

Michigan Legislative Committee Hearing
Winter 2023 Storm Power Outages & Reliability

March 15th, 2023

FORMAL STATEMENT

Thank you. Good morning, Chairwoman Scott, Vice Chair Andrews, Vice Chair Wendzel, and members of the House Energy, Communications, and Technology Committee. My name is Trevor Lauer, and I am the President of the electric company at DTE Energy. Thank you for the opportunity to discuss how our company responded to the recent major weather events that left some of our customers without power – and, more importantly, talk about how together we can fundamentally improve the electric grid to minimize the impacts of these increasingly severe and frequent weather events on the lives of our customers.

Before I begin, I would like to apologize to DTE’s customers that experienced power outages after the recent waves of storms. Our customers and our communities that were impacted deserve better performance from our electric grid and DTE Energy. We know this, and we fully accept both responsibility *and* the task of working together to make the necessary investments in our grid to dramatically improve its performance for our customers.

We understand the importance of electricity in our customers’ lives, and our goal is to keep their power on – always. We care deeply about the communities we serve, not least of which because our employees live in them too. And we know that the strength of our company is tied directly to delivering reliable service to our customers. The events of the past few weeks are not the experiences that we want for our customers – nor for our employees. We must do better, and we can do better.

It’s also important for me to express my deepest appreciation for the remarkable dedication and tireless efforts of all 10,000 DTE employees, our labor and community partners, and the many others who supported our restoration efforts. Many worked non-stop over the last few weeks and were away from family and friends, working in challenging environments, day after day. During a large-scale event, we ask our employees to work 16-hour days, and many of our employees did this for 14 straight days. The strength of our company comes directly from our employees, and I cannot thank them enough for what they have done.

Today, I will focus my comments on three points. First, how the changing nature of Michigan’s weather is impacting our electrical system. Second, how DTE responded to the recent storms. And finally, I will touch on how we will respond to create a more reliable and resilient grid for our customers.

First, let me start with Michigan's weather, which has dramatically changed in recent years. What was once considered a “historic” storm has now become the unwelcome norm, and the severity of this new norm is challenging us and our infrastructure to adapt and adjust.

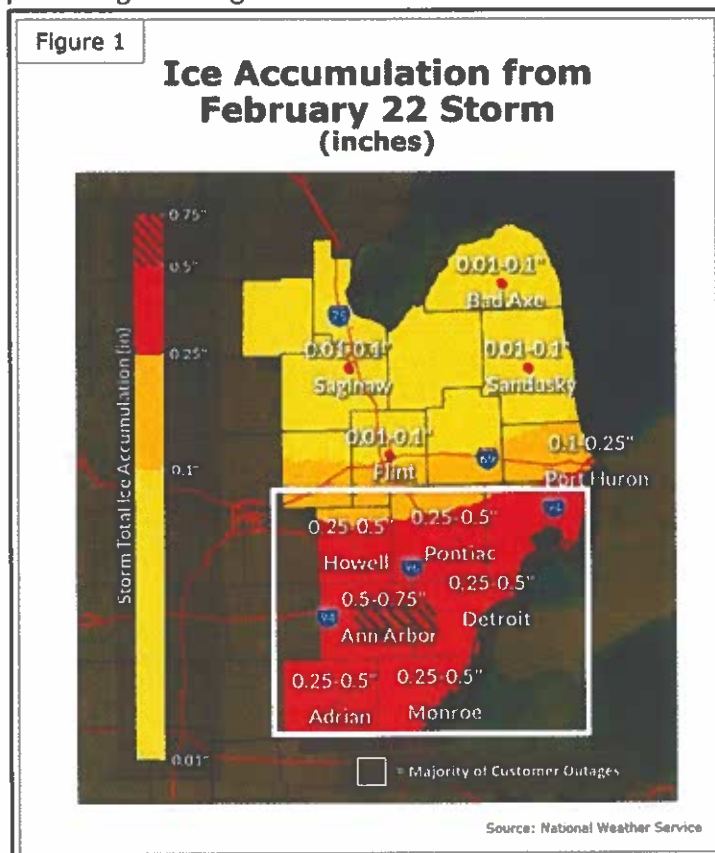
In 2017, our state was struck with a once-in-a-century windstorm with hurricane force winds and gusts as high as 68 mph, bringing down trees, branches, and power lines. In 2021, Michigan experienced another intense period of twelve back-to-back storms with high winds that pummeled our region week after week, including 6 tornadoes in Southeast Michigan. And this

year we have already faced DTE’s largest ice storm in half a century, spanning from Lake Michigan to Lake Erie, immediately followed by a heavy snowstorm and 45+ mph winds.

Simply said, the nature of the severe weather patterns that we see in Michigan has changed. What used to be referred to as a once-a-century event is now becoming a common occurrence. To be clear, this is not a Michigan-only phenomenon. Our industry has experienced this change across the country, and utilities everywhere have been hardening and rebuilding infrastructure to meet this growing challenge.

Now, I’d like to shift to my second point of today’s discussion, where I will share a few words about how we responded to the recent weather events.

The February 22nd ice storm that swept through Michigan was a worst-case scenario for any utility with overhead infrastructure. Meteorologists from across the country forecasted that Michigan would be at the epicenter of this storm. That’s why we proactively prepared several hundred public safety teams and over 1,000 line workers before the storm impacted our service territory. At its peak, this storm caused a buildup of up to 0.65 inch of ice on trees, branches, and electrical lines and equipment in our service territory. The weight of this ice caused trees, branches, and wires to come down across Michigan. The ice and wind combined to result in approximately 25% (~650,000) of our customers losing power and over 10,000 wire downs across Southeast Michigan.



In addition, during the storm, some of our impacted customers experienced errors with our communications systems. We know the importance of effective and accurate communications during a storm, and we are currently conducting a top-to-bottom review of how we can improve in the future.

As with any weather event, our top priority is the safety of the public and our crews. As soon as it was safe, DTE mobilized more than 4,000 field employees - representing the largest response team ever assembled by DTE - to secure downed power lines, assess the damage, and begin restoration work for our customers. Our primary goal during a large-scale outage is to get

everyone's power back as safely and quickly as possible. To do so, we often rely on temporary repairs to the electric system, which allows us to restore more customers quickly. I refer to this as "restore before repair." Once all customers are restored, our crews then begin the process of making permanent repairs where necessary to return the system to normal operating condition. This process can take weeks depending on the level of damage.

In the case of the February 22 ice storm, we were able to restore 95% of our customers in 72 hours. While I am proud of the men and women of DTE that responded to this challenge, the severity of the damage on the grid caused some customers to have outages lasting up to seven days. This is unacceptable, and we must invest in the grid in a way that shortens these individual customer outages, and the overall length of the restoration process for all customers. I will touch on how to do this a bit later.

During any weather event causing outages, we know our most vulnerable customers can suffer the most. DTE works closely with our communities to ensure that warming / cooling centers are available, and we perform wellness checks and other forms of community support. For these recent events, we conducted nearly 20,000 wellness checks in person or by phone to our seniors and other vulnerable customers to ensure their well-being and safety. We also positioned community vans in 22 locations in the impacted municipalities to provide water, blankets, flashlights and other supplies to over 4,300 customers.

When we completed restoration for all our customers following the ice storm, our electrical system was operating in an abnormal state, with over 5,000 temporary repairs in place. Before our team could address all these temporary repairs – by applying permanent fixes – Michigan experienced another episode of severe weather that rolled up from coast to coast, causing almost 2.9 million outages across 29 states along its path. This storm brought nearly a foot of densely packed, heavy, wet snow coupled with strong winds from the east with gusts up to 45 mph. The tree branches and limbs that were weakened from the ice the week prior were further impacted by this heavy snow and wind. This resulted in approximately 10% (~227,000) of our customers losing power, of which many were also impacted by the ice storm. While I am proud that our employees were able to restore 99.8% of all these customers in 72 hours, we did have individual customer outages that went on for an additional three days.

With Michigan's weather becoming more severe, we need to find solutions and make the necessary investments in the grid to increase its resiliency – with the goal of making outages far less frequent and shorter in duration. While no amount of engineering will completely eliminate outages during severe weather events, there are proven investments that will reduce the number of outages and how long they last.

Over the past five years, DTE has invested over \$5 billion in our electrical grid, trimming trees, hardening infrastructure, replacing aging equipment including cable, breakers and switchgear, building new substations, and connecting customers. These customer-focused investments are

yielding results, but to see dramatically improved performance, we must go faster to outpace the rate at which we are experiencing historically severe weather.

Last year alone, we trimmed more than 6,500 miles of trees and inspected and worked on more than 8,500 circuit miles. Because of these investments, our customers experienced 21% fewer power interruptions than in 2021 and the average outage duration time was down by nearly 40%. So, we know that investments into the grid works.

And, as it relates to the storms that have occurred already in 2023, the same is true: where investments have been made, our circuits performed well. Circuits that have been covered by our tree trim and hardening programs performed up to 50% better than others that have not yet received the same level of investment. We need to continue to increase the overall investment in the electric grid to provide these results to all our customers and communities. If we are going to meet the challenges of our new weather normal, these proven investments need to be accelerated – for our customers, our communities and for the state – and the scale of the challenge before us requires a bold plan that delivers lasting results.

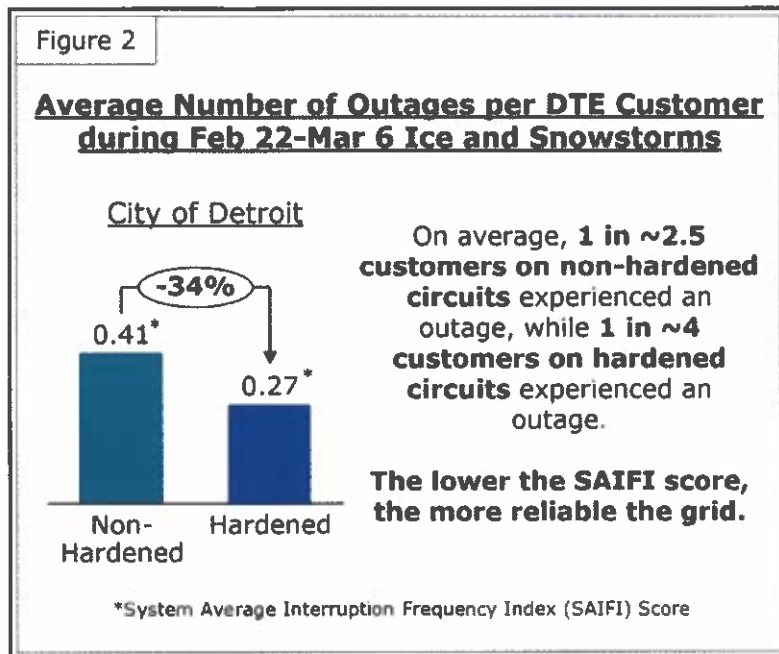
Now finally, I will shift to my third point of today’s discussion where I will share how we will approach this bold plan to respond and deliver better outcomes for our customers.

In 2021, DTE Electric filed our most recent Distribution Grid Plan (DGP) with the Michigan Public Service Commission (MPSC), which hinges on a forward-thinking investment strategy for our grid. In it, we outline our 5-year investment plan and a 15-year vision for the electric grid. This plan provides a comprehensive review of our system’s condition, identifies system needs for increasingly extreme weather events to economy-wide electrification, and develops a detailed “no-regret” investment plan to tackle those needs. The latest DGP provides a strategic path to accelerate investments and calls for an annual increase from the \$1 billion we have been investing in the grid in recent years to \$1.5 billion by 2025. While we plan to file an updated DGP soon, we are confident in the core elements of our current DGP, yet we know that continuing to accelerate investments in the plan’s key elements is paramount.

To accelerate investments, first, we must continue to invest in enhanced tree trimming. We know that the majority of the time our customers spend without power is due to tree interference. In areas where tree trimming is up-to-date, customers experience a 60-70% improvement in overall reliability.

DTE has been and will continue to be a strong advocate for a well-funded tree trimming program. Knowing that tree trimming is a proven approach to reducing outages, we have bolstered our tree trimming workforce. In 2022, we mobilized more than 1,600 tree trimmers every day to trim trees, that’s 30% more than in 2021. We took proactive steps in 2019 by partnering with the Michigan Department of Corrections to pioneer a tree trimming academy at Parnell Corrections Facility. This program equipped returning citizens with the necessary skills for a successful career in tree trimming. Building on that success, in 2021, we partnered with the City of Detroit to establish the Detroit Tree Trimming Academy, allowing us to connect local talent with good

paying jobs to meet the ever-growing demand for skilled tree trimmers. I want to thank Dean Bradly and Jamie Shaw, and all the members of IBEW Local 17 for their invaluable assistance in helping to make this a success. It's programs like this that we must continue to prioritize.



Strengthening our local workforce and driving economic growth in the state of Michigan are matters of great importance to DTE and for the long-term success of our investment plans.

Second, we need to continue preventative maintenance on the existing infrastructure and continue updating the electrical grid – specifically poles, cross arms, braces, wires, and other equipment that makes the electrical system more reliable and resilient. Preventative maintenance includes the

inspection of our electric lines, including poles, cross arms, cables, breakers, and transformers. If during these inspections we find anything that needs fixing, we update that infrastructure with newer more modern equipment to “harden” the grid to reduce the likelihood of failure and increase the redundancy of the system. DTE has continued to increase our investment in preventative maintenance and hardening of the grid and continues to advocate for additional investment in this space.

In 2022, on those most challenged circuits where DTE completed this type of focused maintenance and hardening work, customers experienced a 40-70% improvement in overall reliability. During this year’s ice and snowstorms, customers on these circuits experienced 34% fewer outages. By hardening our infrastructure, it's clear that we can reduce the overall frequency of outages our customers experience and the duration of these outages.

Third, we need to accelerate the complete rebuild of sections of our infrastructure. While hardening the infrastructure is a sound strategy to allow the existing infrastructure to continue to operate, rebuilding much of the older grid sections to modern design is critical for our customers. In some instances, where we are preparing to rebuild sections of the grid and meet the needs of our customers, it will make sense to pursue the undergrounding of our distribution system. Since the early 1970’s, many new developments have been constructed underground, which removes the hazards from wind and trees, and improves reliability for our customers. In 2015, we requested permission from the Michigan Public Service Commission that all new, relocated, or upgraded residential service connections will be installed underground as opposed

to a service drop from the pole to their homes to reduce single customer outages. With nearly a third of our system underground, doing more strategic undergrounding of sections of our existing overhead electrical system needs to be an important part of the work ahead.

Lastly, we need to drive for full automation of the electric grid within 5 to 6 years – which can fundamentally reduce the duration of outages while we continue to harden and rebuild the grid. Our DGP envisioned this happening on the same timeline as the grid rebuild, but this must be accelerated to improve the performance of the grid for our customers in the near term. With our recent investments in Advanced Distribution Management Systems (ADMS) and our new Systems Operation Center complete, we can now bring “smart grid” technologies into the field, which will enable us to more quickly and efficiently isolate outages on a circuit so that the impact of an outage can be minimized. In other words, distribution automation needs to accelerate for our customers. By automating our electric grid, we can significantly reduce the duration of outage events; and fewer, more isolated outages means that our crews can work more quickly to complete restoration for all our customers.

As I alluded to earlier, southern utilities that have experienced these severe weather patterns before us have made many of these exact investments to dramatically improve their electrical grids. In order to accelerate these investments in Michigan, it will require the support of the MPSC and the stakeholders that participate in DTE’s regulatory filings. In February of this year, DTE filed with the MPSC for a rate review of our base electric rates. We understand that no one wants to pay more for electricity, yet as a state we need to do everything we can to make electricity reliable and our electrical system resilient, while at the same time maintaining affordability for everyone. It is five times more costly to make repairs from storm damage than to prevent them by proactively updating our infrastructure. While our current pace of investments in the electric grid has yielded improvements for our customers, we need to do more to speed up these investments so that we can continue to reduce the frequency and duration of outages that disrupts life at home, schools, and businesses.

I know that many members on this committee and the constituents you represent are angry about the status of our grid and you want to hold DTE and the state’s other utilities accountable for better performance. But, for us to get to greater accountability and improved performance of our grid, we must move from disappointment and anger and toward building consensus on the need to accelerate investment in the reliability and resiliency of the electric grid across the state of Michigan. Stakeholders will need to be supportive of these investments and the MPSC’s role in approving them if we are going to be successful as a state in meeting the challenge at hand. And all stakeholders should expect that DTE’s regulator will hold us accountable for implementing these investments and for the results that these investments will deliver for our customers.

When DTE invests in the grid, it’s not just good for our customers – it’s good for the state. Simultaneously through these investments, we are creating economic growth and opportunities for the State of Michigan. In 2022 alone, DTE spent \$2.5 billion with Michigan based business,

this is 62% of our total supply chain spending, creating and sustaining over 11,000 jobs in our state. In addition, DTE has been and will continue reinvesting our retained earnings each year into our electric system for reliability improvements.

In closing Madam Chair, the outages our customers have experienced are unacceptable – unacceptable not just to our customers, but to us as a company, and to me as the leader of DTE Electric. We must move forward together to invest in our infrastructure to create an electrical system that meets the needs of our customers – and your constituents – today and into the future. DTE welcomes the legislature playing an active role in driving focus on investments into the grid and the state. Your leadership will enable Michigan to lead the charge in supporting increased reliability and resiliency, economic development, and provide energy assistance and other customer-centric resources. This will ultimately result in a better experience for our customers, a safer, more resilient grid and a better Michigan.

Thank you, Madam Chair and members of the committee. I welcome any questions.