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Policy makers today have an unprecedented opportunity to spur the growth of new competitive markets for distributed electric generation—electric generation at a scale that can be deployed and operated at the distribution level of the electric grid. Distributed generation markets can work well in every electric utility service area in Ohio and provide customers with cost-effective options for energy services and foster reliance on market forces to enable efficiency, innovation, affordability, and the safe and reliable provision of energy services.

The Ohio Legislature has a pro-market, pro-innovation, and pro-affordability, and pro-customer opportunity to advance a Community Energy program. The Legislature should advance this legislation to secure the benefits of energy freedom for Ohio and for its citizens and businesses. These benefits include the following:

Money Savings and Local Economic Investment: Distributed generation saves money by avoiding expensive energy imports that utilities would otherwise have to provide. A preliminary and conservative estimate of benefits resulting from non-utility electric generation shows a cost of less than 8 cents per customer per month a more thorough evaluation, and a study of economic development and jobs benefits, would eliminate these cost impacts entirely.

Improved Energy Self-Sufficiency: Ohio is heavily dependent on imports of energy from other states. Ohioans are vulnerable to wholesale market price swings, transmission limits and construction delays, and grid-crippling natural disasters. In-state generation reduces these risks while strengthening economic resilience.

Right-Sizing and Right-Siting: Distributed generation is smaller and more “modular” than utility-scale generation. Multiple smaller-sized distributed generation facilities are more secure, less vulnerable to disruption, more reliable in aggregate, easier to repair, faster to build, easier to site via local control at the municipal, township, and county level, and supported by a diverse team of investors and operators. These modularity benefits make distributed generation investments resources that complement the existing grid and utility-scale investments. Utilities

have access to the grid information needed to take advantage of generation sited at and near the location of electric load, saving all customers by using distributed generation production and saving on more expensive “business-as-usual” grid upgrades.

Rapid and Reliable Response to Unprecedented Energy Demand: Modern information technology demands for electricity are straining grids while providing economic development opportunities. Meeting this demand with traditional utility responses is a recipe for losing the jobs race as well as saddling customers with huge costs for imported energy and even potential generation stranded costs. Distributed generation provides an essential second path to energy sufficiency that meets a share of local demand with local resources, while mega-loads get access to the bulk electric supply they demand. For all these reasons, and more, the Ohio Legislature should establish a Community Energy program to bring new distributed generation to Ohio through passage HB 303.

Ohio Community Energy Program Cost Benefit Analysis Executive Summary:

The Ohio legislature is currently considering legislation that would enable electric utility customers to benefit from affordable electricity by subscribing to new non-utility investments in community energy facilities. The legislation calls for a pilot program with a total size of 1,500 MW, equivalent to about 2% of Ohio’s retail sales of electricity 149,500,000 MWhs.

My analysis - which relied on conservative data and calculations - found that developing a robust Community Energy program can offer substantial benefits to Ohio’s utility customers, including those utility customers that do not participate in the program. The benefits are derived by offsetting the utility’s transmission charges, deferring transmission and distribution system upgrades, and avoiding generation costs. These avoided costs can be coupled with indirect benefits like reducing dependency on imported energy, economic development and job creation that results from building a strong, locally based electricity generation sector, and benefits associated from developing brownfield sites that otherwise have no value and are a blight on Ohio’s communities.

This analysis assumes that 1,000 MW of the Community Energy generation would be installed as ground-mounted systems, and that 500 MW would be installed on distressed sites or commercial rooftops. The analysis calculates impacts as if the entire program were built out and operated for a full year in the first program year. In reality, it will take some time to build all 1,500 MW of Community Energy generation, which would substantially reduce the overall cost impacts of the entire program.

My analysis found that according to the current legislation and when conservatively accounting for the total costs and benefits that 1,000 MW of locally produced ground mounted solar projects would bring to the grid, the average impact on Ohio residential customers would be a savings of about \$72,000, and the savings to individual customers would be about four cents (\$0.04) per customer per month. In sum, the operation of 1,000 MW of community solar generation built in Ohio and under the program envisioned in HB 303 would have no significant impact on residential customer rates—these facilities pay for themselves.

The 500 MW of Community Energy generation on distressed sites and commercial rooftops, which earn a higher credit than the ground-mounted generation, would have a cost impact of about \$1.75 million, or about \$0.87 per customer per month. However, it's important to note that the nature of those sites and projects require more investment to develop but bring added benefits by redeveloping sites that have been and otherwise expected to remain undeveloped.

In summary, and again assuming the entire multi-year program were built and began operating on the first day the bill is passed, the Ohio Community Energy Pilot Program as proposed in HB 303 would have an overall cost of about \$1.65 million, and a rate impact of about \$0.82 per customer per month for the average Ohio residential customer. Again, this result is based on very conservative assumptions. After all reasonable costs and benefits are considered, there is likely no net cost to Ohio customers from the program proposed in HB 303.