

DTE Distributed Generation

1. What is distributed generation?

Distributed generation refers to **electric generation resources located throughout the electric distribution grid that are usually owned by customers, often smaller in scale, and typically powered by renewable energy** (primarily wind, solar, or biomass). Distributed generation is distinct from centralized, utility-owned generation sources from traditional power plants fueled by coal, natural gas, nuclear power or utility-scale solar or wind farms.

2. Why did DTE Electric Company (DTE) propose a new distributed generation program?

Public Acts 341 and 342 of 2016 required the Michigan Public Service Commission (MPSC) to **phase out the net metering program** and create a new distributed generation program.

In its April 18, 2018 Order in Case No. U-18383, the MPSC adopted a distributed generation program tariff based upon the inflow/outflow billing mechanism that regulated utilities are expected to submit in any rate case filed after June 1, 2018. This mechanism measures and prices a distributed generation customer's incoming and outgoing electricity flows separately on an instantaneous basis and establishes a method for consistent and appropriate cost-of-service billing.

On July 6, 2018 in Case No. U-20162, DTE filed a rate case application with the MPSC. As part of that filing, DTE proposed a new distributed generation program tariff.

3. What did DTE propose?

DTE proposed a distributed generation program tariff based on an inflow/outflow billing mechanism. Under its proposal, the energy the customer uses from the grid (the inflow) would be billed at the customer's full retail rate and the energy the customer pushes out to the grid (the outflow) would be credited to the customer at the average monthly wholesale price of energy – a rate approximately half of the utility's actual power supply costs. DTE's proposal also included a requirement that distributed generation customers pay a system access contribution charge, based on the size of their energy system.

4. Did the MPSC approve DTE's proposal?

No.

The MPSC approved the use of an inflow/outflow billing mechanism and set the inflow rate at the full retail rate. The MPSC ordered that **the outflow credit be based on the power supply component of the customer's retail rate, minus transmission charges** – a rate equal to the amount of the actual costs of power supply and ensures the customer is not getting credit for transmission and distribution services they are not providing. The MPSC also rejected DTE's proposed system access contribution charge.

5. What is inflow and what is the inflow charge that was approved for DTE?

Inflow is the electricity the customer uses from the utility distribution system. The inflow charge is the charge for electricity flowing into a distributed generation customer's premises and is **the same DTE full-service rate** according to the customer's retail rate schedule.

6. What is outflow and what is the outflow credit amount that was approved for DTE?

Outflow is the electricity generated by the customer's distributed generation project (such as solar panels) that is not used on-site and is instead sent out on the electric grid. The outflow credit is the rate for each unit of energy in kilowatt hours (kWh) that is exported from the distributed generation customer to DTE's distribution system. This credit is **based on the power supply component of the customer's retail rate, minus transmission charges**. Outflow credits can be used in each billing period to offset power supply charges on the bill.

The standard residential **outflow credit that was approved for DTE is 7.477 cents per kWh** for the first 17 kWh per day¹.

7. What if outflow credits exceed power supply charges for any given billing period?

In any given month, it is possible that a distributed generation customer's system will produce more energy than the customer will use. Should this occur, the customer's outflow credit could exceed the power supply charges on the customer's bill. In this instance, the **excess credit amount will be carried forward and will offset future billing period power supply charges**.

8. When will DTE's new distributed generation program tariff take effect?

Tariffs approved in the MPSC order in Case No. U-20162 approving DTE's new distributed generation program take effect on **May 9, 2019**.

9. Can DTE make modifications to the distributed generation program?

Yes. However, any changes to DTE's new distributed generation program including any associated inflow rate and outflow credit must be approved by the MPSC in a future proceeding. Similar to this case, the public would be able to comment and interested parties would be given the opportunity to participate in such a proceeding.

10. Who can participate in DTE's distributed generation program?

Any DTE customer who generates a portion or all of their own electricity with an eligible electric generator using a renewable energy resource is eligible for DTE's distributed generation program. Projects must be no larger than 150 kW; however, methane digester generation projects as large as 550 kW may also participate. The project must be sized so that it is no larger than what is needed to meet a customer's annual electric energy needs. The program is available on a first come, first served basis subject to DTE's ability to limit program participation as provided for in state law.

For those interested in participating in DTE's distributed generation program, DTE has an online-application process which can be found on their [website](#).

¹ To see approved distributed generation outflow credits for customers on other rate schedules, please refer to DTE's Rider 18.

11. Is there a limit to the number of customers that can participate in DTE's distributed generation program?

Section 173 of PA 342 directs utilities to allow 1 percent of the electric utility's average in-state peak load for the preceding five years to participate in distributed generation programs. The 1 percent requirement is made up of the following components:

- Up to 0.5% for customers with a distributed generation project of 20 kilowatts or less.
- Up to 0.25% for customers with a distributed generation project of between 20 and 150 kilowatts.
- Up to 0.25% for customers with a methane digester of 150 kilowatts or more.

DTE has not yet hit its program cap.

12. How does the new distributed generation program tariff differ from net metering?

Under net metering, a customer's monthly energy usage from the grid is netted against energy generated by the customer and pushed out to the utility's electric grid. For any net excess generation not used on site by the customer over the course of the monthly billing period, the customer receives a bill credit at the full retail rate for each kWh of electricity delivered to the electric grid. Under the new distributed generation program, incoming and outgoing electricity flows are measured separately on an instantaneous basis, and the credit for outflow to the grid is lower than the full retail rate, based on the power supply component of the bill, minus transmission costs.

13. Will existing DTE net metering customers be impacted by the new distributed generation program?

Section 183(1) of Public Act 342 allows existing net metering program customers to **maintain current program terms and conditions for 10 years** from the date of enrollment in the program, also known as the grandfathering period. Enrollment means that a customer has submitted a complete application to their utility. Once a customer reaches the end of their 10-year grandfathering period under the net metering program, the option to transition to the distributed generation program will be available.

14. Who qualifies as an existing DTE net metering customer?

Any customer currently enrolled in DTE's net metering program, or any customer who, prior to the effective date of DTE's new distributed generation program tariff submitted a completed application for DTE's net metering program, is considered an existing net metering customer.

A customer who receives a notification that their application for DTE's net metering program is deficient will have 60 days from the date of notification to correct the defect while remaining eligible for the net metering program. Failure to correct the defect within the allotted time will terminate the customer's eligibility for the net metering program.

Any customer with a completed application must also have a completed and approved distributed generation installation within six months from the date the application is deemed complete.

15. If my neighbors are paying full retail rates for energy that I supply to the grid, why shouldn't I be compensated at that rate?

Some have claimed that DTE is profiting if it pays customers with distributed generation less than the full retail rate for their excess generation when the utility then “sells that power to neighbors at the full retail rate.” This is not accurate. Under the new distributed generation program approved by the MPSC, customers receive a credit for the power supply portion of the utility's rate – but not an additional credit for the transmission and distribution portion because the utility still has to maintain the electric grid (wires, poles, etc.) that all customers rely on regardless of whether those customers have distributed generation or not. By compensating distributed generation customers for outflow at the power supply portion of the utility's rate, the customer is being fully compensated for any energy and capacity it is supplying to the utility.

16. Do the new rates for the distributed generation program reflect cost-of-service principles?

It has been argued that net metering included an implicit subsidy for participating customers. Others have argued that the true “value of solar” exceeds even the retail rate, and that full accounting for the costs and benefits of distributed generation is needed. Based on available data and the evidence presented, the distributed generation program tariff approved in this case reflects cost-of-service principles. As the distributed generation program evolves and more data becomes available, the MPSC will continue to assess the cost and benefit impacts and ensure rates align with cost-of-service principles.

17. Can current DTE net metering customers expand their existing systems and continue to qualify for the net metering program?

No. A current net metering customer who expands their generating system's capacity will lose any remaining grandfathering period and must enroll all their generating capacity (including that which would be otherwise grandfathered) in the distributed generation program.

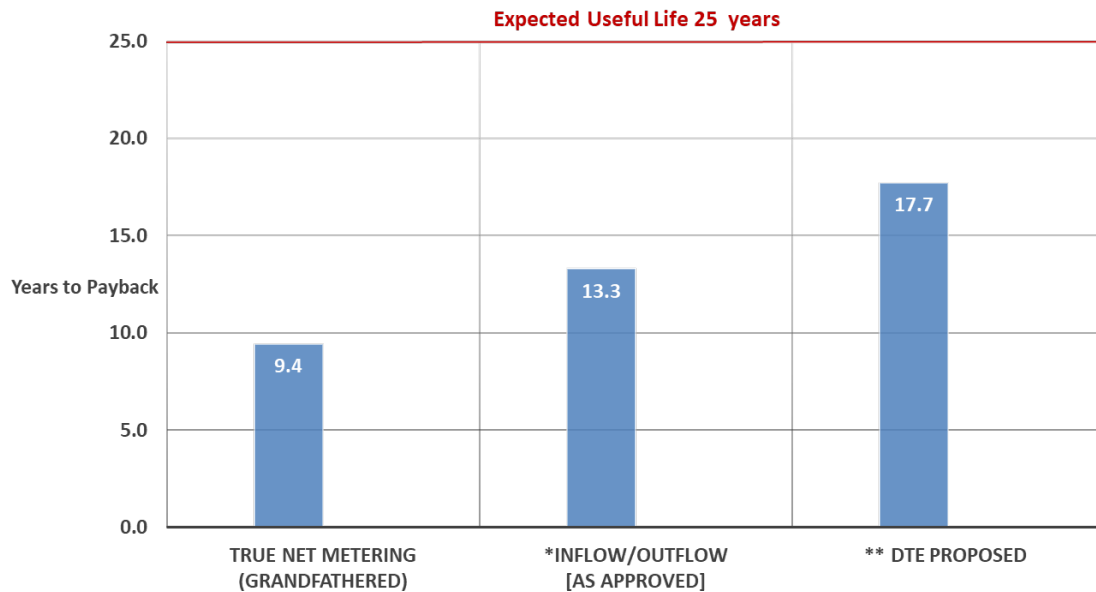
18. As a DTE customer participating in either the net metering or distributed generation programs, what happens to my outflow credit balance if I move or terminate participation in the distributed generation program?

Customers who choose to terminate their participation in the distributed generation program will have **any outstanding outflow credits applied to the power supply portion of future bills or will receive a refund if they move**. Additionally, an existing net metering customer that moves will lose any remaining time in their grandfathering period under the net metering program and, should they wish to participate in a distributed generation program, would be required to join the new distributed generation program.

19. How does the payback on investment compare between the new distributed generation program and the grandfathered net metering program?

The chart below represents a hypothetical bill comparison for a Residential Rate D1 customer currently participating in the net metering program, versus what that same customer's bill would look like as a participant in the distributed generation program approved by the MPSC and DTE's original proposal.

DTE Electric Case No. U-20162
Residential DG Payback-Comparison (Yrs)
Gross Installed Cost \$15,700 (\$2.50/Watt)
Net Installed Cost (@ 30% ITC) \$10,990
6.28 kW Solar PV; Est. Annual Consumption 7,844 kWh; Rate D1



*Outflow Credit @ power-supply less transmission:
7.477 cents/kWh for 1st 17 kWh per day;

**Includes System Access Charge (SAC) @ \$14.51/month, and
Outflow Credit @ MISO 2018 monthly average real-time LMP
3.25 Cents/kWh]

For more information, visit:

[MPSC Website](#)
[DTE Customer Interconnection Page](#)
[Distributed Generation Issue Brief](#)

May 2, 2019

DISCLAIMER: This document was prepared to aid the public's understanding of certain matters before the Commission and is not intended to modify, supplement, or be a substitute for the Commission's orders. The Commission's orders are the official action of the Commission.