



## NET ENERGY METERING

Net energy metering (NEM) is a billing mechanism that allows homeowners and businesses that generate their own electricity with their solar energy system to deliver power they do not use back into the grid and receive a credit. These credits can then be used to offset electricity the homeowner or business purchases when their solar energy system is not generating enough electricity to meet their needs. The utilities bill customers only for the net electricity used during each billing period. Contrary to much recent utility rhetoric, NEM produces benefits for all customers.

### WHEN YOU HEAR YOUR UTILITY TALK ABOUT PROTECTING CUSTOMERS, HANG ON TO YOUR WALLET

For over 100 years, utilities' guaranteed profits on infrastructure have encouraged "gold-plating" or over-investment in the electric system, increasing customers' electric rates. When utilities claim that they are protecting customers by discouraging solar, they are in fact concerned about healthy competition and impacts on their own profits. To put it simply, solar threatens their bottom lines.

### NET ENERGY METERING CUSTOMERS USE THE GRID AND PAY FOR THE GRID

Analysis by Crossborder Energy has shown that, on average, less than half of a solar energy system's output goes into the grid, and any excess solar electricity serves nearby customers' loads. This means few solar customers offset all of their usage and most customers do not zero their utility bills. Rather, NEM customers both use and pay for the grid. A solar customer pays 100% retail rates for all energy consumed from the utility. For example, recent data shows in Arizona, the average NEM customer pays around \$71/month for their electric bill. In Colorado, the average NEM customer pays around \$50/month for their electric bill.

### THE IMPACT OF NET METERING ON RETAIL RATES IS NEGLIGIBLE

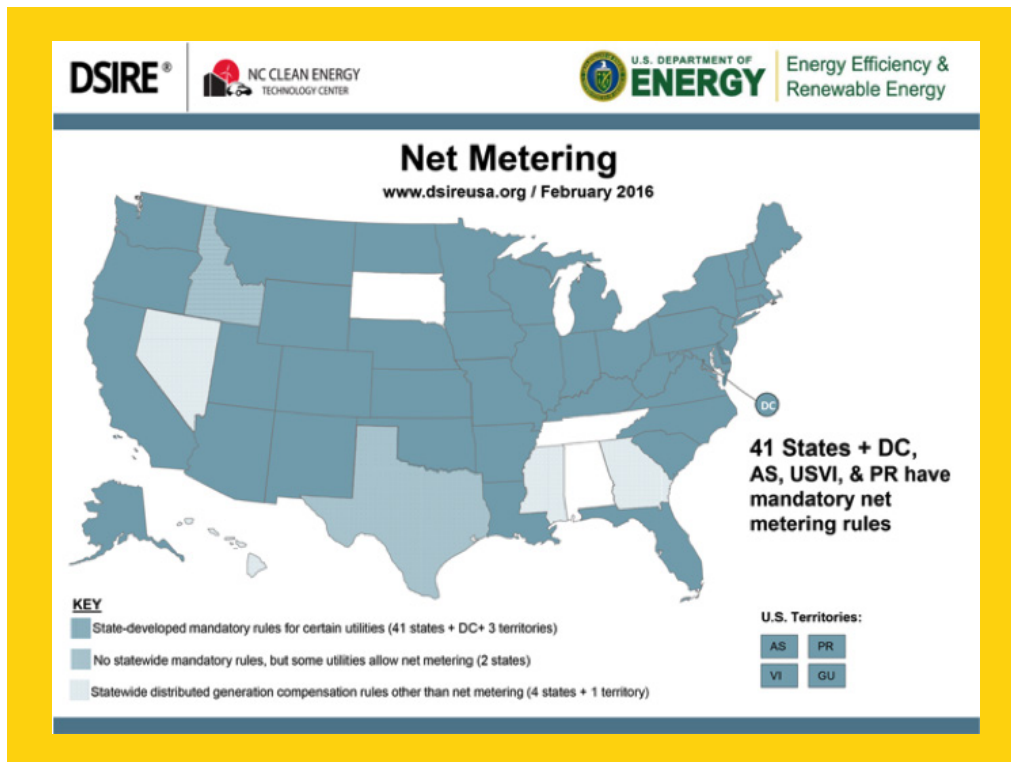
The asserted impact of the "17,000 solar customers" on each of NV Energy's other "one million plus customers" was only \$19/year. This "cost-shift," if it exists, is far less than other cross subsidies typically found in utility rates, which charge the same rates to all residential customers, or to all similarly-sized commercial customers.

### NET ENERGY METERING IS A NET BENEFIT FOR NON-SOLAR CUSTOMERS

When you do the math correctly, the data shows that the benefits provided by local rooftop solar equal, or exceed, the costs to the utility or to other customers.

- California, Maine and Nevada have all done solar cost-benefit studies that show that "non-participants" actually benefit from net metering of solar customers.
- The benefits are even greater when one considers the quantifiable societal benefits of net metered distributed generation (DG), including the enhanced reliability and resiliency of the electric system, land use benefits, air quality benefits and local economic benefits.





## COST SHIFTS, OR “CROSS-SUBSIDIES,” ARE INHERENT IN RATE DESIGN.

Utilities and regulators that are truly concerned about such preferences should address all of these, rather than singling out NEM for solar customers.

### EXAMPLES INCLUDE:

- Multi-family subsidizes Single-family; an apartment building is served by a single transformer bank, and the utility never sees the individual demand of individual units – only the consolidated demands of the group. But a large apartment building, under high fixed charge rate design, will pay much more than an otherwise identical-to-serve load (kw, kWh, hourly usage) at a hotel or office building served through a single meter.
- Customers served with (cheaper) overhead service subsidize customers served with (more expensive) underground service who actually receive more reliable service (storm outages)
- Urban customers subsidize suburban and rural customers; there are typically 500 customers per circuit-mile urban, 100 suburban, 10 rural
- Customers with sporadic and generally off-peak

demand usage who are served on demand charge rates (high-school stadium, large churches) subsidize customers with predominantly on-peak usage (office buildings) served on the same tariff.

## About SEIA

Celebrating its 43rd anniversary in 2017, the Solar Energy Industries Association® is the national trade association of the U.S. solar energy industry, which now employs more than 260,000 Americans. Through advocacy and education, SEIA® is building a strong solar industry to power America. SEIA works with its 1,000 member companies to build jobs and diversity, champion the use of cost-competitive solar in America, remove market barriers and educate the public on the benefits of solar energy. Visit SEIA online at [www.seia.org](http://www.seia.org).