



# POWER OUTAGES NOVI, MI

WITH A SUB-FOCUS ON THE WILLOWBROOK ESTATES SUBDIVISION

# Basic Data - 2016

- ▶ In a news article provided by Bridge Michigan, they quoted DTE as providing the following data regarding power outages:

That MI was ranked 21<sup>st</sup> best nationally in power outage frequency per customer.

That the national average was 1.24 outages per customer.

That MI was at 1.14 outages per customer.

The Public Service Commission stated that for 2016, the average MI home had 1 outage with a total time of under 3 hours.

# Basic Data In General

- ▶ Michigan had ranked in the top 5 for States most prone to outages since at least 2015.
- ▶ DTE covers approximately 7,600 square miles of service area.
- ▶ In a 2017 DTE issued a report to the Michigan Public Service Commission where officials were 'concerned that parts of DTE's distribution system during large storms is unable to provide safe and reliable service, as is required by law'.
- ▶ DTE does have to file Five-Year Investment and Maintenance Plan with Lansing and these can be accessed by the public. There is a portion that includes their forestry policies.

# DTE Energy Hikes

- ▶ \$238 million in 2015 (11.3% increase) – unknown profit.
- ▶ \$122.2 million in 2016 (no increase) - \$1.1 billion profit.
- ▶ \$184 million in 2017 (4% increase) - \$1.1 billion profit.
- ▶ \$74 million in 2018 (1% increase) - \$1.1 billion profit.
- ▶ \$273.3 million in 2019 (8.69% increase) – 1.2 billion profit.
- ▶ \$188.3 million in 2020 (4.7% increase) – 1.4 billion profit.
- ▶ Has asked for a \$195 million increase for 2021 (11.1% increase per customer). ~It needs to be noted that they never have received the full requested amount since easily accessible online records started.



# Eaton Data

Every year, Eaton released their 'Blackout Tracker – United States Annual Report' with data on power outages in general for the US and by State.

# Eaton Data 2015

## National 2015

- ▶ 3,571 total outages.
- ▶ 13.2 million people affected.

## Michigan 2015

- ▶ 152 total outages.
- ▶ 843,717 people affected.

# Eaton Data 2015

- ▶ In 2015, Michigan had the 5th highest rate of reported outages at 152 behind California (#1), Texas (#2), New York (#2), and Ohio (#4).
- ▶ 43 of these were determined to be due to weather or falling trees.
- ▶ 13 were vehicle related.
- ▶ 43 were due to faulty equipment or human error.
- ▶ 8 were due to animals.
- ▶ 843,717 people were affected with an average of 5,551 people affected per outage and an average duration of 33 minutes.
- ▶ In 2015, the highest number of outages were in November followed by July, then August/September tied.

# Eaton Data 2016

## National 2016

- ▶ 3,879 Total outages.
- ▶ 17.9 million people affected.
- ▶ 48 minutes average outage duration.

## Michigan 2016

- ▶ 192 Reported outages.
- ▶ 622,881 people affected.
- ▶ 35 minutes average outage duration.



# Eaton Data 2016

- ▶ In 2016, Michigan had the 3<sup>rd</sup> highest rate of reported outages at 192 behind California (#1) and Texas/New York (tied at #2).
- ▶ 72 of these were determined to be due to weather or falling trees.
- ▶ 13 were vehicle related.
- ▶ 47 were due to faulty equipment or human error.
- ▶ 10 were due to animals.
- ▶ 622,811 people were affected with an average of 3,244 people affected per outage and an average duration of 35 minutes.
- ▶ In 2016, the highest number of outages were in October followed by March, then June.

# Eaton Data 2017

## National 2017

- ▶ 3,526 total outages.
- ▶ 36.7 million people affected.
- ▶ 81 minutes average outage duration.

## Michigan 2017

- ▶ 155 total outages.
- ▶ +2 million people affected.
- ▶ 76 minutes average outage duration.

# Eaton Data 2017

- ▶ In 2017, Michigan had the 5th highest rate of reported outages at 155 behind California (#1), Texas (#2), New York (#3), and Ohio (#4).
- ▶ 56 of these were determined to be due to weather or falling trees.
- ▶ 13 were vehicle related.
- ▶ 36 were due to faulty equipment or human error.
- ▶ 9 were due to animals.
- ▶ 2,020,635 people were affected with an average of 13,036 people affected per outage and an average duration of 76 minutes.
- ▶ In 2017, the highest number of outages were in July followed by January, then May.

# Eaton Data 2018

- ▶ In 2018, Michigan had the 4th highest rate of reported outages at 192 behind California (#1), Texas (#2), and New York (#3).
- ▶ 12,489,963 people were affected with an average of 10,937 people affected per outage and an average duration of 97 minutes.

# Eaton Data 2019

## National 2019

- ▶ Outages.
- ▶ Million people affected.
- ▶ 282 minutes average outage duration.

## Michigan 2019

- ▶ Outages.
- ▶ Million people affected.
- ▶ 555 minutes average outage duration.

# DTE Investor Data 2019

- ▶ The average time a customer was without power including major events was 7.77 hours.
- ▶ The average time a customer was without power excluding major events was 3.37 hours.
- ▶ The number of outages for the average customers including major events was 1.37 outages.
- ▶ The number of outages for average customers excluding major events was 1.14 outages.

# Novi Power Outage Data

The following information was compiled from online news articles and facebook posts from the official City of Novi – Government & Community Services.

It is not comprehensive and would only include outages noteworthy enough to call for news publications, warming shelters, etc.

# Novi Power Outage Data

\* Means it did not affect the Willowbrook Subs in any known way.

<u>Power Outage Started</u>	<u>Power Outage Ended</u>	<u>Effected Total</u>	<u>Effected Novi</u>
7/4/2012			
4/18/2013			
11/18/2013	11/18/2013 - 11/26/2013	325,325	2,700
7/30/2014	7/30/2014		*
3/8/2017	03/08/2017 - 03/12/2017	1,000,000	2,100
3/1/2018			
3/2/2018			
4/15/2018		389,591	
5/31/2018			905
2/7/2019	2/8/2019	2,000	156
7/19/2019 - 07/20/2019	7/22/2019	600,000	
1/10/2020	01/11/2020 - 01/13/2020	4,300	
6/10/2020	6/11/2020	289,000	*
7/20/2020	7/20/2020 - 07/23/2020	158,500	
11/14/2020		370,000	
7/7/2021	07/07/2021 - 07/11/2021	210,000	10,500



# Additional Information

- ▶ In April of 2019, Novi City Council Member Andrew Mutch brought up the power issues in the council meeting.
- ▶ As of this recent outage, he is looking into things and posted to a question I put forth on his facebook page that he has been review emails regarding the DTE upgrades and is currently still doing so.
- ▶ There was a mention of talks about potential circuit upgrades that may predate the 2019 meeting. - Mutch is looking into this.

# Source Material/Interesting Reading

- ▶ <https://www.bridgemi.com/michigan-government/study-claims-michigan-has-more-blackouts-most-states-not-true-says-dte>
- ▶ [https://www.michigan.gov/documents/mpsc/Brattle Report to DTE on Performance Based Regulation 120617 613150 7.pdf](https://www.michigan.gov/documents/mpsc/Brattle_Report_to_DTE_on_Performance_Based_Regulation_120617_613150_7.pdf)
- ▶ [http://images.electricalsector.eaton.com/Web/EatonElectrical/%7Bc9381362-7f37-4a86-921f-83e72e8792e1%7D Blackout Tracker US 2016 Annual Report.pdf](http://images.electricalsector.eaton.com/Web/EatonElectrical/%7Bc9381362-7f37-4a86-921f-83e72e8792e1%7D_Blackout_Tracker_US_2016_Annual_Report.pdf)

# Apologies

I do apologize that I was unable to quickly find some of the data that appears to be missing. Keep in mind that I collected most of this while at work between calls while my power was out at home.