



## **Testimony of David Carpenter**

### **Solar Home Owner**

### **Opposition Testimony for Ohio Senate Bill 320**

**29 November 2016**

Chairman Balderson, Vice Chairwoman Jones, Ranking Member Gentile, and Members of the Ohio Senate Energy and Natural Resources Committee, thank you for the opportunity to testify today. I am here to testify in opposition to Senate Bill 320.

I am David Carpenter, a physicist from Delaware, Ohio. I have had grid-connected rooftop solar for sixteen years, with a 4.8 kW array for almost eleven years. I have been selling SRECs resulting from the RPS since the program inception in 2008-2009.

Instead of a predictable gradual decrease in value from year to year as designed in the original RPS, the prices I have been able to get when selling my SRECs fell off of a cliff, losing 88% of their value all at once in 2013, and then losing all of their remaining value in 2016 due to the freeze. This tampering with predictability hurts the bottom line of those who invest in renewable energy. The freeze of the RPS broke a promise to both small and large investors alike, and continuing that freeze only makes that broken promise more severe. Ohio's economy does not benefit when the Ohio investment climate is viewed with trepidation. Without the RPS to provide predictability in Ohio, businesses and investors go elsewhere, to states that do have investment predictability.

Ohio's RPS supports roof-top solar and other forms of distributed energy systems. The SREC market enables an increase in the affordability of these systems while Ohio's renewable energy industry matures to achieve greater economies-of-scale. It encourages these industries, the money they make and the jobs they create, to be located in Ohio instead of neighboring states. The jobs are a very big deal, because installing renewable energy is labor intensive, and the jobs it creates are both numerous and local.

The decreasing cost of installing solar on homes and businesses is making it a very popular choice locally, as evidenced by the 108 homes and businesses that signed up for the Delaware County Solar Cooperative earlier this year. This should be encouraged with favorable public policy.



The market will choose the cheapest form of energy, and 20 years from now, solar will dominate the energy market. That is inevitable. The questions are about what that future will look like, how we will get there, and who the economic winners will be. Will those winners be Ohioans and Ohio's businesses, or will the winners be in adjacent states. Already, Ohio is falling behind, and the RPS freeze has only made that worse. The state to our north is producing nearly as much renewable energy in 2016 as the Ohio RPS goals for 2027. I don't enjoy watching Ohio lose to Michigan.

Distributed power sources, such as rooftop solar, give consumers greater freedom and control of their own power needs. Without distributed power, consumers are forced to get all of their energy from a utility distribution system with a local monopoly. My house is connected to AEP's grid. I can't choose which distribution company my house is connected to. As a consumer, my only real ability to have freedom of choice and energy independence is to produce my own.

Rooftop solar, other forms of distributed power, and micro-grids, also improve our national security. Large power plants, regardless of type, are more vulnerable to terrorism and to natural disasters. If a large power plant is destroyed, electrical service to a large area can be disrupted. Distributed power sources and micro-grids can keep homes and businesses in operation, and even help sustain the grid when a large plant is down. Distributed power improves the overall resilience of our electricity grid.

Net metering is vital to distributed power. Distributed power sources provide other services besides resilience to the public utilities. These services deserve fair compensation.

Solar power, in particular, provides its peak power during peak use, when electricity is most expensive. This decreases the cost of supplying electricity for everyone on the grid. As batteries become cheaper, distributed power sources with energy storage will be able to control the timing of their contribution of surplus power to the grid. This will reduce utilities needs for "peaker" plants even more, providing significant savings to the utility, and cleaner air and water for public health.

Unlike the large utility-scale arrays, roof-top solar does not reduce the amount of land available for agriculture and for other uses. Utility solar is cheaper, but the benefits derived from it are also less. Utility-scale solar should be built in conjunction with, not at the expense of, distributed solar. The RPS helps make that happen.

Ohio has to decide whether or not it is going to cling to a past that can never be again, or to step into the future as an economic leader in developing new industries and in creating new jobs. The Renewable Portfolio Standards and the Energy Efficiency Standards help us to step into that future.

I appreciate your time and consideration today. I welcome any questions the committee may have.