

Written Comments:

House Bill 5145

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Good morning Chairman Bellino, Vice Chair Wendzel, Vice Chair Lasinski and members of the House Energy Committee. My name is Renze Hoeksema. I am the Vice President of Corporate and Government Affairs for DTE Energy. Thank you for providing the opportunity to share our perspective on House Bill 5145.

Earlier this year, I testified before the Senate Energy and Technology Committee on a Senate version of this bill, along with two other bills in a distributed generation package. During that hearing, I relayed DTE's concerns over distributed generation¹ policies that artificially support one type of generation, and one group of customers, at the expense of our broader customer base. We have similar concerns today. As an electric provider for 2.2 million customers, we must take into consideration the interests of all our customers and how costs are allocated.

DTE remains committed to our plans to nearly triple the amount of renewables in our portfolio over the next ten years, generating enough energy from wind and solar to power more than 1.3 million homes. By 2030, we will have cut our carbon emissions by 50% compared to 2005 levels and remain on course to achieve an 80% reduction by 2040. Ultimately, our goal is to reach net zero emissions by mid-century.

A key milestone in this plan was achieved in April when the Michigan Public Service Commission approved an Integrated Resource Plan (IRP) for our electric utility. The IRP supports our plans for renewable generation and carbon reduction and allows DTE to make additional commitments to energy efficiency above and beyond current state law.

The factors driving this commitment extend beyond our environmental goals - it's a smart business decision because renewables, specifically wind and solar, are becoming more cost-competitive with other generation technologies. Additionally, more and more of our customers are looking for easy and affordable ways to offset their own carbon footprint

Nationally, the cost to install solar has dropped by more than 70 percent over the last decade. We periodically request pricing proposals from developers to stay current with the costs here in Michigan. In the appendix, you'll see a reference to Lazard's 2019 Levelized Cost of Energy Analysis which compares private, small-scale solar, like rooftop and community solar, to universal or utility-scale renewables. Late last year, we were pleased to see proposals for large utility-scale solar projects at prices competitive with wind energy. As a result, we'll be investing in more solar in the future.

As a provider of natural gas service to the Upper Peninsula, DTE understands the region's unique needs and is sympathetic to the concerns raised by Representative Markkanen on behalf of his constituents. However, the changes proposed by House Bill 5145 extend well beyond the Upper Peninsula and will have negative consequences for the balance of Michiganders.

¹ Distributed generation refers to technologies that generate electricity at or near the site where it will be used

Our concerns with the legislation are in two primary areas of distributed generation policy: the removal of the one percent cap, and the elimination of cost of service principles.

The removal of the one percent cap is thought to help ensure that customers across the state can interconnect their private solar systems with the utility's electric grid. **However, there is nothing in the current statute, or any statute, that prohibits a utility from connecting private solar customers once the one percent "cap" is reached.** It simply limits the number of private solar customers that may receive a subsidized rate.

In March, we filed our annual report on customer participation in distributed generation with the Michigan Public Service Commission. The report showed that our residential customers have used less than half of the generation available under the cap. If current trends in enrollment hold, we expect our threshold for residential customers² will be reached sometime in 2024. At that time, we will continue to connect private solar customers under a rate that already exists that reflects the true cost to serve these customers.

The 2016 energy law authorized the MPSC to study the costs of distributed generation and phase out the net metering rate structure. Net metering was intended as a pilot to incentivize early adoption and learn more about the impacts and costs of this technology on the state's grid. The program was successful in those endeavors but was never intended to be permanent.

In 2018, the commission issued an order adopting an inflow/outflow model as the replacement to net metering and provided DTE with a new distributed generation tariff in a subsequent electric rate review. While this was a step in the right direction, we believe inequities continue to exist under the current framework.

There are two key issues.

The first deals with distribution costs. Private solar customers actually utilize the grid more than a typical residential customer. The constant fluctuation in their demand for power results in their utilization of the grid at a level 23 percent higher than the average residential customer.³ Distributed generation customers not only export power to the grid but remain continuously reliant on the grid to ensure reliability, power their panels, and ensure voltage quality. Because of this high degree of usage, there remain distribution costs that are not fully covered by private solar customers. So if an individual chooses to install this technology, we feel it's fair to ask them to pay for their use of the enabling infrastructure and avoid shifting those costs onto other customers.

² Nearly all residential customers fall within Category 1 (20 kilowatts or less)

³ From DTE Rebuttal Testimony in MPSC Case No. U-20162

Second, private solar does not offset any of DTE’s capacity requirements when planning for our customers. Under the 2016 energy law, we must file an annual Capacity Demonstration with the Commission to demonstrate that DTE owns, or has contractual rights to, sufficient generation capacity to meet our obligations four years into the future. The excess energy from private solar is not considered in this planning process. Unlike demand response programs which include generation performance requirements, and consequences for failure to perform, DTE is not able to predict and rely upon proper and timely delivery of energy from private solar. For these reasons, most private solar fails to meet the requirements set forth by our regional grid operator (Midcontinent Independent System Operator (MISO)) to receive capacity credits. We believe it is unreasonable to ask our customers to pay twice and compensate a select few for a service that they do not provide.

We understand the sponsors and proponents of this legislation want to increase access to renewable energy and address affordability concerns. We support these goals. However, the proposed legislation falls short of achieving these desired outcomes.

Raising the cap and expanding the number of customers allowed to receive a subsidized rate will further remove the private solar industry from the very market dynamics that are driving overall solar costs down.

Included in my testimony is a table sourced from data published by the National Renewable Energy Laboratory (NREL) showing the decreasing costs associated with residential rooftop solar from 2010-2017. Costs have come down over 70 percent.

	Units	2010	2017	Improvement
Installed costs	\$/Watt DC	7.84	2.8	64% Decrease
Annual degradation		1.00%	0.75%	25% Decrease
Inverter replacement	\$/Watt DC	0.41	0.13	68% Decrease
Inverter lifetime	Years	10	15	50% Increase
O&M Expenses	\$/kW-yr	37	21	43% Decrease
Inverter efficiency	%	94%	98%	4% Increase

This trend is continuing and is certainly driving interest and adoption. Despite the claims that DTE’s new distributed generation tariff would kill rooftop solar, more than 1,000 customers have applied to participate since it went into effect in May 2019.

Going forward, as costs continue to come down, policy and rate structure for distributed generation can help us capture these savings, and ensure all customers benefit from these investments in renewable energy. Eliminating the one percent cap and removing cost-of-service principles from distributed generation policy, as proposed in House Bill 5145, will do the opposite.

Our customers are not restricted to distributed generation, or rooftop solar, if they want to make additional investments in renewable energy. In fact, there are options that are more flexible and affordable.

The 2016 energy law required local energy companies to establish voluntary green pricing programs. DTE's program, which we call MIGreenPower, has been a tremendous success. **The economic benefits associated with universal solar and wind provide our customers the opportunity to invest in renewable energy at a cost three times less than private solar.**

In just three years we've enrolled over 13,000 residential customers as well as 132 small businesses and 12 large businesses, including Ford, General Motors, the Detroit Zoo, and the University of Michigan.

There's no installation or maintenance necessary on the part of the homeowner, and participation does not require a lease, or a 20 to 25-year contract, or second mortgage. In fact, there's no commitment for homeowners beyond deciding what percentage they want to commit to. And best of all, it works for renters, families that live in apartment buildings, households that don't have a roof optimally sited for solar, and individuals who simply cannot afford a large investment.

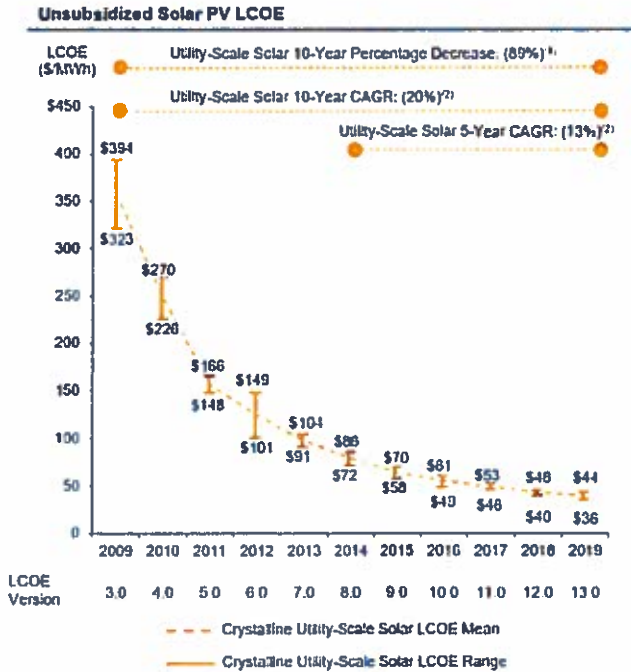
Our program has been successful because it allows participants to customize the percentage of their energy use that comes from renewables and has a simple payment process. These investments go beyond our Renewable Portfolio Standard requirements and are incremental to our broader generation plans.

Utilities across the state are making headway on cutting emissions, supporting thousands of clean energy jobs, and making new investments for a cleaner future that is safe, reliable, and affordable for all Michiganders. What we don't need are policies that raise the costs on our customers.

At DTE, we're excited about our and the state's energy future and look forward to work with this body on continuing down this path.

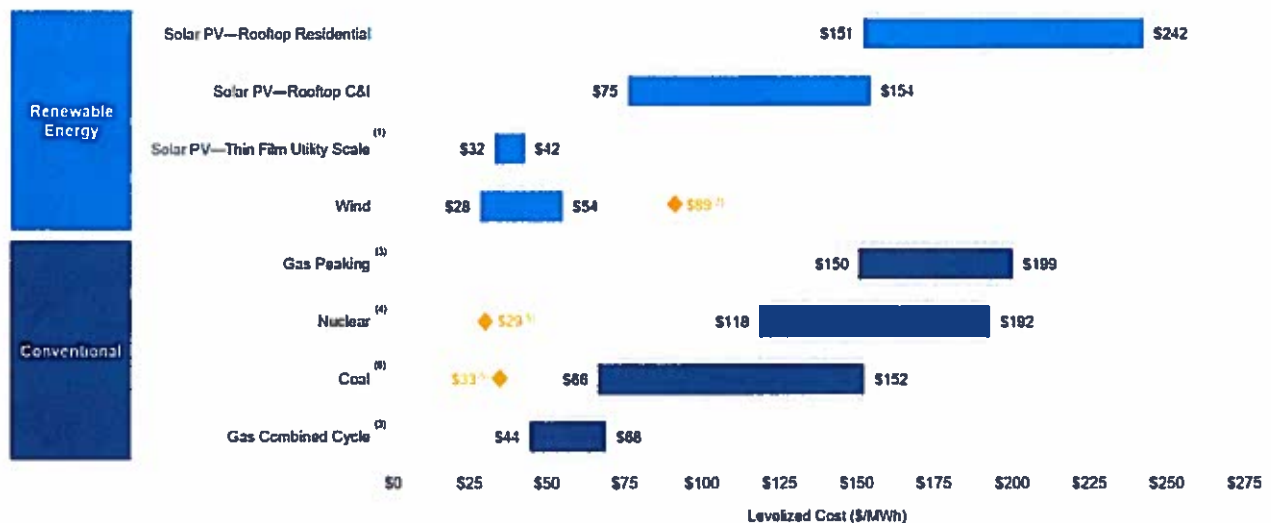
Thank you again for the opportunity to testify. I'm happy to take questions.

Appendix



Levelized Cost of Energy Comparison—Unsubsidized Analysis

Selected renewable energy generation technologies are cost-competitive with conventional generation technologies under certain circumstances



Source: Lazard estimates

Note: Here and throughout this presentation, unless otherwise indicated, the analysis assumes 60% debt at 8% interest rate and 40% equity at 12% cost. Please see page titled "Levelized Cost of Energy Comparison—Sensitivity to Cost of Capital" for cost of capital sensitivities. These results are not intended to represent any particular geography. Please see page titled "Solar PV versus Gas Peaking and Wind versus CCOT—Global Markets" for regional sensitivities to selected technologies.

- (1) Unless otherwise indicated herein, the low end represents a single-axis tracking system and the high end represents a fixed tilt system.
- (2) Represents the estimated implied midpoint of the LCOE of offshore wind, assuming a capital cost range of approximately \$2.33 - \$3.53 per watt.
- (3) The fuel cost assumption for Lazard's global, unsubsidized analysis for gas-fired generation resources is \$3.45/MMBtu.
- (4) Unless otherwise indicated, the analysis herein does not reflect decommissioning costs, ongoing maintenance-related capital expenditures or the potential economic impacts of federal loan guarantees or other subsidies.
- (5) Represents the midpoint of the marginal cost of operating coal and nuclear facilities, inclusive of decommissioning costs for nuclear facilities. Analysis assumes that the salvage value for a decommissioned coal plant is equivalent to its decommissioning and site restoration costs. Inputs are derived from a benchmark of operating coal and nuclear assets across the U.S. Capacity factors, fuel and variable and fixed operating expenses are based on upper and lower quartile estimates derived from Lazard's research. Please see page titled "Levelized Cost of Energy Comparison—Renewable Energy versus Marginal Cost of Selected Existing Conventional Generation" for additional details.
- (6) High end incorporates 90% carbon capture and compression. Does not include cost of transportation and storage.

