

STATE OF MICHIGAN

MICHIGAN OFFICE OF ADMINISTRATIVE HEARINGS AND RULES

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the complaint)
of **Fred Chapman** against)
DTE Energy Company.)

Case No. U-20332

NOTICE OF PROPOSAL FOR DECISION

The attached Proposal for Decision is being issued and served on all parties of record in the above matter on June 27, 2019.

Exceptions, if any, must be filed with the Michigan Public Service Commission, 7109 West Saginaw, Lansing, Michigan 48917, and served on all other parties of record on or before July 18, 2019, or within such further period as may be authorized for filing exceptions. If exceptions are filed, replies thereto may be filed on or before August 1, 2019.

At the expiration of the period for filing exceptions, an Order of the Commission will be issued in conformity with the attached Proposal for Decision and will become effective unless exceptions are filed seasonably or unless the Proposal for Decision is reviewed by action of the Commission. To be seasonably filed, exceptions must reach the Commission on or before the date they are due.

MICHIGAN OFFICE OF ADMINISTRATIVE
HEARINGS AND RULES

For the Michigan Public Service Commission

Kandra K.

Robbins

Digitally signed by: Kandra K. Robbins
DN: CN = Kandra K. Robbins email =
robbinsk1@michigan.gov C = US O =
MOAHR OU = MOAHR - PSC
Date: 2019.06.27 11:12:14 -04'00'

June 27, 2019
Lansing, Michigan

Kandra K. Robbins
Administrative Law Judge

* * * * *

Case No. U-20332

1.

An evidentiary hearing was scheduled for December 6, 2018. On November 7, 2018, Emily A. Jefferson, Assistant Attorney General, filed an appearance on behalf of Commission Staff. On November 27, 2018, Attorney David S. Maquera filed an appearance on behalf of DTE and an Answer and Affirmative Defenses.

On December 6, 2018, the evidentiary hearing was convened as scheduled. Complainant appeared on his own behalf. Attorney David S. Maquera appeared on behalf of DTE. Assistant Attorney General Emily Jefferson appeared on behalf of Commission Staff.

After the conclusion of the of the first witness' testimony, DTE made an oral motion to dismiss the compliant without prejudice contending that Mr. Chapman's complaint alleged negligence and sought damages but made no allegation of a violation of a rule or regulation.¹ In response to the Oral Motion, Staff agreed that although the face of the complaint did only request money damages, Mr. Chapman raised issues concerning the safety of DTE's network during his testimony. These issues would need to be answered.² Staff argued that Mr. Chapman alluded to a violation of service quality or safety rule in his testimony. Mr. Chapman argues that the MPSC oversees regulating DTE. He is concerned that DTE violated the regulations concerning the quality of the service and safety of their service.³ Mr. Chapman argues that there must be a set of requirements with respect to power quality, frequencies, voltages and specific engineering requirements that DTE is required to follow and those were not followed in this instance.⁴ At that time, the motion was taken under advisement.⁵ At the request of Staff, a brief discussion occurred off the record during which the parties agreed to allow Mr. Chapman to amend his complaint to more fully articulate his concerns, to give Staff an opportunity

1 Tr. Vol. I, pg. 32

2 Tr. Vol. I, pgs. 33-34

3 Tr. Vol. I, pgs. 36-37

4 TR. Vol. I, pg. 40

5 Tr. Vol. I, pg. 37

to receive answers to their questions raised by Mr. Chapman's testimony, and to allow DTE an opportunity to properly respond to all of the issues.⁶ DTE withdrew their Oral Motion for Dismissal.

On December 6, 2018, this ALJ issued a letter requiring Mr. Chapman to file an Amended Complaint within 30 days. On December 18, 2018, Mr. Chapman filed an Amended Complaint. On January 29, 2019, Staff filed an Answer to the Amended Complaint indicating that DTE had not yet answered any of their discovery requests. On February 15, 2019, Megan E. Irving filed an appearance on behalf of DTE. On February 22, 2019, DTE filed an Answer and Affirmative Defenses to the First Amended Formal Complaint. On March 1, 2019, Mr. Chapman filed a Response to the Affirmative Defenses. On March 11, 2019, Spencer A. Sattler filed an appearance on behalf of Commission Staff.

On April 24, 2019, the evidentiary hearing continued. Mr. Chapman appeared on his own behalf. Attorney David S. Maquera appeared on behalf of DTE. Assistant Attorney Benjamin J. Holwerda appeared on behalf of the Commission Staff.

II.

OVERVIEW OF THE RECORD

The evidentiary record is two transcripts totaling 219 pages and 5 numbered exhibits submitted by Complainant and 14 exhibits submitted by DTE.⁷

⁶ Tr. Vol. I, pgs. 41-46

⁷ Ex.C-9 consist of notarized letters. The authors of the letters were not subject to cross-examination. Therefore, the letters were given limited weight. They were admitted for the limited purpose to indicate that several homes in the neighborhood lost power on the date in question.

A. Complaint

Mr. Chapman alleges that DTE failed to properly inspect or maintain its equipment resulting in a transformer failing and spilling oil in his yard. This failure resulted in an unusual power surge to his home causing significant damage. He alleges that this is the second year in a row that an unusual power surge caused damage to his home. He requests that the MPSC orders DTE to determine the cause of the failure and ensure that it does not happen again.

B. Answer

DTE contends that the failed transformer was in good shape, it only had a small leak that was emitting oil. The transformer did not fail electrically, and it was replaced because the physical integrity was compromised. DTE acknowledges that there was a power disruption on the date in question, but that power was restored on that day.

C. Evidentiary Hearing

Mr. Chapman testified that at about 8:00 a.m. on June 26, 2018 the lights flickered from brilliant to off and the motor which drives the circulation fan in their hearing system growled into action. Within seconds he smelled smoke and then silence, darkness and an acrid burning smell. He stated that all his power was out. He went outside and discovered that some of his neighbors experienced the same fate.⁸

Mr. Chapman testified that on June 26, 2018, it was a beautiful sunny windless morning. He stated that he has lived in Michigan for over 25 years and has experienced many power outages but this one was markedly different in that the power simply did not

⁸ Tr. Vol. II, pg. 57

just go off rather the house electrical system appeared to be frenzied, chaotic state which produced weird sounds, burning smells and about \$2,700 worth of damaged electrical equipment.⁹

Mr. Chapman testified that the event of June 2018 was not a singular event. He testified that it also happened in June 2017. He testified that he was not a witness to the 2017 event as he and his wife were on vacation. He testified that upon their return they discovered destroyed electrical gear.¹⁰

Mr. Chapman testified that there is a serious problem with the electric network in his neighborhood. DTE refuses to acknowledge that the power surges have occurred and that many of the neighborhood are worried that this problem still exists and is poised to burn them out for a third time perhaps with more serious consequences.¹¹

Mr. Chapman testified that while acts of God may be out of DTE's control, mechanical failure is not an act of God and its avoidance is certainly within DTE's ability to control through solid engineering practice and through maintenance procedures.¹²

David Kasbohm testified. Mr. Kasbohm is an overhead lineman at DTE Energy. He has been employed in that capacity for 29 years.¹³

Mr. Kasbohm testified that he was sent to respond to a reported power outage. He stated that he found the bad tap and repaired that and believed that all power should have been restored. He came to Mr. Chapman's home and realized that there was also a

9 Tr. Vol. II, pg. 57

10 Tr. Vol. II, pg. 58

11 Tr. Vol. II, pg. 58

12 Tr. Vol II, pg. 59

13 Tr. Vol. II, pg. 105

transformer outage behind Mr. Chapman's home. He testified that he requested a crew to come and clean up the oil spill and replace the transformer.¹⁴

Mr. Kasbohm testified that it was a little tricky determining the problem that day. He testified that he found the reclosure that hadn't operated but the one tap had burned off where it connects to the line. He made the necessary repairs and closed it back in. He thought that would turn the power back on for everyone. He subsequently met Mr. Chapman and looked at his transformer.¹⁵

Mr. Kasbohm testified that a tree crew was called to remove the foliage that had oil on it and to clear around the pole to make it easier to get up and down the pole. The pole was in a backyard and there was not truck access.¹⁶

Mr. Kasbohm testified that a four-man crew from a contract company was called to replace the transformer. It was too large of a project for a single person.¹⁷ He testified that in his opinion, the reclosure did not operate as it was meant to operate. The connector burned off the line.¹⁸

In his opinion, the transformer would have contained 15 to 20 gallons of oil. He estimated that a couple of gallons was dumped on the ground.¹⁹ He testified that he has seen this happen before. The oil leak generally comes from overheating. The transformer

14 Tr. Vol. II, pg. 107

15 Tr. Vol. II, pg. 112

16 Tr. Vol. II, pg. 109

17 Tr. Vol. II, pg. 115

18 Tr. Vol. II, pg. 118

19 Tr. Vol. II, pg. 121

overheats and pressurized the oil which squeezes out the top. He stated that this particular transformer was a non-PCB.²⁰

Derrick Sanborn testified that he is the southwest substation manager for DTE. He has an electrical engineering degree from Oakland University.²¹

Mr. Sanborn testified that historically speaking a tap fails from age or corrosion. A tap will heat up and fail. He testified that high resistivity could cause a failure it is typically chronic high resistivity meaning not one instance. A tap becomes loose because the wires move or it's basically environmental issues, they move from wind, snow, water gets in and freezes and expands. Vegetation interference can cause resistivity.²²

Mr. Sanborn testified that when a transformer fails in service and it's a suspected oil leak, they follow a specific protocol. The transformer is removed out of service, tagged and shipped to the Warren Service Center. He testified that there is no testing. The transformer is defective and is placed into defective equipment.²³

Mr. Sanborn testified that the transformer at issue in this matter was removed because it was defective. He testified that the transformer's electrical function was not tested and therefore, he cannot say whether the transformer had an electrical failure.²⁴

Mr. Sanborn testified that there are two separate process for removing equipment. The transformer in question was removed from service utilizing the oil spill protocol, versus the equipment failure protocol.²⁵

20 Tr. Vol. II, pgs. 121-122

21 Tr. Vol. II, pg. 124

22 Tr. Vol. II, pgs. 125-127

23 Tr. Vol. II, pg. 127

24 Tr. Vol. II, pg. 129

25 Tr. Vol. II, pg. 143

Mr. Sanborn testified the industry accepted practice is that they do not have a maintenance program on transformers. It's a very simple device; a tub, a magnet, and oil. There are no moving parts. Typically, when they fail, they fail from some sort of outside interference; lightening strike or act of God. He stated that they are like a light bulb; you don't maintain them when they fail, you replace them.²⁶

Mr. Sanborn testified that the transformer in question was installed on or around June 11, 2003. The failure occurred on June 26, 2018. He testified that the life of a transformer is not consistent. He stated that the oldest transformer he has seen was installed in the 1940s.²⁷

Mr. Sanborn testified that DTE does not read voltages at the meter level for power quality. DTE does read voltages at the meter level in 15-minute intervals. The data is stored in the data mainframe. He testified that DTE also reads the meter for outages. They capture every outage or momentary voltage sag or spike. The data is recorded in the system according to the system parameters. He testified that DTE does not use a meter as a regulating volt device. They use substations and SCADA devices to maintain and operate voltage.²⁸

Mr. Sanborn testified that in his experience a burnt line tap would not cause a leaking transformer. It would cause a power outage.²⁹ Mr. Sanborn testified that initially they suspected that line interference from trees might have caused resistance resulting

26 Tr. Vol. II, pg. 135

27 Tr. Vol. II, pgs. 138-139

28 Tr. Vol. II, pgs. 139-140

29 Tr. Vol. II, pg. 145

in the tap failure. However, upon inspection there were no trees that might have caused interference and it was determined that the tap just failed on its own.³⁰ The line tap was the cause of the power outage. However, there is no way to know what caused the line tap to fail.³¹

Mr. Sanborn testified that it would be impossible to determine if the primary voltage skipped over and entered the residential area causing damage unless it was actually observed.³²

Mr. Sanborn testified that the transformer case is grounded so the only way voltage can come out is through the windings on the secondary side of the transformer. There are two taps on the outside and a neutral. Those three go to the house. The only way the voltage can get to the house is through those three taps and if by chance the primary did do that it would have been a grounded device. The ground would have detected overvoltage and the fuse on the pole would have blown and if those held it would have gone back to the recloser and that would have blown, or if the tap in this case was in bad shape that would have blown. There were three different areas that would have failed before injecting voltage into the system.³³

Mr. Sanborn testified that the way electricity works; there's a potential, voltage is often called potential, there's zero and then there's the top. The top in his case is 4,800.

30 Tr. Vol. II, pg. 146

31 Tr. Vol. II, pg. 147

32 Tr. Vol. II, pg. 147

33 Tr. Vol. II, pg. 148

The only way to get extra voltage is through a lightening strike or if the primary were to come into contact with the secondary.³⁴

Mr. Sanborn testified that he was unable to say for sure that the primary voltage and secondary voltage did not come into contact because no one looked at the inside of the transformer. He testified that it's theoretically possible, however, the transformer expert he spoke to had never seen it happen.³⁵

Mr. Sanborn testified that Mr. Chapman's power went off at 8:15 and remained off until 13:53. He testified that the meter will record anything outside of nominal voltage 12 percent plus or minus. It did not indicate anything outside of the norm.³⁶

III.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Findings of Fact

The following findings of fact are based on the preponderance of the evidence in the evidentiary record.

On June 26, 2018, a power outage occurred at 8:15 a.m. affecting several homes including Mr. Chapman.

DTE sent an overhead lineman, David Kasbohm, to determine the cause and to restore power.

Mr. Kasbohm discovered a failed tap. He fixed the tap restoring some power in the area.

34 Tr. Vol. II, pg. 149

35 Tr. Vol. II, pg. 149

36 Tr. Vol. II, pg. 161

Mr. Kasbohm discovered that repair did not restore power to Mr. Chapman and his neighborhood. He then observed a failed transformer and determined that this was the likely cause of Mr. Chapman's continued power outage. Mr. Kasbohm observed about 2 gallons of oil had leaked from the transformer.

Mr. Kasbohm requested that a crew be sent to replace the failed transformer.

The failed transformer was replaced. The failed transformer was sent to defective equipment based on the oil leak. The failed transformer was never inspected.

DTE does not know what caused the tap to fail or what caused the transformer to fail. Both pieces of equipment were repaired or replaced.

The outage on June 26, 2018 was caused by the failed line tap. It burned open disrupting the continuity of power and causing the outage. Additionally, some members of the public lost power because of a failed transformer.

The transformer located at Mr. Chapman's residence failed resulting in an oil leak.

Because no one inspected the inside of the transformer, it is impossible to determine if the primary voltage came into contact with the secondary voltage resulting in a surge.

AMI meters measure voltages at the meter level in 15-minute intervals. They capture every outage or momentary voltage sag or spike. The data is stored in the data mainframe.

Power was restored to Mr. Chapman at 13:53 on June 26, 2018. Mr. Chapman's power was out for approximately 338 minutes.

Conclusions of Law

The burden of proof in complaint cases is assigned in R 792.10446 which provides:

Rule 446. The complainant generally has the burden of proof as to matters constituting the basis for the complaint and the respondent has the burden of proof as to matters constituting affirmative defenses. The burden of proof, however, may be differently placed or may shift, as provided by law or as may be appropriate under the circumstances.

The Complaint does not specifically allege any particular rule or standard violated by DTE but contends that DTE has failed to maintain their equipment and failed to provide an adequate explanation regarding the cause of the transformer failure in June 2018.

In their initial brief, Staff contends that DTE violated R 460.3705 which provides:

Rule 705. (1) Each utility shall make a reasonable effort to avoid interruptions of service. When interruptions occur, service shall be restored within the shortest time practical, consistent with safety.

(2) Each utility shall keep records of sustained interruptions of service to its customers and shall make an analysis of the records for the purpose of determining steps to be taken to prevent recurrence of the interruptions. The records shall include the following information concerning the interruptions:

- (a) Cause.
- (b) Date and time.
- (c) Duration.

(3) Planned interruptions shall be made at a time that will not cause unreasonable inconvenience to customers and shall be preceded, if feasible, by adequate notice to persons who will be affected.

(4) Each utility shall promptly notify the commission of any major interruption of service to its customers.

1983 AACS; 1996 AACS

Staff contends that DTE's failure to complete electrical testing on the transformer means that DTE is unable to analyze and document the true cause of the power event to prevent future recurrence.

Mr. Chapman's concern in this matter is that a power surge occurred in his neighborhood resulting in damage to several pieces of electrical equipment in his home. He believes that this type of power surge and outage occurred in 2017 and 2018. He is worried that DTE has not fully reviewed the cause of the incident and has taken any steps to prevent any future recurrence.

DTE argues that because Mr. Chapman did not cite a specific rule and Staff only cited the specific rule in its closing brief, that DTE failed to receive proper notice of the allegation and therefore, the complaint should be dismissed.

However, the Commission's Regulatory Affairs Division determined that the formal complaint set forth a prima facie case as required by Rule 442 of the Administrative Rules of Practice and Procedure before the Commission, Mich Admin Code, R 792.10442.

Mr. Chapman's complaint allegations, despite not citing a specific rule, are clear and detailed providing sufficient notice to DTE as to the nature of Mr. Chapman's claims. Mr. Chapman alleges that DTE has failed to properly maintain or inspect its equipment resulting the power surge or outage at his home and in his neighborhood on June 26, 2018. Mr. Chapman is requesting that DTE determine the cause of the outage and take appropriate action to prevent repetitions of the incident.

The evidence presented at the hearing indicates that the power outage at Mr. Chapman's home on June 26, 2018 had two potential causes. The first was caused by

line tap failure. Based on the evidence presented, it is impossible to determine the exact cause of the line tap failure. Line tap failure can have several common causes such as weather, trees or some other interference. However, there was no evidence presented that the line tap failure occurred because of DTE's actions or failure to act. For instance, the failure was not caused by tree interference as determined after a visual inspection. There was no indication that DTE had permitted trees to grow and interfere with the line tap. In fact, the evidence presented indicated that there were no trees in the area of the line tap to have been the cause of interference.

The record indicates that the second cause of the power failure on June 26, 2018 was a failed transformer at Mr. Chapman's home. The failed transformer power outage only impacted the homes in Mr. Chapman's neighborhood not all of the homes that lost power as a result of the line tap failure. There was insufficient evidence presented to determine which event occurred first, the burned tap or blown transformer. From the record, it does not appear that the burned tap would have caused the blown transformer. It is unclear if the blown transformer would have caused the tap failure. This appears to be information that would be necessary to comply with the requirement to determine a power outage cause under R 460.3705.

It is unclear what caused the transformer to fail. It is clear that the transformer leaked oil in Mr. Chapman's yard as testified to by both Mr. Chapman and Mr. Kasbohm. Because of the oil leak, the transformer was replaced, and power was restored to Mr. Chapman and his neighbors. There was no evidence presented to indicate that DTE

conducted any examination of the transformer to determine if a cause of the transformer failure could be identified.

DTE did not inspect the failed transformer. Without this inspection, Mr. Sanborn testified that it would be impossible to determine if the primary voltage came into contact with the secondary voltage resulting in a surge. It is not possible to determine if the failure had an electrical cause.

The evidence presented at the hearing, indicated that the AMI meter at Mr. Chapman's home did not register a power surge on June 26, 2018. Staff contends that based on DTE's answer to discovery in which DTE indicated that they do not read voltages at the meter level, they were not given an opportunity to review all relevant data. During the hearing, Mr. Sanborn clarified his answer to Staff's discovery request. He testified that despite the answer given in discovery DTE does in fact collect meter data that would record a power surge.³⁷

Staff contends that this data would provide valuable information in determining whether or not a power surge occurred causing the transformer to fail resulting in the power outage to Mr. Chapman and his neighbors. Staff was not aware that the AMI meter would register a power surge because of the written discovery answer given by DTE. However, based on Mr. Sanborn's testimony, it appears that AMI meter data for all of the homes impacted by the failed transformer is available and an analysis would potentially yield answers to the cause of the power outage on June 26, 2018. Staff was not given an opportunity to review AMI meter data for all of the homes impacted by the failed

³⁷ Tr. Vol. II, pgs. 139/140 and Exhibit R-8

transformer and the record does not indicate that DTE analyzed any of this data to ascertain if there was a power surge that might have caused the power outage.

In its initial brief, Staff requests that DTE be required to provide the AMI meter data from the other thirteen homes affected by the failed transformer to ascertain whether a voltage surge occurred. Based on the testimony presented during the hearing, the failed transformer is no longer available for any visual inspection.

DTE properly removed the failed transformer on June 26, 2018. DTE removed the failed transformer because of the oil spill. Because DTE used the oil spill as the documented reason for the removal, DTE did not conduct any inspection of the transformer. Although DTE concluded that the transformer did not experience an electrical failure, DTE did not in fact conduct any inspection of the transformer that would have permitted such a determination.

Mr. Chapman has shown by a preponderance of the evidence that he suffered a sustained power outage of 338 minutes on June 26, 2018. This power outage was caused by a transformer failure at this home. Under the Rules, DTE is required to keep records of the sustained interruption and shall make an analysis of the records for the purpose of determining steps to be taken to prevent recurrence of the interruption. DTE did not conduct a complete inspection of the failed transformer that would have permitted DTE to determine the actual cause of the transformer's failure. DTE merely replaced the transformer. This action did allow for the power to be restored to Mr. Chapman's home and neighborhood, but it does not allow for a proper analysis of any steps to be taken to ensure that the power outage is not repeated.

However, as testified to by Mr. Sanborn, because no inspection was made of the transformer, it is impossible to determine if in fact there was an electrical failure of the transformer rather than merely a breach of the physical integrity of the transformer. The failed transformer clearly caused the power outage at Mr. Chapman's home and neighborhood. The question remaining is what caused the transformer to fail and what steps of any can be taken to prevent a recurrence.

At this point in time, it is impossible to conduct an inspection of the failed transformer as it has been disposed of. Nevertheless, a review of the neighborhood's AMI meter data would potentially allow an analysis to determine if a power surge occurred at the time of the outage providing a clearer record of the causation and allowing DTE to take any steps necessary to prevent a recurrence.

I find that Mr. Chapman and Staff have established, by a preponderance of the evidence, that DTE violated R 460.3705. DTE shall provide to Staff the AMI meter data for June 26, 2018 from the thirteen homes affected by the failed transformer to ascertain whether a voltage surge occurred that day.

Mr. Chapman has failed to establish, by a preponderance of the evidence, that DTE violated R 460.3501; R 460.3502; R 460.3504; R 460.3702, R 460.3703; R 460.3801; R 460.813 or any other rule or tariff.

IV.

CONCLUSION

For the reasons set forth above, the undersigned proposed that the Commission adopt the above proposed findings of fact and conclusions of law.

Any arguments not specifically addressed in this Proposal for Decision are deemed irrelevant to the finding and conclusions recited above.

MICHIGAN OFFICE OF ADMINISTRATIVE
HEARINGS AND RULES
For the Michigan Public Service Commission

Kandra K.
Robbins

Digitally signed by: Kandra K.

Robbins

DN: CN = Kandra K. Robbins email
= robbinsk1@michigan.gov C = US

O = MOAHR OU = MOAHR - PSC
Date: 2019.06.27 11:12:35 -04'00'

Kandra Robbins
Administrative Law Judge

June 27, 2019
Lansing, Michigan