

Electricity: Centralized or Distributed?

Scott Sklar

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By Scott
Sklar
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As the cost of on-site solar, wind, and micro-combined heat and power drop in cost, more consumers are producing their electricity on site and sending any excess to their utilities. Their electric meters run backwards and they are credited for the electricity in a process called net metering.

Utilities are becoming alarmed that they will lose profits and that costs are being shifted in ways they have not previously experienced. So they do what every entrenched monopoly does—they commission studies to show how net metering hurts other ratepayers, especially poor people. But just like the tobacco and coal industry study findings that their products are harmless, these utility studies are nonsense.

Electric utilities have also gone to their legislatures or regulatory commissions to impose "standby charges" to compensate for this cost shift. But actually, net metering is better for ALL ratepayers, and studies are delineating those benefits. If electric utilities overplay their hands, more consumers will turn to energy storage, which allows customers to store their electricity (I do this at my home and office buildings). The downside for the utilities is that they lose access to available, reliable in-service regional electric power.

Midwest Energy News reported on February 27, 2015, about a cost-benefit study on net metering in Missouri. The study concluded that the practice is beneficial for all customers, regardless of whether they have rooftop solar or not. "The study used values for two costs and two benefits and concluded NEM's (net energy metering) 'net effect' is positive. The typical solar owner pays only 20% less in fixed grid costs, and costs the utility an estimated \$187 per interconnection. Solar owners benefit the system through reduced emissions and energy costs. Even accounting for a range of utility costs, including administration and the shift of some infrastructure expenses, the Missouri Energy Initiative study of NEM from 2008 to 2013 reached a similar conclusion as NEM studies for Vermont, New York, Texas, and Nevada."

One of my Virginia solar colleagues commented, "If you dig into the reports (I just looked through Mississippi and Vermont), they calculate the actual long-term value of solar. In Vermont today, that is \$0.22 per kilowatt-hour (/kWh). In Mississippi, it's \$0.17/ kWh. In Mississippi, though, net metered customers are only getting \$0.12 savings for their credits. So really, it's the solar homeowners who are subsidizing the utilities."

Utilities and Distributed Solar

Missouri

Study finds net metering to be a net benefit in Missouri

Midwest Energy News

midwestenergynews.com/2015/02/27/study-finds-net-metering-to-be-a-net-benefit-in-missouri

Net Metering in Missouri: The Benefits and The Costs

Missouri Energy Initiative

moenergy.org/publications/whitepapers/net-metering-in-missouri

Mississippi

Net Metering in Mississippi—Costs, Benefits, and Policy Considerations

Vote Solar

votesolar.org/wp-content/uploads/2014/10/Synpase-MS.pdf

Nevada

Nevada Net Energy Metering Impacts Evaluation

Nevada Public Utilities Commission

puc.nv.gov/uploadedFiles/pucnv.gov/Content/About/Media_Outreach/Announcements/Announcements/E3%20PUCN%20NEM%20Report%202014.pdf?pdf=Net-Metering-Study

New York

Solar Power Generation in the US: Too expensive, or a bargain?

Atmospheric Sciences Research Center, University at Albany, State University of New York

asrc.cestm.albany.edu/perez/2011/solval.pdf

Vermont

Evaluation of Net Metering in Vermont Conducted Pursuant to Act 125 of 2012

Public Service Department

publicservice.vermont.gov/sites/psd/files/Topics/Renewable_Energy/Net_Metering/Act%20125%20Study%2020130115%20Final.pdf

Interstate Renewable Energy Council (IREC) Report

Freeing the Grid

An IREC policy guide that grades all 50 states on two key clean energy programs—net metering and interconnection procedures.

freeingthegrid.org

The States and Climate Change

NextGen Climate America

Senator McConnell Urges Governors to Ignore the Law

nextgenamerica.org/epa-rule/senator-mcconnell-urges-governors-to-ignore-the-law

Florida Center for Investigative Reporting

In Florida, Officials Ban Term “Climate Change”

fcir.org/2015/03/08/in-florida-officials-ban-term-climate-change

EcoWatch

How Melting Antarctic Glacier Will Make These 14 Coastal U.S. Attractions Look

ecowatch.com/2014/05/15/coastal-u-s-melting-antarctic-glacier

North Carolina

North Carolina Bans Latest Scientific Predictions of Sea-Level Rise

ABC News

abcnews.go.com/US/north-carolina-bans-latest-science-rising-sea-level/story

Scott Sklar is president of The Stella Group, Ltd., a strategic technology optimization and policy firm. He can be reached at solarsklar@aol.com.