate is unfairly and inefficiently subsidizing rooftop solar to the detriment of other rate-payers;
- even if it were to be assumed that the reductions in net metering compensation are not justified as a matter of public policy and that such reductions would impair the ability of rooftop solar manufacturers to compete, under most circumstances, complaints about net metering reductions are not actionable under the antitrust laws. Leaving aside whether a complainant could prove the required elements of an antitrust violation, decisions about the compensation to be paid under net metering systems—which are, in essence, rate-making determinations—are likely immune from antitrust challenge under the state action doctrine and immune from antitrust monetary damages under the filed rate doctrine.

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I. INTRODUCTION

Use of net metering, once a rate design applicable to a tiny fraction of utility customers, has grown exponentially in recent years. As the costs of rooftop solar installations have declined sharply, while tax incentives have encouraged their deployment, customer participation in net metering programs has reached the eligibility limits set in many state statutes. As participation has increased, so has regulatory scrutiny of net metering policies. Until recently, the debate over these policies has been fought exclusively in state legislatures, before state public utility commissions, and in the case of rural electric cooperatives and municipal utilities, before their governing boards and councils. That debate—pitting unusual coalitions of environmental advocates and tea party activists on one side¹ against utilities and advocates for the poor and minorities on the other²—has centered around arguments whether current policies either (1) overcompensate customers with solar installations for the power they supply to the grid, burdening other ratepayers or (2) undervalue the benefits they provide. But the debate, at least in one case, has shifted to the courts, where sellers of rooftop solar installations have argued that revised net metering compensation schemes that make homeowner solar installations uneconomic amount to violations of the antitrust laws.

Part I of this article examines the history of net metering, how it has traditionally been structured, and why many utilities and regulators have been revisiting existing net metering programs. Part II discusses the public policy justifications for modifications to net metering programs. Part III opens with a description of the Solar City antitrust litigation and its relationship to net metering policy and then discusses the reasons why these authors conclude that the debate about net metering policy should not be resolved through antitrust lawsuits.

1. See generally Grace Wyler, *A War Over Solar Power Is Raging Within the GOP*, NEW REPUBLIC (Nov. 22, 2013), <https://newrepublic.com/article/115582/solar-power-fight-raging-gop>; Davide Savenije, *Tea Party Groups Join Solar Fight Against Utilities*, UTILITY DIVE (Nov. 12, 2013), <http://www.utilitydive.com/news/tea-party-groups-join-solar-fight-against-utilities/193643/> (“Tea Party groups across the U.S. are teaming up with the solar industry and environmental groups to advance solar-friendly policies and resist utilities’ efforts to eliminate net metering.”); Severin Borenstein, *Is Residential Solar Really the Future of Electricity Generation?*, BERKELEY BLOG (May 8, 2015), <http://blogs.berkeley.edu/2015/05/08/is-residential-the-future-of-electricity-generation/> (“The new emphasis on distributed generation has created a very unusual coalition between some traditional environmentalists and some anti-government crusaders. Parts of the tea party movement have joined the Sierra Club in advocating for ‘DG-friendly’ residential electricity tariffs, which mean high volumetric electricity charges in order to make rooftop solar economic.”)

2. See, e.g., NAT’L BLACK CAUCUS OF STATE LEGISLATORS, COMM. ON ENERGY, TRANSP., AND ENV’T, THE NEED TO DEVELOP & IMPLEMENT EQUITABLE ENERGY POLICIES 4-5 (2014) (“But those with DG on their premises do more than capture all the benefits—they also indirectly raise overall utility costs for non-participants.” Those affected will likely “be comprised of disproportionately large numbers of low-income, fixed-income, and minority households.”); see also MIA L. JONES, NAT’L ORG. OF BLACK ELECTED LEGISLATIVE WOMEN, RESOLUTION URGING EQUITABLE DISTRIBUTION OF ELECTRICITY GRID SYSTEMS, ENE-15-01 (Fl. 2014) (asserting that net metering systems push infrastructure costs “onto the backs of those who cannot afford solar installations.”).

II. BACKGROUND

A. *Development of Net Metering Policies*

Although descriptions of the term vary somewhat, at its core net metering, or net energy metering, is a means by which utilities credit customers who generate their own electricity with an offset to their utility bills for any electricity the customers supply to the utility in excess of their own needs.³ In his 2011 book, *Switching to Solar*, Robert Johnstone credits Steve Strong, a Boston-area engineer, with the installation and operation of the first net metered building in 1979.⁴ As Johnstone describes it, the solar PV system, which was funded with a grant from the Department of Energy, simply ran the Boston Edison meter “backward.”⁵ There was no formal net metering tariff, the utility simply accommodated the arrangement.⁶

In the ensuing years, several formal net metering programs were put into place. Utilities in Idaho (1980) and Arizona (1981) were the first to adopt net metering tariffs. Massachusetts regulators developed net metering rules in 1982 and in 1983 “Minnesota passed the first net metering law.”⁷ By 1988 the number of states with net metering policies had swelled to twenty-two.⁸ The Energy Policy Act of 2005 provided further impetus for the growth of net metering. It requires “each nonregulated electric utility”—a term that encompasses state and municipal utilities and rural electric cooperatives—to “consider . . . whether or not it is ap-

3. See, e.g., CARL LINVILL, JOHN SHENOT & JIM LAZAR, REGULATORY ASSISTANCE PROJECT, DESIGNING DISTRIBUTED GENERATION TARIFFS WELL: FAIR COMPENSATION IN A TIME OF TRANSITION 12 (Nov. 2013), <http://www.raonline.org/wp-content/uploads/2016/05/rap-linvillshenotlazar-faircompensation-2013-nov-27.pdf> [hereinafter RAP Study]; see also CHANDRA SHAH, DEPT’T OF ENERGY, NET METERING 3 (May 8, 2014), http://energy.gov/sites/prod/files/2014/05/f15/fupwg_may2014_net_metering.pdf (explaining that “[f]or electric customers who generate their own electricity, net metering allows for the flow of electricity both to and from the customer – typically through a single, bi-directional meter.”). The Solar Energy Industries Association describes net metering as “a billing mechanism that credits solar energy system owners for the electricity they add to the grid,” and that “allows residential and commercial customers who generate their own electricity from solar power to feed electricity they do not use back into the grid.” *Net Metering*, SOLAR ENERGY INDUS. ASS’N, <http://www.seia.org/policy/distributed-solar/net-metering> (last visited Sept. 19, 2016); Jocelyn Durkay, *Net-Metering: Policy Overview and State Legislative Updates*, NAT’L CONFERENCE OF STATE LEGISLATURES (Dec. 18, 2014), <http://www.ncsl.org/research/energy/net-metering-policy-overview-and-state-legislative-updates.aspx#term> (description of net metering is to similar effect).

4. ROBERT JOHNSTONE, SWITCHING TO SOLAR: WHAT WE CAN LEARN FROM GERMANY’S SUCCESS IN HARNESSING CLEAN ENERGY 928 (2011) (Kindle ebook).

The Carlisle House was designed to draw utility power from the grid when necessary. Conversely, when the solar cells were turning out more power than the house could use, the excess power would be fed back to the utility. A small meter mounted on the wall of the dining room told the story in kilowatts. When the utility power was drawn it ran forward. But when the PV was pumping out excess power, it ran backward

Id.

5. *Id.*

6. *Id.*; see also Robert Verzola, *Net Metering History and Logic - Part I*, CLEAN TECHNICA (Sept. 6, 2015), <http://cleantechnica.com/2015/09/06/net-metering-history-logic-part-1/>.

7. See ROBERT E. BURNS & KENNETH ROSE, PURPA TITLE II COMPLIANCE MANUAL 36 (Mar. 2014), https://www.publicpower.org/files/PDFs/PURPA%20Title%20II%20Manual%20Final_w-cover.pdf.

8. *Id.*

propriate” to adopt standards that would “make available upon request net metering service to any electric consumer that the electric utility serves”⁹ and further requires state regulatory bodies to consider adoption of their own net metering policies applicable to the utilities they regulate.¹⁰ The National Association of State Legislatures now counts at forty-four the number of states with net metering policies.¹¹

Although deployment of net metering tariffs is widespread, the net metering policies adopted by state regulatory bodies themselves have varied in a number of respects. Many states limit the size of facilities eligible for net metering.¹² State policies also differ on whether customers can rollover excess credits in one month to later periods and if so, for how long.¹³ Others limit the technology that is eligible or the percentage of utility load that can qualify.¹⁴ Finally, states have also differed on the level of compensation, or credit owed to the utility customer for any excess energy it supplies to the utility.¹⁵

B. *Reexamination of Net Metering Policies: Why Now?*

For a number of years, the North Carolina Clean Energy Technology Center run by North Carolina State University has produced quarterly and annual “50 States of Solar” reports. These reports summarize, among other things, legislative and regulatory developments in the use of solar energy.¹⁶ A recurring feature of all of its recent reports is their discussion of the large number of states that are revisiting their net metering policies.¹⁷ By its latest count, “regulators, lawmakers, or utilities in at least forty-six states studied, proposed, or enacted policy changes pertaining to net metering, valuation of distributed solar, fixed or solar charges, third-party or utility-led rooftop solar ownership, or community solar.”¹⁸ In 2015 alone, it cites “legislative or regulatory action in twenty-seven states on net metering policies.”¹⁹

9. 16 U.S.C. §§ 2621(a), (d)(11) (2009).

10. 16 U.S.C. § 2621(a). This provision, Section 1251 of the Energy Policy Act of 2005, amends section 111(d) of PURPA. Because the Title I provisions of PURPA apply only to utilities with total annual retail sales greater than 500 million kilowatthours, there are likely a number of smaller utilities that would not be required to implement net metering even if the states in which they operate otherwise require it.

11. Durkay, *supra* note 3. The North Carolina Clean Energy Technology Center puts the number somewhat lower. “As of January 1, 2016,” it says, “41 states and the District of Columbia had mandatory net metering rules for certain or all utilities.” Benjamin Inskeep et al., N.C. CLEAN ENERGY TECH. CTR. & MEISTER CONSULTANTS GRP., *The 50 States of Solar: 2015 Policy Review* 13 (Feb. 2016), https://ncclean-tech.ncsu.edu/wp-content/uploads/50-SoS-Q1-2016_Final.pdf.

12. See BURNS & ROSE, *supra* note 7, at 35-37.

13. Durkay, *supra* note 3.

14. *Id.*

15. *Id.*

16. See, e.g., Inskeep et al., *supra* note 11. The Center also produces the widely cited DSIRE (Database of State Incentives for Renewables & Efficiency) on renewable legislation for the Department of Energy. N.C. CLEAN ENERGY TECH. CTR., DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY, <http://www.dsireusa.org>.

17. Inskeep et al., *supra* note 11, at 19.

18. *Id.* at 11 (“In 2015, regulators, lawmakers, or utilities in at least 46 states studied, proposed, or enacted policy changes pertaining to net metering, valuation of distributed solar, fixed or solar charges, third-party or utility-led rooftop solar ownership, or community solar.”)

19. *Id.* at 13.

What is fueling this activity? In his understated way, Boston University's Peter Fox-Penner puts the problem succinctly. Net metering, he says, "may be a good incentive policy but it is not a particularly accurate price signal."²⁰

Although, as noted above, state policies vary widely, there are two longstanding features common to the net metering policies of most states. The first is compensation. Under what the National Council of State Legislatures calls "conventional net metering," customers who generate excess energy are credited for the excess at their supplying utility's full retail rate.²¹ The vast majority of states with net metering policies also place caps on eligibility for net metering. Berkeley's Severin Borenstein attributes these factors—along with a more recent development—virtual or community net metering—and a precipitous drop in the cost of PV solar installations to the elevated attention utilities, legislators and regulators are now giving to net metering policy.²²

The credit given to net metering customers for excess energy they supply to the grid is at the heart of the controversy over these policies. While electric utilities are obligated by federal law to consider offering net metering services, nothing in the Public Utility Regulatory Policies Act's (PURPA) net metering definition specifies how customers with distributed generation resources are to be compensated under net metering. "Net metering service" is simply defined as service to "an electric consumer" with an "eligible on-site generating facility" that is able to deliver electric energy to the utility that "may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period."²³

Some states—Florida and Ohio, for example—have long limited the credit to net metering customers to less than the full retail rate. In Ohio's case, net metered customers have been credited for energy they provide to the utility since 2002 at the utility's "unbundled generation rate."²⁴ While net metered customers in Florida are credited for excess electricity they supply to the utility at the utility's retail rate,²⁵ they are also subject to monthly demand charges based on "maximum measured demand during the billing period" and to monthly connection or customer

20. PETER FOX-PENNER, SMART POWER 56 (2014). Fox-Penner is Director of Boston University's Institute for Sustainable Energy.

21. Durkay, *supra* note 3.

22. Severin Borenstein, *Rate Design Wars are the Sound of Utilities Taking Residential PV Seriously*, ENERGY INST. AT HAAS (Nov. 12, 2013), <https://energyathaas.wordpress.com/2013/11/12/rate-design-wars-are-the-sound-of-utilities-taking-residential-pv-seriously/> [hereinafter *Rate Design Wars*].

23. 16 U.S.C. § 2621(d)(11) (2009).

24. See *Net Metering*, N.C. CLEAN ENERGY TECH. CTR., <http://programs.dsireusa.org/system/program/detail/36> (last updated Jan. 11, 2016). The Ohio Public Utilities Commission had originally required utilities to credit customer-supplied electricity at the utility's full retail rate, but the Ohio Supreme Court ruled in 2002 this would overcompensate distributed generation customers. *FirstEnergy Corp. v. Public Util. Comm'n*, 95 Ohio St. 3d 401, 768 N.E.2d 648 (Ohio 2002). As the Court reasoned, Ohio law required utilities to compensate net metered customers for the "electricity" they produced. Compensating them at the full retail rate would violate the statute because it would compensate them, not only for the electricity they produced, but for the costs of "transmission, distribution, or ancillary services" included in the retail rate, but not actually provided by the customer. *Id.* at 652.

25. See *Net Metering*, *supra* note 24.

charges not applicable to other retail customers without their own generating facilities.²⁶ But the majority of states, as noted above, have chosen to require their utilities to compensate net metering customers for excess energy at the utility's full retail rate. That rate, as many commentators have observed, includes not only the cost of the energy sold to the utility, but the cost to maintain and operate the utility's transmission and distribution operations.²⁷ Thus, they argue with considerable force, full retail rate compensation amounts to a subsidy for most net metered customers.²⁸

For many years, as Borenstein writes, compensation at the full retail rate was largely a non-issue. "It wasn't that utilities or industry analysts failed to understand the simple math," he says.²⁹ Rather, "[i]t's that they didn't think the exposure was very large, because solar PV was so expensive and the subsidies were smaller."³⁰ But with high installation costs, energy produced from rooftop solar installations and other customer owned generating equipment was far more expensive per kWh than the utility's retail rate:

As recently as a decade ago, the cost of a residential system was still north of \$10/watt, translating to at least \$0.50/kWh. Even with aggressive state subsidies and small federal subsidies, it was difficult to get the end-use consumer cost below \$0.35/kWh. The average retail price for the kWh replaced by a solar system was generally well below that, so very few consumers could really save money putting in solar.³¹

By 2013, the drop in PV costs, coupled with the availability of generous federal and state tax credits, changed the equation. That, says Borenstein, is when the cost of rooftop solar installations fell below the typical utility's retail rate, making the installation of rooftop solar facilities quite attractive.³² What states have seen as a result is a dramatic rise in rooftop solar installations—a fifteen fold increase between 2008 and 2013 and a doubling between 2012 and 2014.³³ As the number of such installations have grown, utilities have seen a significant drop in revenue contributions from net metered customers, placing pressure on them to increase rates to other customers to make up the shortfall.³⁴ This shortfall is not small. In the 2014 update to his book *Smart Power*, Fox-Penner cites a study

26. Fla. Admin. Code Ann. r. 25-6.065(8)(h) (2008).

27. See, e.g., David Raskin, *Getting Distributed Generation Right: A Response to "Does Disruptive Competition Mean a Death Spiral for Electric Utilities?"*, 35 ENERGY L. J. 253, 270 (2014) [hereinafter *Distributed Generation*].

28. *Id.*; *Rate Design Wars*, *supra* note 22. We use the term "most" because, as discussed *infra*, there are, in theory, instances where the value of a particular customer's installation may exceed the net metering credit—even at the full retail rate.

29. *Rate Design Wars*, *supra* note 22.

30. *Id.*

31. *Id.*

32. *Id.*; Stanford law professor Michael Wara and Senior Fellow at Harvard's Environmental Policy Initiative Ari Peskoe, also peg 2013 as the date when states and utilities began revisiting net metering policies in earnest. But they credit "Disruptive Challenges," a 2013 White Paper by the Edison Electric Institute, as creating the impetus for subsequent net metering developments. See Michael W. Wara, *Competition at the Grid Edge: Innovation and Antitrust Law in the Electricity Sector* 8 (Stan. L. and Econ. Olin, Working Paper No. 491, 2016); Ari Peskoe, *Unjust, Unreasonable, and Unduly Discriminatory: Electric Utility Rates and the Campaign Against Rooftop Solar*, 11 TEX. J. OF OIL GAS & ENERGY L. 101, 108-10 (2016).

33. Jim Rossi, *Federalism and the Net Metering Alternative*, 29 ELECTRICITY J. 13 (2016).

34. See Elisabeth Graffy & Steven Kihm, *Does Disruptive Competition Mean a Death Spiral for Electric Utilities?*, 35 ENERGY L.J. 1 (2014).

estimating that customer solar installations in California alone would reach 5% penetration by 2020, “leaving a revenue deficiency of \$1.1 billion.”³⁵

The revenue shortfall problem has been mitigated by the fact that there are limitations on the percentage of utility load eligible for net metering.³⁶ Ashley Brown, Executive Director of Harvard’s Electricity Policy Group, puts the imposition of caps less charitably. These caps he says, “are a statement by policy makers that they are using a seriously flawed system, and in effect saying, “stop me before I do more damage.”³⁷ But, while these caps have mitigated the problem, it has also been exacerbated by the decisions of various regulators to extend net metering programs to community solar installations.

The recent experience in New York is illustrative. The cost of rooftop solar installations has declined significantly in recent years, but not any more rapidly than the cost of utility scale solar facilities, which retain their substantial cost advantage over rooftop solar installations. Indeed, as a recent Brattle Group study estimates, community solar and other utility scale solar facilities are half the cost of rooftop solar installations.³⁸ The result has been an explosion in the growth of community solar systems in New York. The lower cost per kwh of community solar creates an even bigger spread between the full retail rate at which net metered power is compensated and the cost of producing that power than the difference between the retail rate and the cost of rooftop solar.³⁹ In the few years since New York permitted the virtual net metering of community solar installations, community solar capacity had grown from 400 MW of capacity in the queue in 2013 to the point where 2700 MW were in the queue by Spring 2016.⁴⁰

35. PETER FOX-PENNER, *supra* note 20, at 218.

36. On the other hand, as customer participation has reached existing tariff limits, customers and solar companies have pushed to increase or lift caps on eligibility. See Solar Net Metering and Incentives Myths, Facts and Reasons to Lift Net Metering Caps, <http://www.necec.org/files/necec/Policy%20Documents/Solar%20Incentives%20MythsVfacts10.22.15.pdf>.

37. Ashley C. Brown, *Net Metering: The Dark Cloud in a Sunny Sky*, AM. PUB. POWER ASS’N (May 27, 2015), <http://blog.publicpower.org/sme/?p=576>.

38. BRUCE TSUCHIDA ET AL., THE BRATTLE GRP., COMPARATIVE GENERATION COSTS OF UTILITY-SCALE AND RESIDENTIAL-SCALE PV IN XCEL ENERGY COLORADO’S SERVICE AREA 33 (July 2015), http://brattle.com/system/publications/pdfs/000/005/188/original/Comparative_Generation_Costs_of_Utility-Scale_and_Residential-Scale_PV_in_Xcel_Energy_Colorado%27s_Service_Area.pdf?1436797265. See also Julia Pyper, *Brattle Group Study: Residential PV Will Cost Twice as Much as Utility-Scale Solar in 2019*, GREENTECH MEDIA (July 14, 2015), <http://www.greentechmedia.com/articles/read/brattle-group-study-residential-pv-will-be-double-the-cost-of-utility-scale>.

39. Telephone Interview with Stephen Wemple, Vice President of Regulatory Affairs, Con Edison (May 12, 2016).

40. See Solar Progress Partnership, Comment Letter on an Interim Successor to Net Energy Metering, Case No. 15-E-0751 at 5 (Apr. 18, 2016), <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={75A9DA7C-50C3-44C1-912C-D6695E455D88}>[hereinafter Solar Progress Partnership Comments]. There has been a similar growth in community solar in Minnesota. See Inskeep, *supra* note 11, at 12.

III. WHY CONVENTIONAL NET METERING IS IN NEED OF REFORM.

A. *The Revenue Shift Issue*

Responses to the revenue shortfall issue have been varied. But the most common change utilities have proposed to make to their rate structures has been to increase monthly fixed customer charges. During 2015 alone, “[s]ixty-one utilities in 30 states proposed increasing fixed charges levied on all residential customers.”⁴¹ This approach, as Borenstein notes, is “aimed at covering some of the costs of retail distribution, metering and billing” and has the support of most economists because it “move[s] electricity pricing towards a more cost-based system.”⁴² He cites as examples the municipal utilities in Los Angeles and Sacramento. These utilities, he says, are not subject to the states’ net metering laws and have increased their customer charges.⁴³ Sacramento’s customer charge will escalate from \$13 in 2013 to \$20 by 2020.⁴⁴ Although they have not received their full requests, regulated privately-owned utilities have also received approval to raise their customer charges in recent years.⁴⁵ Because increases in customer charges are matters of rate design, not means to recover more revenue, these increases are offset by reductions in the per hour, or kwh rates.

State legislators and regulators in half of the states, responding to this same concern, have launched their own inquiries into their existing net metering policies during 2015.⁴⁶ Although regulators have defined the scope of their proceedings somewhat differently, the basic framework of the debate has varied little from state to state.

Utilities, joined in some instances by advocates for low income consumers, make a simple argument based on the revenue shortfall issue described earlier. As rooftop solar penetration increases, the revenue shortfall must be recovered from other electric consumers. This burden, they argue, falls disproportionately on those consumers unable to afford rooftop solar installations, or, as renters, unable

41. Inskip, *supra* note 11, at 12. Peskoe criticizes these filings to increase customer charges as reflective of the “top down process” under which the regulator, focused mainly on the overall revenue allowance, typically defers to the utility’s proposals on rate design and cost allocation. Peskoe, *supra* note 32, at 104. This view, we think, overlooks the nature of the net metering debate. Net metering design and cost allocation changes have been hotly contested before the regulators and have undergone significant changes from the terms proposed by the utilities. Inskip, *supra* note 11, at 17. And, as we discuss *infra*, many of the changes to net metering policy being considered are the result of generic inquiries initiated by the regulators, not in reaction to utility filings.

42. *Rate Design Wars*, *supra* note 22, at 3.

43. *Id.*

44. *Id.* While Borenstein is correct that Los Angeles’s municipal utility is not subject to California’s net metering laws, that is not true for the Sacramento Municipal Utility District. Email from Steven G. Lins, Chief Assistant General Counsel, Sacramento Municipal Utility District (June 7, 2016) (on file with author). SMUD’s customer charge will increase to \$20 by 2017, not 2020. *Id.*

45. Peskoe, *supra* note 32, at 158.

46. Inskip, *supra* note 11, at 19. In April 2016, the Federal Trade Commission announced that it too, would begin an examination of the “competition and consumer protection issues raised by consumers’ growing use of rooftop solar panels to generate their own electric power,” and that it would place “a particular focus on net metering laws and regulations.” Press Release, Fed. Trade Comm’n, FTC Workshop Will Examine Competition and Consumer Protection Issues in the Rooftop Solar Business (Apr. 12, 2016), <https://www.ftc.gov/news-events/press-releases/2016/04/ftc-workshop-will-examine-competition-consumer-protection-issues#skip-navigation-destination>.

to participate in the programs.⁴⁷ As Brown describes it, full retail net metering “[i]s socially regressive, transferring wealth from [the] less affluent to more affluent consumers.”⁴⁸

David Raskin, writing in both the Harvard Business Law Review Online and the Energy Law Journal, argues that the pricing issue is not only a matter of basic logic, but that states with rate structures compensating net metered customers at the full retail rate may be violating federal law as well.⁴⁹

Under PURPA, he points out, utilities are obligated to purchase the output of “small power production facilities”—hydroelectric projects, solar facilities, wind generators and other renewable energy facilities—at no more than the purchasing utility’s “avoided cost” to generate the same amount of electricity.⁵⁰ Avoided cost compensation, he adds, does not include the costs of transmission or distribution because those costs are not avoided by the purchasing utility when it purchases the customer’s electricity.⁵¹ Since net metered customers are being credited for excess energy they also supply to the utility, there is no logical reason why they should be compensated more for their energy than owners of small power production facilities who are ineligible to participate in net metering.⁵² Indeed, he points out, when net metering-eligible customers themselves produce more electricity than they consume during the utility billing period, FERC treats the excess as a wholesale transaction subject to its regulation.⁵³ That is, they do not get paid the retail rate.

Raskin takes his case one step further. Because the net metered customer is being credited for excess energy delivered to the utility, it is, in effect making a wholesale sale to the utility. And, because FERC has exclusive authority to regulate wholesale transactions under the Federal Power Act (FPA), Raskin maintains that FERC, not the states, should be regulating compensation levels.⁵⁴ Raskin acknowledges that under existing FERC case law, where the net metered customer delivers less electricity to the utility than it purchases during the billing period (typically monthly), FERC has determined that there is no net sale to the utility and therefore no wholesale sale.⁵⁵ He maintains, however, that under the

47. *Distributed Generation*, *supra* note 27, at 273.

48. Brown, *supra* note 37, at 3.

49. David B. Raskin, *The Regulatory Challenge of Distributed Generation*, 4 HARV. BUS. L. REV. ONLINE 38, 44 (2013) [hereinafter *Regulatory Challenge*]; *Distributed Generation*, *supra* note 27.

50. *Regulatory Challenge*, *supra* note 49, at 43-44.

51. *Id.* Fox-Penner points out that while this is true in the short run, in the long-run the utility might avoid some transmission costs. Email from Peter Fox-Penner, Director, Inst. for Sustainable Energy (July 6, 2016) (on file with author).

52. *Regulatory Challenge*, *supra* note 49, at 43-44.

53. *Id.* at 44; see also *Sun Edison LLC*, 129 F.E.R.C. ¶ 61,146 (2009); *MidAmerican Energy Co.*, 94 F.E.R.C. ¶ 61,340 (2001).

54. *Distributed Generation*, *supra* note 27, at 275.

55. *Regulatory Challenge*, *supra* note 49, at 44. See also Order on Rehearing, *Standardization of Generator Interconnection Agreements and Procedures*, 106 F.E.R.C. ¶ 61, 220 at P 744 (2004) (“Net metering allows a retail electric customer to produce and sell power into the Transmission System without being subject to the Commission’s jurisdiction.”).

D.C. Circuit's decisions in *Southern California Edison Co. v. FERC*,⁵⁶ and *Calpine Corp. v. FERC*,⁵⁷ “[net metering] could not be used to determine whether a sale has taken place and that there is a sale whenever energy is delivered from the generator to the utility and vice versa.”⁵⁸

Vanderbilt law professor Jim Rossi has criticized Raskin's argument as an unsupported call for federal regulation of rooftop solar compensation that would threaten the “success and promise of net metering.”⁵⁹ Raskin's jurisdictional argument, he says, rests on a misreading of the *Southern California Edison* and *Calpine* cases. Those cases, Rossi argues, simply held that FERC “lacks any jurisdiction to set its own netting intervals for retail sales.”⁶⁰ FERC's net sales test, by contrast, does not require FERC to select a billing interval that is different from the billing period used in the customer's actual retail transaction.⁶¹ Even if the excess energy delivered to the utility were considered a separate sale, he adds, FERC would be on solid ground treating the delivery as “any other sale” under the FPA and thus outside its jurisdiction.⁶²

Rossi probably has the better of the argument. FERC's test for wholesale jurisdiction—whether there is a net sale to the utility over the billing period—is consistent with PURPA, which expressly contemplates utility deployment of net metering and defines net metering service to encompass the service provided to the net metered customer under which its deliveries to the utility “may be used to offset electric energy provided by the electric utility . . . during the applicable billing period.”⁶³ If FERC's net metering jurisdiction test were ever challenged directly in court, any ambiguity in the FPA's use of the term “any other sale” would likely be resolved in the agency's favor under *Chevron*.⁶⁴

But whether Rossi or Raskin are right on the jurisdictional issue, Rossi's criticism does not address Raskin's larger point: that current net metering policies are overcompensating net metering participants—by a lot.⁶⁵ This is the key argument offered in the various state proceedings by utilities, advocates for low income customers, and even those who simply choose not to put solar panels on their rooftops.

B. Weaknesses in the Counter-Arguments of Conventional Net Metering Proponents

“Conventional net metering” proponents—those who support net metering credits at the customer's full retail rate—cannot not really dispute the math behind the utility arguments. Rather, most offer two lines of argument. They first object

56. *S. Cal. Edison Co. v. FERC*, 603 F.3d 996 (D.C. Cir. 2010).

57. *Calpine Corp. v. FERC*, 702 F.3d 41 (D.C. Cir. 2012).

58. *Regulatory Challenge*, *supra* note 49, at 45.

59. Rossi, *supra* note 33, at 13.

60. *Id.* at 15.

61. *Id.*

62. *Id.* at 14 (noting that the FPA gives FERC exclusive jurisdiction over wholesale sales, but not to “any other sale of electric energy.”).

63. Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594, 962 (2005) (emphasis added); 16 U.S.C. § 2621(d)(10)(E)(11) (2009) (emphasis added).

64. *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984). Under *Chevron*, the courts will defer to an agency's reasonable interpretation of ambiguous statutes it is entrusted with administering.

65. *Distributed Generation*, *supra* note 27, at 269.

that utility-proposed changes to net metering are motivated not so much by concern over regressivity or unfair cost shifts, but an anticompetitive desire to maintain their monopoly perches.⁶⁶ Intent aside, they also argue that the distribution costs incurred to serve distributed generation (DG) customers are offset by the value distributed generation, particularly renewable energy, provides to the grid. The arguments of the Coalition for Solar Rights mirror those of other solar advocates. A rooftop solar installation, they maintain, (1) “saves on expensive and polluting conventional power,” (2) “saves on investment in transmission and distribution infrastructure,” (3) “reduces electricity lost over the wires,” (4) “saves on [the] cost of managing power delivery,” and (5) “saves on [the] cost of meeting carbon and renewable requirements.”⁶⁷

A 2014 report prepared for the Regulatory Assistance Project (RAP) is more nuanced.⁶⁸ The authors state that “because of the number of services distributed generation can provide to the grid, cross-subsidies can flow both ways—either from DER customers to non-participating customers or vice versa.”⁶⁹ Their recommendation to regulators is not that they leave net metering unchanged, but that regulators implement a methodology that fairly considers these benefits and “build policies, regulations and tariffs that recognize the characteristics of their state and the utility in question.”⁷⁰ Still, despite the authors’ acknowledgment that net metered customers may be receiving subsidies, they tend, like the avowed rooftop solar advocates, to treat as unique benefits, attributes of residential-scale distributed generation that also flow from other, unsubsidized, but equally renewable resources.

The argument that utility-proposed changes to net metering are aimed mainly at preserving their retail monopolies suffer from several defects.⁷¹ First, the argument focuses exclusively on the incentives of for-profit investor-owned utilities

66. Peskoe, *supra* note 32, at 107-8, 146, 165 (“effect of implementing their proposals [is to] stifle the growth of decentralized PV”); Wara, *supra* note 32, at 30 (“it would be quite surprising if to some degree utilities were not also acting in their own interest – and proposing rates that preserve monopoly when a fair allocation of costs would allow greater competition.”). Wara also argues that utilities seeking to thwart competitive inroads by rooftop PV may resort to “non-price barriers to entry such as complicated, expensive, or time consuming rules governing connection of residential solar systems.” *Id.* at 18. Practices like these would indeed present serious impediments to competition. So far as the authors of this article can tell, however, the net metering debates have not been about utility connection practices.

67. *End the Utility Power Grab: Solar Customers Deserve Fair Credit with Net Metering*, COAL. FOR SOLAR RIGHTS, http://www.oursolarrights.org/files/8713/8326/4638/National_Net_Metering_Fact_Sheet.pdf (last visited Sept. 24, 2016) [hereinafter *Vote Solar Initiative*].

68. RAP describes itself as a non-profit organization that provides regulatory policy advice on energy and environmental issues to regulators and legislators in the United States, the European Union and China. *Where We Work*, REGULATORY ASSISTANCE PROJECT, <http://www.raonline.org/region> (last visited Sept. 4, 2016).

69. RAP Study, *supra* note 3.

70. *Id.*

71. In reviewing a draft of this article, Ari Peskoe asked whether it is fair to dismiss entirely the proposition that concern about profitability is a motive behind IOU objections to net metering. To be clear, we have not dismissed the possibility that this is a motivating factor for some private utilities. But we think it clear, for the reasons discussed above, that it is not the principal motivating factor for most private utilities or a factor at all for not-for-profit utilities.

(IOUs) and not their municipal and rural electric cooperative counterparts.⁷² But if preserving the profitability of their retail sales operations were the main motivating factor for net metering reforms, it would not explain why so many municipal utilities and rural electric cooperatives are also reexamining their net metering policies.

Nor would the IOUs' profit motive explain why IOUs operating under decoupling mechanisms-rate designs that separate profitability from sales levels-would remain concerned about conventional net metering policies.⁷³ Peskoe quotes as proof of motive a statement in Electric Edison Institute's 2013 "Disruptive Challenges" white paper that decoupling will only serve as a "band-aid" and that as volumetric rates go up under decoupling, "political pressure" may "prevent an IOU from fully recovering its costs."⁷⁴ But we think it proves the opposite. Although some have argued that the utilities are seeking protection against obsolescence, the grid is not obsolete.⁷⁵ As Peskoe observes, "nearly all PV users rely on the central grid to fill . . . gaps [in] PV's intermittent supply and ensure reliable power when the sun is not shining."⁷⁶ And if, as Wara notes, "households with and without solar make equivalent or nearly equivalent demands upon the grid,"⁷⁷ utilities, for-profit and non-profit alike, would logically be concerned, not about grid obsolescence, but that net metered customers were not bearing a reasonable share of the cost burden to maintain the grid.⁷⁸ This is not to say that their concerns

72. See, e.g., Peskoe, *supra* note 32. Although his article refers to "utilities," as the context of the article makes clear, and as the author has confirmed, the term is intended to mean IOUs. His article does not address the net metering practices of rural electric cooperatives or municipal utilities.

73. See discussion *infra* of "decoupling." Under decoupling, as sales levels decline the utility is permitted to increase its volumetric charges on the remaining sales to make up the revenue shortfall.

74. Peskoe, *supra* note 32, at 153.

75. Wara, *supra* note 32, at 10 (referring to "grid investments rendered unnecessary or uneconomic by distributed solar").

76. Peskoe, *supra* note 32, at 106.

77. Wara, *supra* note 32, at 14.

78. Peskoe devotes considerable attention in his article to the proposition that cross-subsidy claims should be viewed skeptically because cost allocation methodologies are inherently imprecise. Peskoe, *supra* note 32, at 24-25. In essence, he is saying that trying to measure the size of the net metering subsidy is a fool's errand because of this imprecision. But in focusing on the regulator's flexibility to fashion cost allocation methodologies, Peskoe misses the larger point. To be sure, rate design and cost allocation is not an exact science. *Colo. Interstate Gas Co. v. Fed. Power Comm'n*, 324 U.S. 581, 591 (1945). But if both rooftop PV customers and those without solar both place equivalent or nearly equivalent demands on the grid, the law on undue discrimination is pretty clear. Similarly situated customers should pay similar rates. *Ala. Elec. Coop. v. FERC*, 684 F.2d 20, 27-28 (D.C. Cir. 1982). Reasonable cost allocation may be inexact, but it is not a standardless concept. In reviewing a draft of this article, Mr. Peskoe questioned whether we are being consistent in arguing that similarly situated customers should pay similar rates for distribution services, while also supporting the concept (discussed *infra*), of compensating distributed generation customers for the value they provide to the distribution system. That is a fair question. Distribution system value (as distinct from the energy value of distributed generation) has certainly been hotly debated—in some cases, within the same institution. Compare Lisa V. Wood, *Why Net Energy Metering Results in a Subsidy: The Elephant in the Room*, BROOKINGS INST. (June 13, 2016), <http://www.brookings.edu/research/opinions/2016/06/13-net-energy-metering-wood>, with Mark Muro & Devashree Saha, *Rooftop Solar: Net Metering is a Net Benefit*, BROOKINGS INST. (May 23, 2016), <http://www.brookings.edu/research/papers/2016/05/23-rooftop-solar-net-metering-muro-saha>. But the short answer, we believe, is that distribution system value will usually be minimal. See *infra* 79-83, 108 and accompanying text. In the limited circumstances where it is material, those distributed generation customers would be differently situated from other distribution customers (including other distributed generation customers) and therefore entitled to pay lower distribution service charges. As we also discuss, *infra*, even if we are wrong about

are necessarily motivated by concerns about fairness itself, but if unfair burdens are placed on certain customer classes, even if the utilities are kept whole, private utilities must still answer to their regulators, cooperatives to their customer-owners, and municipal utilities to their citizenry. A closer look at the benefits arguments also reveals its inherent weaknesses.

The argument that residential solar “saves on expensive and polluting conventional power” is debatable.⁷⁹ “Conventional power,” assuming the reference is to power generated from fossil fuels, is surely polluting. But it is almost certainly less, not more expensive than residential solar, and by a wide margin.⁸⁰ To the extent it does reduce pollution, meeting state or federal mandates, it would be difficult to dispute that residential solar provides a benefit. But so would other utility scale renewable resources, almost certainly at a lower cost. To the extent they provide an equivalent benefit at less cost than residential solar installations, compensation to the latter should be capped at that lower cost to encourage use of the most efficient option.⁸¹

The argument that residential solar installations should receive a full retail rate credit because they reduce carbon emissions fails for similar reasons. Proponents of full net metering argue, not that there is no subsidy, but that the externality benefits of rooftop solar—like reduced carbon emissions—are sufficiently in balance with costs to ensure that distributed generation customers (e.g. those with rooftop solar) “will not impose a burden on [the utility’s] ratepayers.”⁸² But that argument—the externality benefit—would apply equally to large scale solar that is ineligible for net metering.

The *generalized* claim that residential solar installations save on transmission and distribution infrastructure is also questionable. Indeed, if one were to generalize, the conclusion would be just the opposite. “Homeowners that install solar PV,” writes Pennsylvania State University’s Seth Blumsack, “are, *in most places*, shifting the cost of this infrastructure to ratepayers [who] have not installed solar panels.”⁸³ Where, for example, a customer’s residential solar installation requires

how often rooftop solar installations will provide significant value to the distribution grid, that judgment is one regulators, not the courts, should make. Similarly off-target, we think, are several studies cited by the National Renewable Energy Laboratory (NREL) in its May 2016 report, *Utility Regulatory and Business Model Reforms for Addressing the Financial Impacts of Distributed Solar on Utilities*. GALEN BARBOSE ET AL., NAT’L RENEWABLE ENERGY LAB, UTILITY REGULATORY AND BUSINESS MODEL REFORMS FOR ADDRESSING THE FINANCIAL IMPACTS OF DISTRIBUTED SOLAR UTILITIES, (May 2016). NREL references studies finding that under existing rate structures many high use electric customers subsidize those with “below average consumption.” *Id.* at 9. Because net-metered customers are often also the highest use customers, conventional net metering has “actually served to *reduce* what, in the absence of NEM, would have been an even larger cross-subsidy.” *Id.* This seems to us, however, like more of a “two wrongs make a right” justification than a bona fide defense of existing net metering policies.

79. Vote Solar Initiative, *supra* note 67.

80. *Distributed Generation*, *supra* note 27, at 266.

81. See, e.g., Borenstein, *supra* note 1, at 3. As discussed *infra*, the value of a solar installation will be highly sensitive to its location. So it is possible that in some limited instances, a higher cost rooftop installation might provide proportionately greater value to the grid than a larger solar array.

82. The Alliance for Solar Choice, Notice of Filing Direct Testimony of B. Thomas Birch in the Matter of the Commission’s Investigation of Value and Cost of Distributed Generation at 2 (Feb. 25, 2016), <http://images.edocket.azcc.gov/docketpdf/0000168554.pdf>.

83. Seth Blumsack, *The Disruptive Impact of Rooftop Solar*, WORLD ECON. FORUM (Mar. 25, 2015), <https://agenda.weforum.org/2015/03/the-disruptive-impact-of-rooftop-solar/> (emphasis added).

the utility to upgrade the customer's interconnection to accommodate the flow of power onto the distribution grid, RAP's 2014 study notes that a net metered customer's solar installation may actually increase distribution system costs.⁸⁴ And, while *some* residential solar installations might, in theory, reduce peak load on the local grid, that benefit cannot be presumed. As Stephen Wemple of Con Edison notes, a solar installation located in upstate New York, for example, where load has been flat or declining, and where there is no congestion on the distribution grid, would provide little or no value to the utility's distribution system.⁸⁵ Peter Fox-Penner makes the same point about newer distribution grids in his book *Smart Power*: "Some customers may be attached to a part of a distribution grid that is so new and so large that there will be a zero avoided distribution costs if the customers at the end of the line increase their self-generation or cut their demand."⁸⁶ Instead, Fox-Penner maintains that "the most valuable to install" distributed generation will likely be that located "in the middle of the distribution system, not at the far end of the grid, that is, at your home or factory."⁸⁷

There is also reason to take issue with claims by residential solar advocates that deployment of net-metered facilities materially reduces electric lost over the wires. To be sure, there are, by definition, fewer line losses associated with on-site generation consumed on the premises. To the extent, however, that energy excess to the customer's needs is sent to the grid, there will also be line losses. "[This] reduces the DG advantage in line losses and distribution capacity upgrades."⁸⁸ If the installations are virtually net-metered community solar facilities, there will be line losses to deliver their output to the grid as well.

RAP's study also cites as one potential benefit of rooftop solar that solar panels may deflect or reduce rooftop heat absorption, thereby reducing peak demand.⁸⁹ In theory that might be true, but as former Secretary of Energy Stephen Chu has argued, a similar benefit might redound to the utility from those homeowners who simply have white or light-colored rooftops.⁹⁰

C. Major State Proceedings

Many states, as we have noted, are in the midst of proceedings to reexamine their net metering policies. Most have as their goal to measure the relative costs and benefits of net metering.⁹¹ Some, though, have punted the question down the road.

84. RAP Study, *supra* note 3, at 17.

85. Telephone Interview with Stephen Wemple, *supra* note 39.

86. PETER FOX-PENNER, *supra* note 20.

87. *Id.* Fox-Penner also recognizes that distributed solar may "incrementally reduce transmission," but its impact is "very small" and will be "nowhere near one for one." Email from Peter Fox-Penner, Director, Inst. for Sustainable Energy (June 24, 2016) (on file with author).

88. Borenstein, *supra* note 1.

89. RAP Study, *supra* note 3, at 23 n.40 ("Rooftop distributed PV also provides a shading benefit that can reduce temperature gain in structures, thus further reducing the demand for electricity beyond the demand displaced by PV production."); *see also* Borenstein, *supra* note 1.

90. Steve Hargreaves, *White Roofs to Fight Global Warming*, CNN MONEY (July 13, 2009), http://money.cnn.com/2009/07/13/news/economy/white_roofs.

91. Inskeep, *supra* note 11, at 17. Both Wara and Peskoe offer comprehensive descriptions of the various net metering proceedings that have been or are taking place nationwide. Peskoe, *supra* note 32; Wara, *supra* note 32.

In California, for example, the state commission has largely left the existing net metering system intact, but only until 2019. In the interim it has permitted utilities to implement modest increases to their customer charges.⁹² That the state ultimately chose to take limited action, however, is not to suggest that the case had limited import. On the contrary, the new rules were approved on a divided three to two vote, with the dissenting commissioners favoring broader changes to the state's current net metering rules.⁹³

After extensive hearings, Utah similarly concluded that it lacked sufficient information to determine whether net metered customers were benefitting from an intra-class subsidy and, if so, what the magnitude of the subsidy might be.⁹⁴ But in ruling on the inquiry it expected its staff to conduct on the benefits issue, the Commission seemed to rule out the notion that the generating facilities of net metered customers provided any capacity benefit to the utilities:

The customer is under no obligation to maintain the system or to supply the utility with electricity. If a problem develops that prevents the customer from generating energy, the customer is under no obligation to cure it. More significantly, a customer is under no contractual obligation to provide any of the power it generates to the utility.⁹⁵

Still other state commissions have taken definitive steps back from existing net metering policies. Last year Hawaii terminated net metering credits based on the utility's retail rates. Instead, customers with residential solar systems will be "net billed," that is, they will be credited at the utility's avoided cost of energy.⁹⁶ Existing net metered customers will be grandfathered under the former system.⁹⁷ And in a highly publicized decision, also last year, Nevada's public utility commission determined that the state's largest utility had reached its net metering cap and that, commencing in 2016, net metered customers would be credited for excess energy at the utility's avoided energy cost, not its full retail rate.⁹⁸ Over the protests of existing net metered customers, it stated that its new policy would apply to all net metered generating facilities.⁹⁹ While it subsequently extended the phase in period for the new rates, the commission reiterated that it would not grandfather

92. Proposed Decision, *Order Instituting Rulemaking to Develop a Successor to Existing Net Metering Tariffs*, CAL. PUB. UTILITIES COMM'N, R.14-07-002 (2016).

93. *Id.*

94. *In the Matter of the Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program*, PU. SERV. COMM'N OF UTAH, Docket No. 14-035-114 at 10-11 (Nov. 10, 2015), <http://psc.utah.gov/utilities/electric/elecindx/2014/documents/27044914035114o.pdf>.

95. *Id.* at 13.

96. Inskeep, *supra* note 11, at 17.

97. *Id.*

98. Proposed Order, *Application of Nevada Power Company and Sierra Pacific Power Company d/b/a NV Energy for Approval of a Cost-of-service Study and Net Metering Tariffs*, Docket No. 15-07041 (Dec. 22, 2015), http://pucweb1.state.nv.us/PDF/AxImages/DOCKETS_2015_THRU_PRESENT/2015-7/8305.pdf (terminating net metering program) [hereinafter Nevada PUC decision]. Under the Nevada commission's ruling, any energy delivered to the utility would be considered a sale and any energy produced by the utility and consumed by the rooftop solar owner would be considered a separate purchase. In this sense, there is no net metering at all, not even a netting of energy sales and purchases.

99. *Id.*

existing arrangements.¹⁰⁰ The state commission's ruling, which was originally appealed, had a dramatic impact; the state's largest provider of rooftop solar installations, SolarCity, initially announced its withdrawal from the Nevada market, as did two other companies.¹⁰¹ NV Energy then announced that it would urge the state commission to restore grandfathering and a group of solar advocates urged the state's governor to remove the three sitting Commissioners who had voted to end grandfathering.¹⁰² A few months later, the governor announced that he would not reappoint the Commission's presiding commissioner to a new term, appointed a new task force on net metering that has since recommended restoration of grandfathering,¹⁰³ and then announced that he would not reappoint a second commissioner who had voted out the original order.¹⁰⁴

D. Glimmers of Progress

In his May 2015 blog post, "Is residential solar really the future of electricity generation?" Severin Bernstein argues that in most circumstances, but not all, large scale solar installations are a far more efficient and less costly choice for consumers than residential, rooftop solar panels.¹⁰⁵ But, he says, sound regulatory policies should not promote one technology over the other.¹⁰⁶ Rather, they should incorporate "incentives that reflect the real benefits and costs of each type of system and then let them battle it out," something existing net metering programs do not accomplish.¹⁰⁷ This is precisely the approach reflected in a promising proposal that a coalition of utilities and solar companies have presented to regulators in New York for consideration.

Late last year, the New York Public Service Commission launched an inquiry into "The Value of Distributed Resources,"¹⁰⁸ part of its broader exploration of

100. *Id.*; see also Inskip, *supra* note 11, at 17. As of this writing, legislation supported both by residential solar advocates and NV Energy (the state's largest utility) was under consideration to grandfather the prior net metering rate structure for those persons who had installed rooftop solar facilities prior to 2016. Daniel Rothberg, *Task Force: Let Pre-2016 Solar Customers Keep Old Rate*, LAS VEGAS SUN (May 26, 2016), <http://m.lasvegassun.com/news/2016/may/26/task-force-let-pre-2016-solar-customers-keep-old-r/>.

101. Ivan Penn, *SolarCity to Leave Nevada After PUC Cuts Rooftop Solar Benefits*, L.A. TIMES (Dec. 23, 2015), <http://www.latimes.com/business/la-fi-solarcity-nevada-rooftop-20151223-story.html>; Julia Piper, *Does Nevada's Controversial Net Metering Decision Set a Precedent for the Nation?*, GREENTECH MEDIA (February 4, 2016), <http://www.greentechmedia.com/articles/read/nevada-net-metering-decision>.

102. Piper, *supra* note 101.

103. Gavin Blade, *Noble lifts lid on net metering fight*, UTILITY DIVE (July 27, 2016), <http://www.utilitydive.com/news/updated-headed-for-the-exits-nevada-puc-commissioner-david-noble-lifts-li/423366/> In September, the Nevada Commission voted to restore grandfathering Daniel Rothenberg, *Sandoval shakes up PUC by appointing 2 new commissioners*, LAS VEGAS SUN (September 20, 2016), <http://lasvegassun.com/news/2016/sep/20/sandoval-shakes-up-puc-by-appointing-2-new-commiss/>.

104. Rothenberg, *supra* note 103.

105. Borenstein, *supra* note 1.

106. *Id.*

107. *Id.*

108. Notice Soliciting Comments and Proposals on an Interim Successor to Net Metering and of a Preliminary Conference, *In the Matter of the Value of Distributed Energy Resources*, N.Y. STATE PUB. SERV. COMM'N, Case No. 15-E-0751 (Dec. 23, 2015), <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKewiGouHlkdLMAhXC8YMKHbGuBV0QFggcMAA&url=http%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCom-mon%2FViewDoc.aspx%3FDocRefId%3D%257B72C65039-EC54-497A-8D4A->

what the agency has called “Reforming the Energy Vision,” or REV.¹⁰⁹ Its questions on net metering policy prompted formation of the Solar Progress Partnership, an unusual coalition of the state’s largest utilities and three major solar companies—SunEdison, Inc., Solar City, and SunPower, Inc.

Although there are detailed provisions governing a several year transition period and grandfathering of existing net metered facilities, the end state of the Partnership’s proposal will be a new compensation scheme, different from conventional net metering, under which distributed resources are paid for the three types of benefits they might provide. That is, they would be paid (1) the marketplace value of the energy they supply, (2) the value of any savings they provide to lower the cost of building and maintaining the distribution system, and (3) the value of societal benefits they provide—principally helping to meet carbon reduction targets. This concept is reflected in what the proponents describe as an LMP+D+E formula, where LMP is the locational marginal price established in the New York ISO marketplace, “D” is the value of the resource to the distribution system and “E” is the societal value of the distributed resource.¹¹⁰ The Partnership contemplates that the latter will roughly equate with the resource’s REC, or renewable energy credit value.¹¹¹

The concept would work slightly differently for residential versus community solar facilities. In the case of the latter, virtual net metering customers would continue to receive the full retail rate credit for energy provided to the utility, but the developer would make a “Developer Payment” to the utility to make up the difference between the LMP + D + E value of the resource and the retail rate credit to the retail customer.¹¹² For customers with on-site distributed generation resources (primarily rooftop solar), the credit would move from the current full retail rate to the value of LMP + D + E.¹¹³

Central to the proposal was the Partnership members’ recognition of the key flaw in the existing net metering program:

As currently structured, NEM allows participating customers to reduce distribution system charges on their bill, including power exported onto the grid. When coupled with the Revenue Decoupling Mechanism in New York,¹¹⁴ distribution system

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109. *About the Initiative*, NY.Gov, <http://www3.dps.ny.gov/W/PSCWeb.nsf/All/CC4F2EFA3A23551585257DEA007DCFE2?OpenDocument> (last updated Jan. 28, 2016).

110. Solar Progress Partnership Comments, *supra* note 40, at 6.

111. Telephone Interview with Stephen Wemple, *supra* note 39. To receive “E” compensation, the customer would have to relinquish any RECs it might otherwise hold. Solar Progress Partnership Comments, *supra* note 39, at 7-8.

112. Solar Progress Partnership Comments, *supra* note 40, at 9.

113. *Id.*

114. Under “decoupling” as a utility’s revenues decline because of customer reductions in use tied either to efficiency programs the utility is obligated to facilitate or net metering, the utility is allowed a rate adjustment to make up for the shortfall. “Although revenue decoupling makes the utility whole, it does so by explicitly shifting costs from participating . . . customers to nonparticipating . . . customers using a public or system benefits charge.” LISA WOOD & ROBERT BORLICK, INNOVATION ELEC. EFFICIENCY, VALUE OF THE GRID TO DG CUSTOMERS 6 (Sept. 2013), http://www.edisonfoundation.net/iee/Documents/IEE_ValueofGridtoDGCustomers_Sept2013.pdf.

charges that make up the utilities' distribution-system revenue requirement are then shifted to customers who do not participate in NEM ("Shifted Revenue Requirement").¹¹⁵

Until this agreement, the rooftop solar advocates have largely taken the position that net metering produces no revenue shift.¹¹⁶ The Partnership's agreement that New York's existing net metering system shifts responsibility for distribution system costs from net energy metering (NEM) participants to other ratepayers, it seems to these authors, was therefore a major breakthrough.¹¹⁷

So too, was a second critical feature of the Partnership's proposal: their agreement on the proposition that distributed energy resources should be compensated for the value they provide to the distribution system—the "D" in their formula—but that this value would vary depending on the type of resource and where it was located.¹¹⁸ The location-specific nature of the "D" value distinguishes this approach from "value of solar" tariffs, another alternative to net metering adopted by Minnesota and the City of Austin's municipal utility.¹¹⁹

As Con Edison's Stephen Wemple explained it, a solar installation with no battery backup located in portions of upstate New York where load growth had been flat or declining and where there is no congestion on the distribution grid

115. Solar Progress Partnership Comments, *supra* note 40, at 5.

116. Krysti Shallenberger, *Strange Bedfellows: How Solar and Utilities Struck a Net Metering Compromise in New York*, UTILITY DIVE (May 26, 2016), <http://www.utilitydive.com/news/strange-bedfellows-how-solar-and-utilities-struck-a-net-metering-compromis/419367/>.

117. *Id.* ("The agreement to transition away from retail rate net metering for residential customers is largely unprecedented in the industry.")

118. In its May, 2016 report, "Utility Regulatory and Business Model Reforms for Addressing the Financial Impacts of Distributed Solar on Utilities," the National Renewable Energy Laboratory (NREL) acknowledges both the cost-shifting impact of conventional net metering programs and the ability of rate design changes like increases in customer charges or introduction of demand charges to address this issue. GALEN BARBOSE ET AL., *supra* note 78, at xi. But "these reforms are generally premised on reducing compensation to DPV customers and, as such, achieve their objectives only insofar as they constrict DPV customer-economics." *Id.* NREL instead urges reforms that would still facilitate development of solar resources "by focusing on facilitating higher-value DPV deployment, expanding customer access, and aligning utility earnings and profits with DPV growth." *Id.* See also SUSAN F. TIERNEY, ANALYSIS GRP., INC., THE VALUE OF "DER" TO "D": THE ROLE OF DISTRIBUTED ENERGY RESOURCES IN SUPPORTING LOCAL ELECTRIC DISTRIBUTION SYSTEM RELIABILITY (Mar. 30, 2016); ELEC. POWER RESEARCH INST., TIME AND LOCATIONAL VALUE OF DER: METHODS AND APPLICATIONS: EXECUTIVE SUMMARY FOR EPRI REPORT 3002008410 (Apr. 2016). The Tierney and EPRI studies both find that conventional net metering, by contrast, significantly overcompensate distributed generation for the value they provide to the grid.

119. NREL characterizes the "value of solar" tariffs adopted by Minnesota and Austin as "a policy alternative to net energy metering" intended to value the contributions of distributed generation to the utility grid. *Value of Solar Tariffs*, NAT'L RENEWABLE ENERGY LAB., http://www.nrel.gov/tech_deployment/state_local_governments/basics_value-of-solar_tariffs.html (last updated Oct. 7, 2015). As Peskoe describes it, a Value of Solar tariff "eliminates cross-subsidization by paying PV a rate that reflects the value of the energy and other attributes it is providing to the central grid." Peskoe, *supra* note 32, at 279. Unlike the Solar Progress Partnership proposal, however, value of solar tariffs – at least the two now in effect – compensate solar at a set, uniform dollar per kWh rate. TIERNEY, *supra* note 118. See also MIKE TAYLOR ET AL., NAT'L RENEWABLE ENERGY LAB., VALUE OF SOLAR: PROGRAM DESIGN AND IMPLEMENTATION CONSIDERATIONS, No. TP-6A20-62361 (Mar. 2015). But like the Solar Progress Partnership proposal, the City of Austin explains that its value of solar tariff is also intended to "reduce cost shifting between solar and non-solar customers." *Residential Solar Energy Rate*, AUSTIN ENERGY, <http://austinenergy.com/wps/portal/ae/rates/residential-rates/residential-solar-energy-rate> (last visited Sept. 5, 2016).

would likely have little “D” value.¹²⁰ “[T]hat is not to say,” as utilities themselves have acknowledged, “that the benefits of DER are *necessarily* small.”¹²¹ On the contrary, as Wemple notes, solar panels located in or near an afternoon-peaking commercial or industrial zone might well provide a distribution system benefit, such as the ability to defer construction of a new circuit or upgrade of existing facilities.¹²² This, Wemple added, was a very important point. The current net metering system compensates all distributed resources at the utility’s full retail rates. To be sure, he said, there might be some distributed resources that, in theory, would provide value approximating the retail rate. But, for a typical installation in an unconstrained portion of the distribution system, the benefit will be smaller.¹²³ The solar industry participants in the joint proposal have implicitly conceded this point in acknowledging the revenue-shifting impact of New York’s current net metering policy. That is, there would be no revenue shift (or “Shifted Revenue Requirement” to use the Partnership’s terminology) if the value of LMP + D + E exceeded the full retail rate.

The value of the Solar Progress Partnership’s proposal, as Wemple says, is that it puts the environmental benefits of utility scale renewable resources on a par with distributed generation.¹²⁴ And that fits precisely with Borenstein’s advice:

If DG solar with incentives that reflect its true benefits wins, that will be great, because we will know we’ve got the least-cost approach to reducing the externalities of electricity generation. If it sputters, that will be fine, too, because it will indicate that there are other less-expensive ways to achieve our environmental goals. Either way, it’s time for incentives that are truly calibrated to costs and benefits, not to achieving penetration of one low-carbon technology over another.¹²⁵

120. Telephone Interview with Stephen Wemple, *supra* note 39; Email from Stephen Wemple, Vice President of Regulatory Affairs, Con Edison (May 12, 2016) (one file with author).

121. Joint Utilities, Comments on an Interim Successor to Net Energy Metering, Case No. 15-E-0751 at 5 (Apr. 18, 2016), <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjQ0cyn2qvPAhUm9IMKHxSLC4oQFggcMAA&url=http%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCommon%2FViewDoc.aspx%3FDocRefId%3D%257B8303C796-0BCC-46EC-8B66-CF8EBCE51984%257D&usq=AFQjCNFBFSF9sTpEKWfWtODrXxri0g4xVwA&bvm=bv.133700528,d.amc> (emphasis added).

122. Telephone Interview with Stephen Wemple, *supra* note 39.

123. *Id.* Indeed, as both Seth Blumsack and Steve Huntoon have written, the rapid growth in rooftop solar installations has led to the circumstance that in some areas, like California, there is so much solar power available during the mid-afternoon that utility system peaks have shifted from that time of day to later in the afternoon. In other words, crediting the customer only for the energy value (with no “D” value), might still result in overcompensation if the time of use rate was predicated on a peak LMP value that no longer reflects system reality. See Steve Huntoon, *Just Ducky*, PUB. UTIL. FORT. (Apr. 2016), <https://www.fortnightly.com/fortnightly/2016/04/just-ducky?authkey=8d95dd7418cb0410bf089904885b81a597d0877390b3ee3dd087f8ed6aba8bb2>; Blumsack, *supra* note 83 (“Solar PV energy production could grow so much that by 2020 the demand for grid-provided electricity would be lower at 12:00 noon than at 12:00 midnight”).

124. Telephone Interview with Stephen Wemple, *supra* note 39.

125. Borenstein, *supra* note 1. Following submittal of the Solar Progress Partnership proposal, the New York commission’s staff issued a report on October 27, 2016 recommending its own reform to conventional net metering in the state, a proposal to replace conventional net metering, over time, with a system that would “develop accurate pricing for DERs [distributed energy resources] that reflects the actual value DERs create.” Staff Report and Recommendations in the Value of Distributed Energy Resources Proceeding, 15-E-0751, p. 4 (October 27, 2016), <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={59B620E6-87C4->

IV. WHY DISPUTES ABOUT NET METERING CANNOT AND SHOULD NOT BE RESOLVED BY ANTITRUST LAWSUITS

A. *The SolarCity Antitrust Suit*

The net metering debate took a new turn in 2015 when one of the major players in the rooftop solar industry, SolarCity, filed an antitrust suit against the Salt River Project Agricultural and Power District. The suit, which we discuss below in more detail, claimed that revisions to Salt River's net metering program violated the Sherman Act.

For a number of years, Salt River, a municipal utility serving part of the Phoenix, Arizona metropolitan area, has offered conventional net metering to its customers with distributed generation. It has seen a growth in the use of net metering that is producing the same revenue shift problem that has prompted other utilities, as well as state regulators, to reexamine their net metering policies.

Salt River, as a municipal utility, is not subject to regulation by Arizona's public utility commission.¹²⁶ But it does go through a similar rate review process.¹²⁷ Its approach to this cost shift problem does not differ significantly from the net metering changes that state regulators have approved or considered, including a net metering tariff change that the Arizona Corporation Commission

4C80-8BEC-E15BB6E0545E}. At the time of this writing, the Commission had asked for comments and expected to act on the staff's recommendations by January, 2017. New York Department of Public Service Press Release, October 28, 2016, <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={7934F3A9-454C-4E88-A8BC-002940C82048}>. Developments in other states during 2016 have also pointed to an increased receptiveness by advocates on both sides of the debate to consider more nuanced measures of benefits and costs. Herman K. Trabish, *As states debate solar, contentious rate cases give way to broader valuation proceedings*, UTILITY DIVE (Aug. 18, 2016), <http://www.utilitydive.com/news/as-states-debate-solar-contentious-rate-cases-give-way-to-broader-valuation/424415/>. This past summer, the National Ass'n of Reg. Utility Commissioners (NARUC) issued a draft report, NARUC MANUAL ON DISTRIBUTED ENERGY RESOURCES COMPENSATION, <http://pubs.naruc.org/pub/88954963-0F01-F4D9-FBA3-AC9346B18FB2>. A key focus of the report, NARUC President Kavella noted, was on net metering policy and whether comprehensive value of resource studies would better inform the net metering debate. Julia Pyper, *How Regulators Are Thinking About Distributed Energy Resources*, GREENTECH MEDIA (July 29, 2016), <https://www.greentechmedia.com/articles/read/How-Regulators-are-Thinking-About-Distributed-Energy-Resources>. Speaking a few months later, President Kavella added that proponents of rooftop solar that tout the value of solar approach are not really making the case to preserve conventional net metering: "That's not an argument for net metering; that's an argument for value-of-solar and the data collection that this manual tries to target." Stephen Lacy, *One of America's Top Utility Regulatory Figures Argues the Republican Case for Distributed Energy*, GREENTECH MEDIA (October 16, 2016), https://www.greentechmedia.com/articles/read/the-republican-case-for-distributed-energy?utm_source=Saltthru&utm_medium=email&utm_campaign=Issue:%202016-10-26%20Utility%20Dive%20Demand%20Response%20%5Bissue:7781%5D&utm_term=Utility%20Dive:%20Demand%20Response.

126. *Solar City Corp. v. Salt River Project Agric. Improvement and Power Dist.*, No. CV-15-00374-PHX-DLR, 2015 WL 6503439 (D. Ariz. 2015), http://scholar.google.com/scholar_case?case=15513752808032819923&q=%22Salt+River%22+%22Solar-City%22&hl=en&as_sdt=4,135.

127. When Salt River proposes a change in its rates or rate structure, it must notify the public, allow written comments and oral presentations and submit its proposal to Salt River's board for approval. Parties dissatisfied with the board's ruling may seek rehearing, and if denied, may seek judicial review. See ARIZ. REV. STAT. §§ 30-802(B)(1)-(3), 48-2334(B)-(E), 30-810-812.

approved for Salt River's neighboring private utility, Arizona Public Service Company.¹²⁸

Under Salt River's tariff changes, first proposed in December, 2014 and approved a few months later, customers with new distributed generation (those with existing solar systems remain on the old system) are subject to a monthly demand charge based on their peak monthly usage.¹²⁹ Because this on peak grid charge "collects most of the grid costs," the hourly energy charge to these customers, which otherwise would have collected these grid costs, is substantially reduced.¹³⁰ Their hourly charges will also vary based on time of use.¹³¹ In this respect they are now treated like Salt River's commercial customers.¹³²

These changes track precisely one of the net metering reform recommendations of the non-profit Regulatory Assistance Project:

A second approach would be to charge residential customers a monthly fee based on their maximum level of usage at any hour during the month. This could be done through a rate element called a "demand charge" that is applied to the highest kW usage. This is commonly seen in tariffs for commercial and industrial customers, but is very uncommon in the United States for residential consumers. Our example also includes a TOU rate design, with higher energy prices during on-peak than during off-peak hours. This approach is often considered "fair" by distribution engineers, because each component of the distribution grid is sized to a particular level of demand, and the costs are somewhat linear with increased demand. It is still a volumetric form of rate design, but based on the maximum volume during a period of the month, rather than the total volume for the month.¹³³

Salt River's approach, unlike an increase in the fixed customer charge (another change that has been approved by various regulators), also gives the customer some control over the increase in its costs. Rooftop solar owners, Salt River points out, can reduce their monthly demand charges by "orient[ing] their solar system west facing to better align with peak demand."¹³⁴

Stung by a precipitous drop in orders for its rooftop solar systems, SolarCity, the "largest installer of distributed solar energy systems,"¹³⁵ filed an antitrust suit against Salt River, charging it, among other things, with monopolization in violation of Section 2 of the Sherman Act.¹³⁶ The gist of its argument is that the new demand charges amount to a "penalty . . . so significant that it eliminates the eco-

128. RAP Study, *supra* note 3, at 37 ("The Arizona Corporation Commission has adopted a variation on demand-charge-based distribution charge and time of use rate for the utility Arizona Public Service in a decision issued in November, 2013. Beginning in 2014, the utility's NEM tariff for new photo-voltaic (PV) installations will include a monthly demand charge of \$0.70/kW/month, applied based on the kilowatt capacity of the PV system (about \$4.90 per month for a typical 7 kW residential rooftop PV system)").

129. *See Changes for New Rooftop Solar Customers*, SALT RIVER PROJECT, <http://www.srp-net.com/prices/priceprocess/customergenerated.aspx> (last visited Sept. 5, 2016).

130. *Id.*

131. *Id.*

132. *Id.*

133. RAP Study, *supra* note 3, at 37.

134. *See Changes For New Rooftop Solar Customers*, *supra* note 129.

135. *Solar City Corp.*, 2015 WL 6503439, at *1.

136. *Id.* at *3.

conomic value to customers generating their own power,” thereby driving solar competitors out of the market.¹³⁷ What makes the demand charge a penalty, it argues, is that it is “not justified by the costs SRP incurs to serve customers who use distributed solar.”¹³⁸

In support of its penalty argument, SolarCity alleges that “solar energy systems confer substantial benefits to the grid and to SRP itself that offset or reduce the cost of service for customers with solar energy systems.”¹³⁹ Interestingly, this is a proposition that the Solar Progress Partnership it joined has expressly eschewed. When net metering customers are credited at the full retail rate metering systems, SolarCity has now acknowledged, the result is that the “distribution system charges that make up the utilities’ distribution-system revenue requirement are then shifted to customers who do not participate in NEM.”¹⁴⁰

On the merits, SolarCity’s complaint seems to be a case of fitting a square peg into a round hole. SolarCity concedes that its case “does not involve a duty to deal with a competitor.”¹⁴¹ That is no small thing, as, outside of PURPA, utilities have no obligation to purchase their competitors’ power. And, under PURPA, they cannot be required to pay qualifying renewable energy suppliers more than the utility’s avoided energy costs. The whole net metering debate turns on whether net metered customers are being compensated fairly for the excess energy they supply *to the local utility* as an offset to their utility bills (or, put another way, whether they are overpaying for distribution service). But if the utilities’ refusal to deal is not SolarCity’s complaint, it is hard to see how the level of compensation they provide frames a cognizable antitrust issue.

To get around this problem, SolarCity offers a unique spin on the nature of net metering: “Under net metering, the excess electricity from a distributed generation customer’s solar system is transferred into the grid and *purchased at retail rates by the distributed solar customer’s neighbors or others.*”¹⁴² The notion that when a customer with solar power excess to its needs is selling the excess, not to the local utility, but to its neighbors (presumably in competition with the utility)—and doing so at the utility’s retail rate—will surely come as a shock to those unsuspecting neighbors.

The foregoing notwithstanding, SolarCity’s complaint, as of the date of this writing, has survived a motion to dismiss, the trial court holding that Salt River was not entitled to “state action” immunity.¹⁴³ And, it therefore, presents an important question: should net metering disputes be resolved by antitrust lawsuits?

137. Amended Complaint and Demand for Jury Trial at ¶ 5, *Solar City Corp. v. Salt River Project Agric. Improvement and Power Dist.*, No. 2:15-CV-15-00374-PHX-DLR (D. Ariz. Mar. 2, 2015) [hereinafter *SolarCity Complaint*].

138. *Id.* at ¶ 8.

139. *Id.*

140. Solar Progress Partnership Comments, *supra* note 40, at 5.

141. *SolarCity Complaint*, *supra* note 137.

142. *Id.*, at ¶ 75 (emphasis added).

143. *See also Solar City Corp.*, 2015 WL 6503439. In his order, federal district court Judge Rayes dismissed SolarCity’s claims for damages under federal and state antitrust laws. *Id.* at *10-11. The Court found that, as a governmental entity, Salt River was not subject to antitrust damage claims. *Id.* at *5-6. But the court denied Salt River’s motion to dismiss SolarCity’s claim for injunctive relief under the antitrust laws, ruling that the plaintiff had “plausibly alleged” that Salt River had monopoly power and had used it to restrict competition.

In the next section of this article we explain why, as a matter of both law and policy, the answer should be “no.”

B. Most Net Metering Rate Decisions Are Not Subject to Antitrust Liability

Whether Solar City could otherwise allege and ultimately prove the elements required to establish monopolization under Section 2 of the Sherman Act is beyond the scope of this article.¹⁴⁴ Regardless of how the conflicting positions in the net metering debate are resolved, however, the decisions policymakers, acting under state authority, ultimately fashion to revisit and revise net metering policies cannot and should not be subject to challenge under the antitrust laws. The antitrust laws do not apply to such public policy determinations, and the antitrust laws are incapable of balancing all of the important societal interests at issue.¹⁴⁵

Id. at *12. Initially, the Court held that Salt River’s state action immunity defense presented questions of fact not properly resolved in a motion to dismiss. *Id.* at *14. In later denying Salt River’s motion to certify the case for interlocutory appeal, however, the court acknowledged that state action immunity was not a question of fact. *SolarCity Corp.*, 2015 WL 9268212, at *2-3 (“The District argues that the ‘clear articulation’ prong is a question of law that the Court should have decided in its Order. The Court agrees with the District.”) But in reversing himself on whether state action immunity was a question of fact, he ruled that, as a matter of law, Salt River was not entitled to state action immunity because restrictions on retail competition were not the “clearly foreseeable” result of state laws empowering Salt River to set retail rates. *Id.* at *2-3.

The lower court’s 2015 orders allowing SolarCity’s claim for injunctive relief to proceed - and in particular the judge’s determination on the issue of state action immunity are the subject of Salt River’s pending interlocutory appeal to the Ninth Circuit. The Department of Justice filed an amicus brief that, among other things, supports SolarCity’s position that the state action doctrine does not apply. Brief for the U.S. as Amicus Curiae Supporting Plaintiff-Appellee, *SolarCity Corp. v. Salt River Project Agric. Improvement and Power Dist.*, No. 15-17302 (filed June 7, 2016) [hereinafter DOJ Amicus Brief].

144. A claim for monopolization requires proof that the defendant possesses monopoly power and has acquired, enhanced or maintained that power by the use of exclusionary conduct. ANTITRUST LAW DEVELOPMENTS (SEVENTH) 225 (Am. Bar Ass’n 2012). Determining whether conduct should be characterized as “exclusionary” has been “one of the most vexing questions in antitrust law.” *Id.* at 241.

Salt River has filed a motion for summary judgment arguing, among other things that it has not engaged in anticompetitive conduct. *Solar City Corp. v. Salt River Project Agric. Improvement and Power Dist.*, No. 2:15-CV-15-00374-PHX-DLR (D. Ariz. Sept. 15, 2016).

145. To be sure, it has long been settled that the antitrust laws apply to the electric industry, the extensive nature of federal regulation in that industry notwithstanding. *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973); *Cantor v. Detroit Edison Co.*, 428 U.S. 579, 596 n. 35, (1976) (“[T]here can be no doubt about the proposition that the federal antitrust laws are applicable to electrical utilities.”) This is so, even though agencies like the FERC, charged with ensuring just and reasonable rates, must take antitrust policy into account when setting rates. *Gulf States Utils. Co. v. Fed. Power Comm’n*, 411 U.S. 747, 757-58 (1973). In weighing antitrust policy, along with other factors, the agency’s orders serve not to shield utilities from antitrust liability, but as “a first line of defense against those competitive practices that might later be the subject of antitrust proceedings.” *Id.* at 760. “The fact that banking is a highly regulated industry critical to the Nation’s welfare,” the Supreme Court has similarly observed, “marks [sic] the play of competition not less important but more so.” *United States v. Philadelphia Nat’l. Bank*, 374 U.S. 321, 372 (1963). But while “[r]epeals of the antitrust laws by implication from a [federal] regulatory statute are strongly disfavored,” states may determine that otherwise anticompetitive conduct serves an important state interest. *Id.* at 350. When that is the case, under *Parker*, state action to carry out that policy does not result in implied *repeal* of the antitrust laws, but it may result in *exempting* or *immunizing* the conduct in question from the antitrust laws.

As an initial matter, the antitrust laws govern the conduct of *commercial enterprises* and individuals.¹⁴⁶ The theory of the free market provides that in perfect competition, when the market forces of supply and demand determine the price charged, the resulting price “equate[s] social desire and social cost” and maximizes the welfare of consumers.¹⁴⁷ When, however, private firms collude to enable themselves to behave like a monopolist, or when a monopolist engages in exclusionary conduct that undermines competition on the merits, that conduct harms the public interest, usually by inflating prices. “The risk that *private* regulation of market entry, prices, or output may be designed to confer monopoly profits on members of an industry at the expense of the consuming public has been the central concern of . . . our antitrust jurisprudence.”¹⁴⁸

By contrast, the *states* “need not adhere in all contexts to a model of unfettered competition.”¹⁴⁹ States may enact policies like rent control or minimum wage laws even though such policies are aimed explicitly at replacing the “competitive” outcome with an outcome that reflects other concerns, such as the distribution of income or power. The debates that occur in state legislatures or before regulatory agencies are not limited to arguments about whether a particular policy is “procompetitive” or anticompetitive,” but allow for the consideration of all factors of importance to individuals and businesses. “If every duly enacted state law or policy were required to conform to the mandates of the [federal antitrust statute], thus promoting competition at the expense of other values a State may deem fundamental, federal antitrust law would impose an impermissible burden on the States’ power to regulate.”¹⁵⁰

1. The State Action Doctrine

The State Action Doctrine, first articulated in *Parker v. Brown*, provides the legal framework for immunizing state public policy determinations from scrutiny under the antitrust laws.¹⁵¹ “State legislation and ‘decision[s] of state supreme court, acting legislatively rather than judicially, . . . are exempt from the operation of the antitrust laws’ because they are an undoubted exercise of state sovereign authority.”¹⁵² On the other hand, when a state delegates its authority to a “substate governmental entity,” such as a municipality, state action immunity attaches to the activities of local governmental entities only “if they are undertaken pursuant to a

146. We refer here to “commercial enterprises” because governmental entities, acting in a commercial capacity, may also be subject to the antitrust laws. *Community Commc’n Co. v. Boulder*, 455 U. S. 40, 53 (1982).

147. See, e.g. ROBERT H. BORK, *THE ANTITRUST PARADOX* 97 (1993).

148. *North Carolina State Bd. Of Dental Exam’rs v. Fed. Trade Comm’n*, 135 S. Ct. 1101, 1111 (2015) (quoting *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 501 (1988) (Stevens, J. dissenting)) (emphasis added).

149. *North Carolina State Bd. of Dental Exam’rs*, 135 S. Ct at 1109.

150. *Id.*

151. *Parker v. Brown*, 317 U.S. 341 (1943).

152. *North Carolina State Bd. of Dental Exam’rs*, 135 S. Ct at 1110 (citing *Hoover v. Ronwin*, 466 U.S. 558, 567-68 (1984)).

‘clearly articulated and affirmatively expressed’ state policy to displace competition.”¹⁵³ “This rule ‘preserves to the States their freedom . . . to use their municipalities to administer state regulatory policies free of the inhibitions of the federal antitrust laws without at the same time permitting purely parochial interests to disrupt the Nation’s free-market goals.’”¹⁵⁴

When private parties attempt to invoke the state action doctrine based on a claim they are acting pursuant to a state policy to displace competition, there is an additional requirement: “the policy [must be] actively supervised by the State itself.”¹⁵⁵ This rule “confirms that while a State may not confer antitrust immunity on private persons by fiat, it may displace competition with active state supervision if the displacement is both intended by the State and implemented in its specific details.”¹⁵⁶ Thus, under this additional requirement for private parties, “[a]ctual state involvement . . . is the precondition for immunity [under] federal law.”¹⁵⁷

2. State Statutes That Authorize Rate Setting “Clearly Articulate” a State Policy to “Displace Competition”

A state may delegate to a commission, municipality, special purpose district or other “substate governmental entity” the duty to set rates for a service based on some public interest standard, such as “just and reasonable.” When the state establishes such a rate setting process, then as long as the state or substate entity is actively engaged, the rates ultimately set through this process are immune under the state action doctrine.¹⁵⁸

As noted above, actions of local governmental entities are immune “if they are undertaken pursuant to a ‘clearly articulated and affirmatively expressed’ state policy to displace competition.”¹⁵⁹

“[T]o pass the ‘clear articulation’ test,” a state legislature need not “expressly state in a statute or its legislative history that the legislature intends for the delegated action

153. Fed. Trade Comm’n v. Phoebe Putney Health Sys., Inc., 133 S. Ct. 1003, 1010-11 (2013) (citing Community Commc’n Co. v. Boulder, 455 U.S. 40, 52 (1982)).

154. *Id.* (citing Lafayette v. Louisiana Power & Light Co., 435 U.S. 389, 415-416 (1978)).

155. Fed. Trade Comm’n v. Ticor Title Ins. Co., 504 U.S. 621, 642 (1992) (citing California Retail Liquor Dealers Assn. v. Midcal Aluminum, Inc., 445 U.S. 97 (1980)).

156. *Ticor Title Ins. Co.*, 504 U.S. at 633 (1992).

157. *Id.* at 633. Recent Supreme Court decisions have underscored the limitations of the state action doctrine while observing that “state action immunity is disfavored.” *Phoebe Putney Health Sys., Inc.*, 133 S. Ct. at 1005. Given the facts of these cases, the holdings that the conduct at issue was not immune are unsurprising. The Court has held that a state’s theoretical right to disapprove filed rates will not satisfy the “active supervision” prong where the record shows there was no actual state review of the rates, that a general grant of corporate powers does not establish a state policy to authorize anticompetitive mergers, and a licensing board dominated by members of a profession will not be immune for unsupervised actions to drive out potential competitors. *Ticor Title Ins. Co.*, 504 U.S. at 642-43; *Phoebe Putney Health Sys., Inc.* 133 S. Ct. at 1003; *see generally North Carolina State Bd. of Dental Examiners*, 135 S. Ct. 1101. On each occasion, however, the Supreme Court has reaffirmed the fundamental principles of the state action doctrine and the long line of Supreme Court cases upon which numerous lower courts continue to rely.

158. *See* discussion, *infra*, at note 156 (discussing lack of governmental engagement in *Ticor Title Ins. Co.*, 504 U.S. 621, and *Cantor*, 428 U.S. 579).

159. *Phoebe Putney Health Sys., Inc.*, 133 S. Ct. at 1011.

to have anticompetitive effects.” Rather . . . state-action immunity applies if the anticompetitive effect was the ‘foreseeable result’ of what the state authorized.¹⁶⁰

Under this test, the Supreme Court has held, for example, that a municipality’s enactment of a zoning ordinance was immune from an antitrust claim that it restricted competition in the billboard market because the suppression of that competition was the “foreseeable result” of the statute authorizing zoning.¹⁶¹

Similarly, and particularly relevant here, in *Southern Motor Carriers Rate Conference, Inc. v. United States*, decided in 1985, the Supreme Court held that when a statute provides for a substate governmental entity to prescribe “just and reasonable” rates, it evidences the legislature’s intent that such rates “be determined by a regulatory agency, *rather than by the market*.”¹⁶² The Court noted that the factors to be considered under the statute at issue bore “no discernible relationship to the prices that would be set by a perfectly efficient and unregulated market,” clearly indicating that the legislature “intended to displace competition.”¹⁶³ In fact, the Court referred to the practice of setting “just and reasonable rates” as “inherently anticompetitive.”¹⁶⁴ Thus, the Court held that, to the extent the ratemaking activities at issue were anticompetitive, that conduct was undertaken “pursuant to a ‘clearly articulated state policy,’” and, accordingly, immune under the state action doctrine.¹⁶⁵ The principles articulated in *Southern Motor Carriers* continue to be cited with approval by the Supreme Court¹⁶⁶ and relied upon in the lower courts.¹⁶⁷

160. *Id.* at 1011 (citing *Hallie v. Eau Claire*, 471 U.S. 34, 43 (1985)).

161. *Columbia v. Omni Outdoor Advert., Inc.*, 499 U.S. 365, 373 (1991). *See also* *United Nat. Maint. v. San Diego Convention Ctr.*, 766 F. 3d 1002 (9th Cir. 2014). There, the court upheld the City of San Diego’s *Parker* immunity defense to an antitrust suit claiming that by requiring all trade show vendors to use its cleaning services, the City-owned convention center had unlawfully shut out competition from independent cleaning services. In upholding the city’s *Parker* immunity claim, the court found particularly relevant that state law authorized San Diego to use the funds from operating the convention center both to pay for the center and “for the benefit of the [community].” *Id.* at 1010-1011. “In order to ensure the success of that investment,” the court held, “it is foreseeable that an operator of the convention center may exclusively provide cleaning staff to ensure the success of that financial commitment.” *Id.*

162. *S. Motor Carriers Rate Conference, Inc. v. United States*, 471 U.S. 48, 64 (1985) (emphasis added).

163. *Id.* at 65 n. 25.

164. *Id.* at 64.

165. *Id.* at 65. In *Southern Motor Carriers*, the Supreme Court distinguished *Cantor v. Detroit Edison Co.*, 428 U.S. 579 (1976), in which the Court had refused to extend state action immunity to a private electric utility’s program of furnishing light bulbs to residential customers without additional charge. According to *Southern Motor Carriers*, the program in *Cantor* was found to be unprotected “because the Michigan Legislature had indicated no intention to displace competition in the relevant market,” presumably a reference to the market for light bulbs. *S. Motor Carriers*, 471 U.S. at 64. Another explanation for the holding in *Cantor* is that, although the program at issue was the subject of a filed tariff, the Court found very little actual state involvement in the decisions resulting in the enactment of the program. *Cantor*, 428 U.S. at 594 (“there can be no doubt that the option to have, or not to have, such a program is primarily [the utility’s], not the Commission’s”). In that regard, *Cantor* resembles the Court’s 1992 decision in *Ticor Title*, in which the Court held that a state’s theoretical right to disapprove filed rates will not satisfy the “active supervision” prong where the record showed that there was no actual state review of the rates. *Ticor Title Ins. Co.*, 504 U.S. 621 (1992).

166. *See Phoebe Putney Health Sys., Inc.*, 133 S. Ct. at 1013 n. 7 (identifying *Southern Motor Carriers* as a case where the finding of the State’s intent to displace competition involved an authorization to act or regulate “in ways that were inherently anticompetitive”).

167. *See Am. Cab L.L.C. v. Sunline Servs. Grp.*, 2013 WL 1387198 (C.D. Cal. 2013) (post-*Phoebe Putney Health Systems* decision citing *Southern Motor Carriers* with approval in holding that Sherman Act claim was barred under state action doctrine).

3. Applying the State Action Doctrine to Net Metering Rate Decisions

a. Net Metering Policies Established By Political Subdivisions of the State.

As explained above, when the legislature enacts a statute delegating rate setting authority to a municipality according to a process that allows all interested parties to advocate their respective positions, the rates thereby established are immune under the state action doctrine. This conclusion applies with full force to the fashioning of regulatory policies on net metering.

Acknowledging that “not every aspect of electricity generation and distribution was intended to become competitive,” the Justice Department nonetheless takes issue with this conclusion in its amicus brief filed in the *SolarCity* litigation.¹⁶⁸ It argues that where the state—in this case Arizona—has authorized retail electric competition, “neither *continuing pockets of regulation* nor conflicting goals establish that the state has articulated a clear policy to displace competition.”¹⁶⁹ Thus, DOJ says, where the complaint is that the purpose of the utility’s new rate design “is not to recoup reasonable grid-related costs from distributed solar customers, but to prevent competition from [providers of distributed solar], the price increase is not a ‘foreseeable result’ of [the utility’s] authority to set its rates.”¹⁷⁰

The difficulty in DOJ’s argument is that the municipality’s authority to set distribution rates—like the authority given to state public utility commissions to regulate the retail rates of privately-owned utilities—falls precisely in one of the “pockets of regulation” where, as the Supreme Court said in *Southern Motor Carriers*, limitations on competition are clearly foreseeable.¹⁷¹ Indeed, regulation of a utility’s distribution system involves the use and pricing of facilities for which there is no competition. Where limitations on competition are the clearly foreseeable result of the authority granted the municipality, even evidence that the municipality acted with an anticompetitive motive cannot nullify the municipality’s antitrust immunity.¹⁷² The debate about net metering policy centers on the rates customers should pay for use of the local grid. As discussed earlier in this article, all utility customers rely on the utility distribution grid, including those with rooftop solar installations. This makes the local grid what the Ninth Circuit has described as one of the “paradigmatic examples of natural monopolies” that state legislatures foresee will displace competition and therefore enjoy *Parker* immunity.¹⁷³

In contesting the utility’s state action immunity claim in *SolarCity*, the DOJ also argues that the utility “does not cite any statutory provision giving it authority to use its rates to exclude competition.”¹⁷⁴ Disproving this contention, however, places an impractical onus on virtually any utility. It would be one thing if the

168. DOJ Amicus Brief, *supra* note 143, at 32.

169. *Id.* (emphasis added).

170. *Id.* at 36.

171. *Southern Motor Carriers*, *supra*, 471 U.S. at 65 n. 25.

172. *Omni Outdoor Advert*, 499 U.S. at 376-78.

173. *Lancaster Cmty. Hosp. v. Antelope Valley Hosp. Dist.*, 940 F. 2d 397, 401 n.8 (9th Cir. 1991).

174. DOJ Amicus Brief, *supra* note 143, at 35.

allegation was that the utility used its monopoly over distribution to refuse to interconnect distributed generation facilities or to insist on interconnection standards that were not based on bona fide reliability concerns. But charging a customer with distributed generation *anything* for use of the local grid will necessarily make self-generation less economically attractive. Even assuming that assessing such customer charges for use of the grid would be anticompetitive, this would seem to be precisely the foreseeable result of granting the municipal utility the power to set rates for the use of its natural monopoly distribution facilities.¹⁷⁵ In the *Solar-City* case, moreover—and this is not atypical—the lower court found that Salt River’s rates were intended not only to recover its costs of electric distribution, but to subsidize water operations as well.¹⁷⁶ It is hard to imagine a more clearly articulated policy to displace competition under *Southern Motor Carriers* than one authorizing a utility to charge rates exceeding its actual costs.

b. Net Metering Policies of Rural Electric Cooperatives

While rural electric cooperatives are privately-owned entities, several courts have characterized their operations as “quasi-governmental” in nature and held that, like municipal utilities, they do not have to establish “active state supervision” to qualify for *Parker* immunity. In *Fuchs v. Rural Elec. Convenience Coop. Inc.*, for example, the court observed that “[i]n antitrust cases, courts have often found it difficult to determine whether actors should be treated as public agencies or private entities. The dividing line is neither sharply drawn nor easily perceived.”¹⁷⁷ But, it said, rural electric cooperatives should be treated more like an “arm of the state” . . . presumed to act in the public interest,” than as a private actor.¹⁷⁸ “Unlike private actors who seek to further their own interests and will exploit market factors to reap the highest possible profits,” it reasoned, “rural electric cooperatives are in some sense ‘instrumentalities of the United States.’”¹⁷⁹

175. DOJ’s rationale would also call into question the lawfulness of ubiquitously-used utility rate structures like “lifeline rates” and “public benefit charges.” The former often take the form of outright discounts to low income electricity consumers, a practice that requires the utility to raise rates to more affluent customers. REGULATORY ASSISTANCE PROJECT, *Electricity Regulation In the U.S.: A Guide* (Mar. 2011). But in lowering the cost of utility-provided electricity to low income users, lifeline rates also make distributed generation less competitive for those customers. Low income electric customers in thirty states are also assisted by fixed public benefit fund charges to higher income customers. SANDRA GLATT ET AL., U.S. DEPT. OF ENERGY, PUBLIC BENEFIT FUNDS: INCREASING RENEWABLE ENERGY & INDUSTRIAL ENERGY EFFICIENCY OPPORTUNITIES 1 (Mar. 2010), www1.eere.energy.gov/manufacturing/states/pdfs/publicbenefitfunds.pdf. The revenues generated from these charges are used to provide assistance to lower income consumers. But by raising the fixed monthly charges to higher income users to fund these programs the utility is making distributed generation less attractive, too. Does DOJ really mean to call into question whether lifeline rates and public benefit charges fall outside the state action immunity doctrine?

176. *SolarCity Corp.*, 2015 WL 6503439, at *3 (noting that “revenues generated from the District’s sale of electricity subsidize the Association’s ‘money-losing water operations, by [\$100 million] per year.’”). The fact that the state contemplated that funds raised by the local authority would be used to support other purposes, as the Ninth Circuit noted in *United Nat’l. Maint., Inc.*, made the foreclosure of some competition foreseeable. *United Nat’l. Maint., Inc.*, 766 F. 3d at 1011.

177. *Fuchs v. Rural Elec. Convenience Coop., Inc.*, 858 F. 2d 1210, 1216 (7th Cir. 1988); see Duncan Kennedy, *The Stages of the Decline of the Public/Private Distinction*, 130 U. PA. L. REV. 1349 (1982).

178. *Fuchs*, 858 F. 2d at 1217.

179. *Id.* (quoting *Ala. Power Co. v. Ala. Elec. Coop., Inc.*, 394 F. 2d 672, 677 (5th Cir. 1968), *cert. denied*, 393 U.S. 1000 (1968)).

The Sixth Circuit reached a similar conclusion,¹⁸⁰ as did a federal district court in Alabama.¹⁸¹ In each of these instances, however, the courts' conclusions were tied to the assumption that the cooperatives received funding from the Rural Utilities Service. While the vast majority of rural electric cooperatives in fact rely on RUS funding, that is not true of all rural electric cooperatives.¹⁸² Whether the minority of rural cooperatives that rely entirely on private sources of capital (and thus do not have to meet federal loan requirements) would likewise be considered "arms of the government" not requiring active supervision, is unclear.¹⁸³

c. Net Metering Rates of Privately-Owned Utilities

As noted earlier, where private utilities are involved, state action immunity requires not only evidence of a "clearly articulated" state policy to displace competition, but evidence of active state supervision to carry out that policy. Such "active supervision" is easily manifested in the numerous state proceedings examining utility net metering policies.

Like their federal counterparts, state regulatory agencies fashion policies both through individual adjudications and generic rulemaking proceedings.¹⁸⁴ Addressing the same regulatory challenge in the federal context, the Supreme Court discussed the need for this flexibility decades ago:

Not every principle essential to the effective administration of a statute can or should be cast immediately into the mold of a general rule. Some principles must await their own development, while others must be adjusted to meet particular, unforeseeable situations. In performing its important functions in these respects, therefore, an administrative agency must be equipped to act either by general rule or by individual order.¹⁸⁵

As discussed earlier, many of the proceedings in which state agencies are examining net metering have been generic proceedings initiated by the regulators or, in some cases, the state legislatures. These types of proceedings fit the concept of "active supervision" almost by definition.

But cases in which the utilities themselves initiate proposals to revise their net metering tariffs are no less actively supervised by the states. While private utilities initiate the process that leads to the setting of their rates in such cases, they plainly do not control the result. Indeed, as recounted in the surveys of these proceedings done in the *50 States of Solar* reports cited earlier, what the utilities have

180. *McCarthy v. Middle Tenn. Elec. Membership Corp.*, 466 F. 3d 399 (6th Cir. 2006).

181. *Caver v. Central Ala. Elec. Coop.*, No. 15-0129-WS-C, 2015 WL 4742490 (S.D. Ala. Aug. 11, 2015).

182. Cynthia Marlette, General Counsel, Fed. Energy Regulatory Comm'n, Statement before the United States House of Representatives Subcommittee on Conservation, Credit, Energy, and Research (July 30, 2008), <http://www.ferc.gov/CalendarFiles/20080730104611-Marlette.pdf>.

183. A number of rural electric cooperatives are subject to rate regulation by state public utility commissions. *See infra* note 188. Assuming the "active supervision" test applies to them, state regulation of their net metering policies would likely constitute "active supervision" for the same reasons that, as we discuss *infra*, apply to privately-owned utilities. A more difficult question, beyond the scope of this article, is whether, in the absence of both RUS funding and conventional state commission rate regulation, they could qualify for state action immunity.

184. *See, e.g.*, *Arthurs v. Board of Registration in Med.*, 418 N.E.2d 1236, 1246 (Mass. 1981) (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 202 (1947)); *New Jersey Dept. of Env't. Prot. v. Stavola*, 511 A.2d 622, 631 (N.J. 1986); *In re Application of Hawaiian Elec. Co., Inc.*, 918 P.2d 561, 570-71 (Haw. 1996).

185. *Chenery Corp.*, 332 U.S. at 202.

requested, and what the states have authorized, have usually differed substantially.¹⁸⁶

Nor are members of the public, including owners of rooftop solar installations, passive participants in proceedings involving utility-proposed changes to net metering. Opponents, which may include governmental entities charged with protecting the interests of consumers, consumer groups, and others, are permitted to contest the requests made by the private utilities by offering evidence and submitting arguments. The commissions themselves, after a process that is largely indistinguishable from a generic rulemaking proceeding, make the final determination on the rates to be allowed. Such a process easily satisfies the requirement, applicable to conduct by private parties, that the conduct at issue must be “actively supervised by the State.”¹⁸⁷

C. *The Antitrust Laws are Incapable of Balancing the Societal Interests at Issue*

For the reasons discussed earlier, the antitrust laws do not apply to the decision of a substate governmental entity, such as a municipality, to approve a rate adjustment opposed by manufacturers of rooftop solar installations. Beyond these legal barriers, it is also important to recognize that the antitrust laws are not suited to resolve the public policy debate over how net metering rates should be designed because they cannot attach any weight to societal interests that do not fit within the category of impact on “competition.”

As explained above, one of the arguments made in opposition to reductions in net metering credits is that such reductions impair the ability of distributed solar system manufacturers to compete against traditional utilities. Even taking that argument at face value, it is just one of many arguments made in the debate over net metering rates. For example, one of the counterarguments is that the failure to reduce these credits raises the costs for households without these solar installations, households that disproportionately include low income, fixed income and

186. Inskip, *supra* note 11, at 29.

187. See, e.g., *Vernon v. S. Cal. Gas Co.*, No. 94-56174, 1996 WL 138554, at *3 (9th Cir. Mar. 27, 1996) (“SoCal[Gas]’s rates to [plaintiff] were the subject of extensive proceedings before the CPUC,” and this review established active supervision by the state of California); *Nugget Hydroelectric, L.P. v. Pac. Gas & Elec. Co.*, 981 F.2d 429 (9th Cir. 1992) (the CPUC decisions reviewing the defendant’s anticompetitive contract provisions were sufficient to prove that the state actively supervised the contracts containing those provisions); *Norcen Energy Res. Ltd. v. Pac. Gas & Elec. Co.*, No. C-94-0911-VRW, 1994 WL 519461, at *9 (N.D. Cal. Sept. 19, 1994) (the “CPUC’s thorough consideration and reconsideration [of the anticompetitive conduct complained of, as evidenced by the CPUC’s resolutions] amply demonstrates the state’s active role in regulating defendant[s] . . . conduct in this case”); *Stanislaus v. Pac. Gas & Elec. Co.*, No. CV-F-93-5866-OWW, 1994 WL 706711, at *27 (E.D. Cal. Aug. 25, 1994) (the CPUC’s reasonableness review of applications satisfies the active supervision requirement); *Transphase Sys. v. S. Cal. Edison Co.*, 839 F. Supp. 711, 716 (C.D. Cal. 1993) (“a careful review of the CPUC’s published opinions clearly establishes that the Commission actively supervises every aspect of [defendant’s] activities attacked by [plaintiff’s] complaint.”). Municipalities are not, as noted earlier, subject to the “active supervision” prong of the state action immunity test. As APPA General Counsel Delia Patterson has pointed out to the authors, however, municipal utilities in some states are nonetheless also subject to rate regulation by state commissions. In many other instances, their rates are subject to review by independent, elected boards. Email from Delia Patterson, General Counsel, APPA (June 22, 2016) (on file with author). Rural electric cooperative rates are regulated similarly by a number of state commissions or otherwise subject to approval by their elected boards. Telephone Interview with Paul Breakman (May 9, 2016).

minority households.¹⁸⁸ As one academic argues, full retail net metering “is socially regressive, transferring wealth from the less affluent to more affluent consumers.”¹⁸⁹ Balancing these and other considerations, is particularly difficult in the ratemaking context, where local grid upgrade costs involve lump sum outlays that serve many purposes; integrate solar better, improve reliability, etc. That, as Fox-Penner observes, “is what regulation does—it decides a fair, revenue adequate but not overadequate way of recouping fixed costs from multiple beneficiaries.”¹⁹⁰

While legislatures, elected officials, municipalities, and public utilities commissions can consider all of these arguments, courts adjudicating antitrust cases are limited to assessing the impact of practices on *competition only*. For example, the Supreme Court refused to consider arguments that allowing competitive bidding could result in inferior engineering work and create a danger to public safety and welfare, noting that its function was “not to decide whether a policy favoring competition is in the public interest.”¹⁹¹ Similarly, a district court and appellate court struggled with an antitrust lawsuit challenging an agreement among universities to allocate more of the schools’ limited financial aid funds to students with a demonstrated financial need, as opposed to competing for less needy students with large merit scholarships.¹⁹² Lacking any mechanism to balance the non-economic case for providing assistance to students without the means to attend college against the “pure market” model of competitive bidding for the most sought-after students, the courts were required to attempt to cast the social justifications for the program in competitive terms.¹⁹³

The public policy debate over the rate design for net metering should take place in a forum where all arguments can be advanced and all interests—including non-economic interests—can be considered. It is possible, for example, that preserving existing full retail net metering could be regarded, simplistically, as “good for the environment” and “bad for poor people.” Weighing those conflicting considerations is the job of legislatures, municipalities, and regulators. It is beyond the capacity of courts adjudicating antitrust cases.¹⁹⁴

188. See, e.g., THE NAT’L BLACK CAUCUS OF STATE LEGISLATORS, *supra* note 2. (“But those with DG on their premises do more than capture all the benefits—they also indirectly raise overall utility costs for non-participants.” Those affected will likely “be comprised of disproportionately large numbers of low-income, fixed-income, and minority households.” See also MIA L. JONES, *supra* note 2, (asserting that net metering systems push infrastructure costs “onto the backs of those who cannot afford solar installations.”).

189. See Brown, *supra* note 37.

190. Email from Peter Fox-Penner, *supra* note 87.

191. National Soc’y of Prof’l Eng’r v. United States, 435 U.S. 679, 692 (1978).

192. United States v. Brown Univ., 805 F. Supp. 288 (E.D. Pa. 1992), *rev’d*, 5 F.3d 658 (3d Cir. 1993).

193. *Id.* at 304-05.

194. As noted earlier, state action immunity and implied repeal are distinct concepts. But the concerns that would justify repeal implied from the existence of a regulatory regime apply with full force in the net metering context. Where, for example, particular conduct is barred under the antitrust laws but encouraged under a scheme of regulation, the Supreme Court has found implied repeal necessary to eliminate the threat that identical conduct would receive different treatment from experienced regulators, on the one hand, and “nonexpert judges and different nonexpert juries” on the other. *Credit Suisse Sec. L.L.C. v. Billing*, 551 U.S. 264, 265 (2007). Just as the antitrust courts lack the “security-related expertise” the Court found important in *Credit Suisse*, so too do generalist courts lack the ratemaking expertise to fashion ratesetting policy through antitrust decisions.

D. *Applicability of the Filed Rate Doctrine to Net Metering Antitrust Cases*

Many readers of this Journal will be familiar with the “filed rate doctrine” as the principle (1) barring regulated sellers of electricity or natural gas “from collecting a rate other than the one filed with the [FERC]”¹⁹⁵ and (2) requiring state regulators to allow local utilities passthrough of costs incurred under a federally-filed tariff.¹⁹⁶ But in the antitrust context, the doctrine (known in that context as the *Keogh* doctrine)¹⁹⁷ has been applied to bar plaintiffs from collecting monetary damages for state and federal antitrust violations where the damages arise from “filed” rates, i.e., rates or tariffs on file with a federal regulatory agency.¹⁹⁸ In this respect, all that is relevant is that the rates or tariffs have been filed with the regulatory agency, irrespective of whether they have been approved or investigated.¹⁹⁹

The *Keogh* doctrine itself is narrow; it is not an antitrust immunity doctrine; it only prevents treble damages claims for violations of filed rates.²⁰⁰ It does not, for example, prevent government or private suits seeking injunctive relief for predatory, exclusionary, or collusive behavior.²⁰¹ And there is a split among the circuits as to whether the doctrine should bar damage suits where the plaintiffs are competitors rather than customers of the defendants.²⁰²

That said, the doctrine is likely to be directly relevant to the disposition of claims that a utility’s net metering tariffs violate the antitrust laws. Although some of the cases describing the doctrine imply that its applicability is limited to cases in which antitrust claims implicate *federally*-filed rates, it “has been held to apply equally to rates filed with state agencies by every court to have considered the question.”²⁰³

195. *Arkansas La. Gas Co. v. Hall*, 453 U.S. 571, 578 (1981); *NSTAR Elec. & Gas Corp. v. FERC*, 481 F.3d 794, 800 (D.C. Cir. 2007); *cf. Montana-Dakota Utils. Co. v. Nw. Pub. Serv. Co.*, 341 U.S. 246 (1951).

196. *Nantahala Power & Light Co. v. Thornburg*, 476 U.S. 953 (1986); *Mississippi Power and Light Co. v. Mississippi ex rel. Moore*, 487 U.S. 354 (1988). This, as the Ninth Circuit pointed out in *Carlin v. Dairyamerica, Inc.*, 705 F.3d 856 (9th Cir. 2013), derived from Supremacy Clause concerns.

197. The doctrine derives its name from the Supreme Court’s decision in *Keogh v. Chicago & Nw. Ry. Co.*, 260 U.S. 156 (1922), barring the plaintiff from recovering treble damages.

198. *Carlin*, 705 F.3d at 869.

199. *Square D Co. v. Niagara Frontier Tariff Bureau, Inc.*, 476 U.S. 409, 417 n. 19 (1986); *see also E. & J. Gallo Winery v. EnCana Corp.*, 503 F.3d 1027, 1039 (9th Cir. 2007) (only issue under filed rate doctrine is whether the rates have been “authorized”); *Town of Norwood v. New England Power Co.*, 202 F.3d 408, 416 (1st Cir. 2000).

200. *Square D Co.*, 476 U.S. at 422.

201. *See, e.g., Georgia v. Pennsylvania R.R. Co.*, 324 U.S. 439 (1945); *City of Groton v. Connecticut Light & Power Co.*, 662 F.2d 921 (2d Cir. 1981).

202. *Compare City of Groton*, 662 F.2d at 929 (recognizing competitor exemption); *City of Mishawaka v. Indiana & Mich. Elec. Co.*, 560 F.2d 1314 (7th Cir. 1977), *cert. denied*, 436 U.S. 922 (1978) (recognizing competitor exemption in “price squeeze” cases”); *City of Kirkwood v. Union Elec. Co.*, 671 F.2d 1173, 1177-78 (8th Cir. 1982); *and In re Lower Lake Erie Iron Ore Antitrust Litig.*, 998 F.2d 1144, 1161 (3d Cir. 1993) (recognizing competitor exception to *Keogh*); *with Utilimax.com, Inc. v. PPL Energy Plus, L.L.C.*, 378 F.3d 303, 307-08 (3d Cir. 2004) (doctrine applies where plaintiff is both competitor *and* purchaser); *Town of Norwood*, 202 F.3d at 420; *and Pinney Dock & Transp. Co. v. Penn Cent. Corp.*, 838 F.2d 1445 (6th Cir. 1988) (finding that *Keogh* bars competitors’ claims).

203. *Destec Energy, Inc. v. S. Cal. Gas Co.*, 5 F. Supp. 2d 433, 458 (S.D. Tex. 1997) (citing *Wegoland Ltd. v. NYNEX Corp.*, 27 F.3d 17, 20 (2d Cir. 1994) (“the rationales underlying the filed rate doctrine apply equally strongly to regulation by state agencies”); *Taffet v. S. Co.*, 967 F.2d 1483, 1494 (11th Cir. 1992), *cert. denied*, 506 U.S. 1021 (1992) (“This principle, which is central to the filed rate doctrine . . . applies with equal force to preclude recovery under RICO whether the rate at issue has been set by a state rate-making authority or

This latter point is of considerable significance to privately-owned utilities and their rural electric cooperative counterparts. Retail rates and tariffs of the former are almost all regulated by state commissions. And the retail rates of roughly half of all rural electric cooperatives are regulated by state commissions, too.²⁰⁴ While mere state approval of private or rural cooperative utility tariffs will not necessarily give them a state action antitrust exemption,²⁰⁵ approval of those same tariffs by the regulator will preclude the utility's customers from seeking antitrust damages for tariffs they believe to be excessive—even if the conduct leading to the formulation of those tariffs was the product of overt collusion.²⁰⁶ And at least one circuit court of appeals has concluded that where “any meaningful relief [for the alleged antitrust violation] would require the *alteration* of tariffs”—even injunctive relief would be covered by the filed rate doctrine.²⁰⁷

The SolarCity litigation is a good example of a case in which the relief sought would seem to fall squarely within the coverage of the filed rate doctrine. The district court in that case correctly concluded that the filed-rate doctrine applies to challenges to the reasonableness of rates. It nonetheless found the doctrine inapplicable. “Whether the rates are reasonable,” it reasoned, “has no bearing on whether the District engaged in anticompetitive conduct.”²⁰⁸ But, even assuming that charging net-metered customers more for the utility's distribution system costs could be considered anticompetitive, the competitor exemption from the filed rate doctrine accepted by some circuits would seem inapplicable. That is, the Solar City complaint is about the charges for services the net-metered customers receive, i.e., for purchases made in their role as customers, not competitors.

It is also hard to see how a court could fashion monetary relief that did not compensate the plaintiff for tariff overcharges to them as customers—the very subject of rate regulation. It is equally difficult to see how a court could fashion injunctive relief that, to be effective, did not also substitute the court's judgment about reasonable rates for that of the regulator. “Antitrust courts,” however, “normally avoid direct price administration, relying on rules and remedies (such as structural remedies. . .) that are easier to administer.”²⁰⁹

The filed rate doctrine would also seem to apply to municipal utility rates that are subject to filing and regulatory requirements. But its import is considerably less in such cases. The filed rate doctrine, as noted above, limits damage liability,

a federal one.”); *H.J. Inc. v. Nw. Bell Tel. Co.*, 954 F.2d 485, 494 (8th Cir. 1992), *cert. denied*, 504 U.S. 957, 112 (1992) (“the filed rate doctrine applies whether the rate in question is approved by a federal or state agency”). See also *Texas Commercial Energy v. TXU Energy, Inc.*, 413 F.3d 503, 507 (5th Cir. 2005).

204. ROBERT L. HAHNE & GREGORY E. ALIFF, *ACCOUNTING FOR PUBLIC UTILITIES* Ch. 14 (2012). Some state commissions also regulate municipal utility rates. Email from Delia Patterson, *supra* note 187.

205. *Cantor*, 428 U.S. at 579.

206. See generally *Square D Co.*, 476 U.S. 409.

207. *Town of Norwood*, 202 F.3d at 420 (1st Cir. 2000) (emphasis in original). There, the court contrasted termination of a price fixing arrangement, which “conceivably could have been enjoined without tampering with the tariffed rates themselves,” and where “the relief would merely assure non-collaborative individual filings by the supposed conspirators,” with an injunction that would set the rates, terms and conditions of the tariff. *Id.* at 419-20. As the court noted, that type of relief would thwart the purpose of the doctrine to preserve the regulator's exclusive authority to regulate the rates, terms, and conditions contained in filed tariffs. *Id.*

208. *SolarCity Corp.*, 2015 WL 6503439 at *43.

209. *Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 25 (1st Cir. 1990).

not antitrust exposure. The Local Government Antitrust Act (LGAA), however, already exempts state and local governments from liability for antitrust damages.²¹⁰ Thus, except for their possible exposure to damage claims under *state* antitrust laws, the doctrine would seem to provide municipal utilities no more protection than they already have under the antitrust laws.²¹¹

V. CONCLUSION

Reaching the “right” answer about the future of net metering is a complicated undertaking. The large number of states that are reexamining their existing net metering policies is surely not proof of the *need* for reform. But with so many experienced regulators questioning the efficacy of their existing policies, their sheer numbers just as surely suggest that there are at least reasons to reevaluate the status quo.

These authors believe that there is not only reason to revisit current policies, but that this article has documented a compelling case for reform. The future of net metering policy, however, will require a balancing of interests that should be decided by regulators, the boards of municipal utilities and the boards of consumer-owned rural electric cooperatives. The antitrust laws have been called “the Magna Carta of free enterprise,” and they play a vital role in preserving competitive marketplaces.²¹² But as the courts themselves have said, they are ill-suited to weigh the societal interests that regulators regularly take into account – societal interests that are at the heart of the net metering debate.

210. LGAA, 15 U.S.C. §§ 34-36, provides that “[n]o damages, interest on damages, costs, or attorney’s fees may be recovered under section 4 . . . of the Clayton Act . . . from any local government . . .” 15 U.S.C. § 35(a). Relevant here, the LGAA defines “local government” as “a school district, sanitary district, or any other special function governmental unit established by State law in one or more States[.]” *Id.* § 34(1). The language itself seems plainly to encompass municipal utilities. And, in fact, the federal district court for Arizona found that the Act applies to the Salt River Project in the SolarCity litigation mentioned above. *See also* SolarCity Corp. v. Salt River Project Agric. Improvement and Power Dist., No. CV-15-00374-PHX-DLR, 2015 WL 6503439 (D. Ariz. Oct. 27, 2015).

211. It would be a matter of state law whether a state-filed rate served to limit a defendant’s liability for antitrust damages under state antitrust law. That issues is beyond the scope of this article.

212. *United States v. Topco Assoc.*, 405 U.S. 596, 610 (1972).