

Guest editorial

Rocky Mountain Power solar tax proposals are counter productive

H. Macdaniel Ball, Energy Analyst Murray, Utah

November 29, 2016

Rocky Mountain Power contends that rooftop solar owners are currently costing other rate payers and is applying for additional charges for new solar customers; charges that would allow the utility to make a profit on investments made by solar owners.

A new review of 16 value-of-solar studies from around the country tells a different story. It shows that nationwide, the dollar and cents value of solar that homes and businesses send back to the grid is often higher than the credit utilities provide to customers. In other words, the study shows that utilities are likely often underpaying solar panel owners, not subsidizing them. Of the 16 studies reviewed, 12 found that the value of solar energy was higher than the average local residential retail electricity rate.

The report found at least 8 key benefits of rooftop solar, all of which have real value that can be measured by regulators, policymakers, and utilities.

- 1. Reduced waste: Solar energy systems produce clean, renewable electricity on-site, reducing the amount of power utilities must generate or purchase from fossil fuel-fired power plants. In addition, distributed solar-systems reduce the amount of energy lost in generation, long-distance transmission, and distribution, which cost Americans about \$21 billion in 2014.
- 2. Lower cost: By reducing overall demand for electricity during daytime hours that form the peak period for most utilities, solar energy production helps customers and utilities avoid investments in new power plants.
- 3. Less risk: Because the price of solar energy tends to be stable over time, whereas the price of fossil fuels can fluctuate sharply, integrating more solar energy into the grid reduces consumers' exposure to volatile electricity prices. Also, by reducing demand for energy from the grid, home and business solar systems reduce the overall price of electricity, saving money for all customers.
- 4. Stronger grid: Distributed energy decentralizes the grid, potentially safeguarding people in one region from other areas that are experiencing problems, like blackouts. Emerging technologies, including smart meters and small-scale battery storage systems, will enhance this value.
- 5. Clean electricity: Increasing solar energy capacity helps utilities avoid the costs of meeting renewable energy requirements or installing new technologies to clean-up fossil fuel-fired power plants.
- 6. Reduced greenhouse gases: In 2014, the electricity sector was the largest source of global warming emissions — responsible for 30 percent of all U.S. greenhouse gas pollution. Generating energy from the sun provides a renewable source of energy that produces little to no greenhouse gas emissions. In 2015, distributed solar energy alone — just solar panels on households and businesses — averted approximately 8 million metric tons of carbon dioxide emissions.
- 7. Improved public health: Solar can help us reduce health costs. According to the American Lung Association, 52 percent of Americans (and most Utah residents) live in a place where pollution often reaches dangerous levels. A National Research Council study in 2005 found that health-impacting pollutants from coal- and gas-fired power plants, respectively, cost society 3.2 cents and 0.16 cents per unit of generated electricity (kilowatt-hour). With an average household in the United States using about 11,000 kilowatt-hours of electricity each year, the health cost associated with that electricity consumption would be about \$350 per year if it all came from a coal plant.
- 8. Economic growth: The American solar industry is growing rapidly, creating new jobs and businesses across the nation. In 2015, the solar industry added jobs at a rate 12 times that of the overall economy, and as of November 2015, employed more than 208,000 people.

We are fortunate to live in Utah, for many reasons; one of our principal assets is abundant sunshine; let's take full economic advantage of this gift and secure our future energy needs locally.