DTE TIME-OF-DAY RATE CHANGES: WHAT THIS MEANS FOR RESIDENTIAL SOLAR CUSTOMERS

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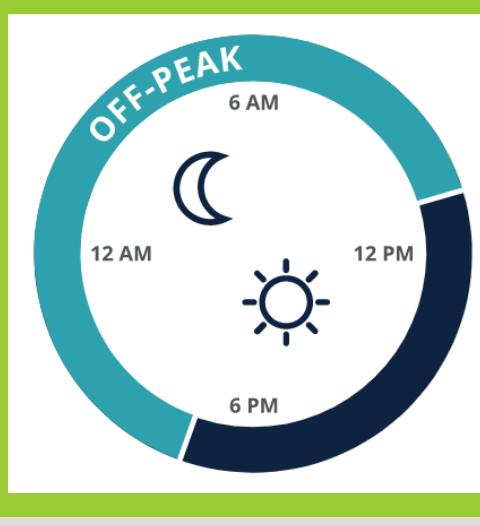
Earlier this year, DTE began implementing a new time-of-day rate structure, and residential power customers were automatically switched from the old standard D1 rate to the new standard D 1.11 rate. There are alternatives to the new default rate that are more beneficial to customers with solar. This infographic aims to help solar customers better understand the new rate structure and inform decisions to reduce their utility bill. Most solar users would benefit from switching to the D1.2 time-of-day rate, especially if they actively participate in load shifting and EV off-peak charging as the rate is better aligned with solar production and has lower inflow rates during off-peak hours when the sun isn't shining.

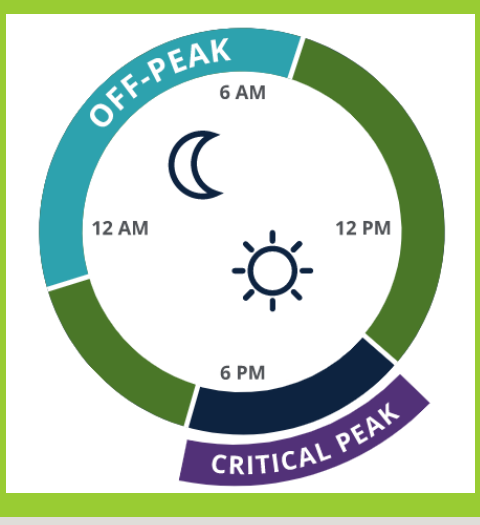
Current Time of Day Rate Options' On-Peak, Mid-Peak, Off-Peak

D1.11

D1.2

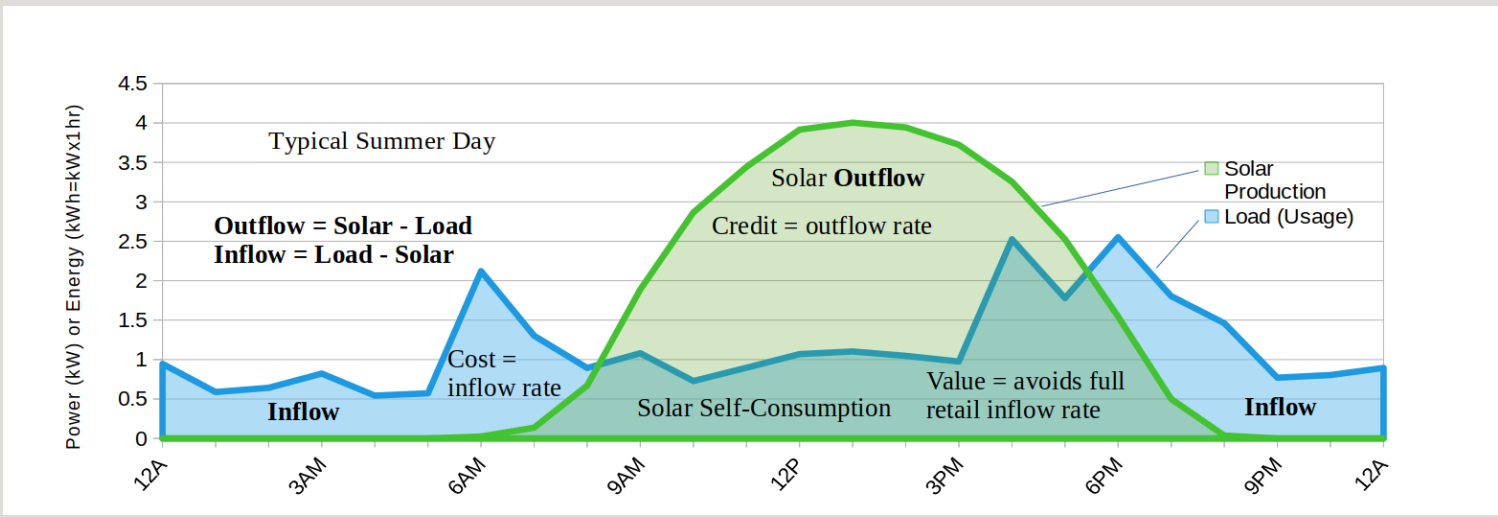


D1.8



You can better understand how solar production and power supply usage interact by understanding inflow and outflow.

Inflow = Electricity Load - Solar
Outflow = Solar - Electricity Load



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Solar produces the most mid-day, when the grid load is high and electricity is expensive, compared to Off-peak. In this way, it helps balance the grid when it's needed most.

Inflow Costs & Outflow Credits Breakdown

- **Inflow Costs = Power Supply Charges (Capacity & Non-Capacity) + Distribution Charge + PSCR**
- **Outflow Credits = Power Supply Charges (Capacity & Non-Capacity + PSCR**

For more information, check out the DTE Rate Book

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Inflow Costs per each Time of Day Rate

Inflow Costs (¢/kWh)	On-Peak	Mid-Peak	Off-Peak
New Default: D1.11: 3pm - 7pm	Oct - May: **18.67¢** June - Sept: **22.89¢**	N/A	Both Oct - May & June - Sept: **17.37¢**
D1.2: 11 am - 7pm	Nov - May: **21.56¢** June - Oct: **24.04¢**	N/A	Nov - May: **11.78¢** June - Oct: **11.98¢**
D1.8 Dynamic Peak Pricing	Mon - Fri 3pm - 7pm: **24.86¢**	Mon - Fri 7am - 3pm & 7pm - 11pm: **17.69¢**	Mon - Fri 11pm - 7am + Weekends: **13.38¢**

Outflow Credits per each Time of Day Rate

Outflow Credits (¢/kWh)	On-Peak	Mid-Peak	Off-Peak
New Default: D1.11: 3pm - 7pm	Oct - May: **11.79¢** June - Sept: **16.02¢**	N/A	Oct - May: **10.59¢** June - Sept: **10.49¢**
D1.2: 11 am - 7pm	Nov - May: **14.70¢** June - Oct: **17.06¢**	N/A	Nov - May: **6.81¢** June - Oct: **7.01¢**
D1.8 Dynamic Peak Pricing	Mon - Fri 3pm - 7pm: **16.15¢**	Mon - Fri 7am - 3pm & 7pm - 11pm: **8.77¢**	Mon - Fri 11pm - 7am + Weekends: **4.46¢**

WHAT RATE IS BEST FOR CUSTOMERS WITH SOLAR?

The rate option whose On-peak rate overlaps most with your solar production is the most optimal, but it also depends on your inflow and outflow and self-consumption patterns.

CONSIDERATIONS:

- **Do you charge your Electric Vehicle overnight?**
  - D1.2 and D1.8 can provide significantly lower Off-peak rates than D1.11 default.
- **Optimizing your solar power production:**
  - You'll get more reward with the D1.2 rate with its longer daytime On-Peak period and higher Outflow credit. D1.8 is very similar in cost savings.
- **Electricity Consumption Patterns**
  - If you use more energy than you produce in solar in the daytime and use very little at night all year round:
    - D1.11 may be better.
- **Duration of On-Peak and Off-Peak:**
  - D1.2 Off-Peak rate is lower for a longer period of time.

RECOMMENDATIONS:

Avoid On-Peak Inflow from the grid - it costs you money!

- Run your loads when solar is available.
- When there is no excess solar during On-Peak periods (ex: a cloudy afternoon weekday) run loads in the morning, at night, or on the weekend instead.

SAMPLE BILLS EXPLAINED:

Rider 18 Distributed Generation Winter Bill Example

Rider 18 Distributed Generation is a DTE Pricing Option that provides credit to customers for electricity from solar or wind that they send back to the grid.

DTE Electric Company Residential Electric Service - Time-of-Day Pri		
Current Charges		
Power Supply Charges		
On Peak Capacity Charge	102 KWH @ 0.086820	8.86
Off Peak Capacity Charge	473 KWH @ 0.007920	3.75
Power Supply Non Capacity Charge	575 KWH @ 0.041050	23.60
Power Supply Cost Recovery	575 KWH @ 0.006650	3.82
On-Peak Outflow Credit	46 KWH @ -0.134520	-6.19
Off-Peak Outflow Credit	50 KWH @ -0.055620	-2.78
Excess Generation Bank Adj		-31.14
Other Power Supply Volumetric Surcharges		0.08
Delivery Charges		
Service Charge		8.50
Distribution	575 KWH @ 0.068790	39.55
LIEAF Factor		0.90
Other Delivery Volumetric Surcharges		4.57
Residential Michigan Sales Tax		2.10
Sub Total:		55.62
Total DTE Electric Company Current Charges		**55.52**
Excess Generation Bank:		
Beginning Balance		418.76
Adjustment		-31.14
Ending Balance		387.62

Delivery costs will never be zero but can be decreased by decreasing inflow. This can be done by self consuming your solar generation.

The Excess Generation Bank stores unused Outflow credits, or credits exceeding Power Supply costs in a particular period.
Excess Generation is typical in high solar production periods and is then used to offset power supply in months with lower solar production

Rider 18 Distributed Generation Spring/Summer Bill Example

The high ending balance on the Excess Generation Bank in the summer bill compared to the winter bill is representative of the increased solar productivity of the Spring/Summer seasons.

DTE Electric Company Residential Electric Service - Time-of-Day Pricing -		
Current Charges		
Power Supply Charges		
On Peak Capacity Charge	21.835 @ 0.110330	2.41
Off Peak Capacity Charge	393.156 @ 0.009910	3.90
Power Supply Non Capacity Charge	414.991 @ 0.041050	17.04
Power Supply Cost Recovery	414.991 @ 0.019170	7.96
On-Peak Outflow Credit (05/04/2023-05/31/2023)	843.64193 @ -0.168880	-142.47
On-Peak Outflow Credit (06/01/2023-06/02/2023)	82.90507 @ -0.170550	-14.14
Off-Peak Outflow Credit (05/04/2023-05/31/2023)	306.22239 @ -0.068460	-20.96
Off-Peak Outflow Credit (06/01/2023-06/02/2023)	30.09261 @ -0.070130	-2.11
Excess Generation Bank Adj		148.31
Other Power Supply Volumetric Surcharges		0.06
Delivery Charges		
Service Charge		8.50
Distribution	414.991 @ 0.068790	28.55
LIEAF Factor		0.90
Other Delivery Volumetric Surcharges		3.24
Residential Michigan Sales Tax		1.61
Sub Total:		42.80
Excess Generation Bank:		
Beginning Balance		566.84
Adjustment		148.31
Ending Balance		715.15