

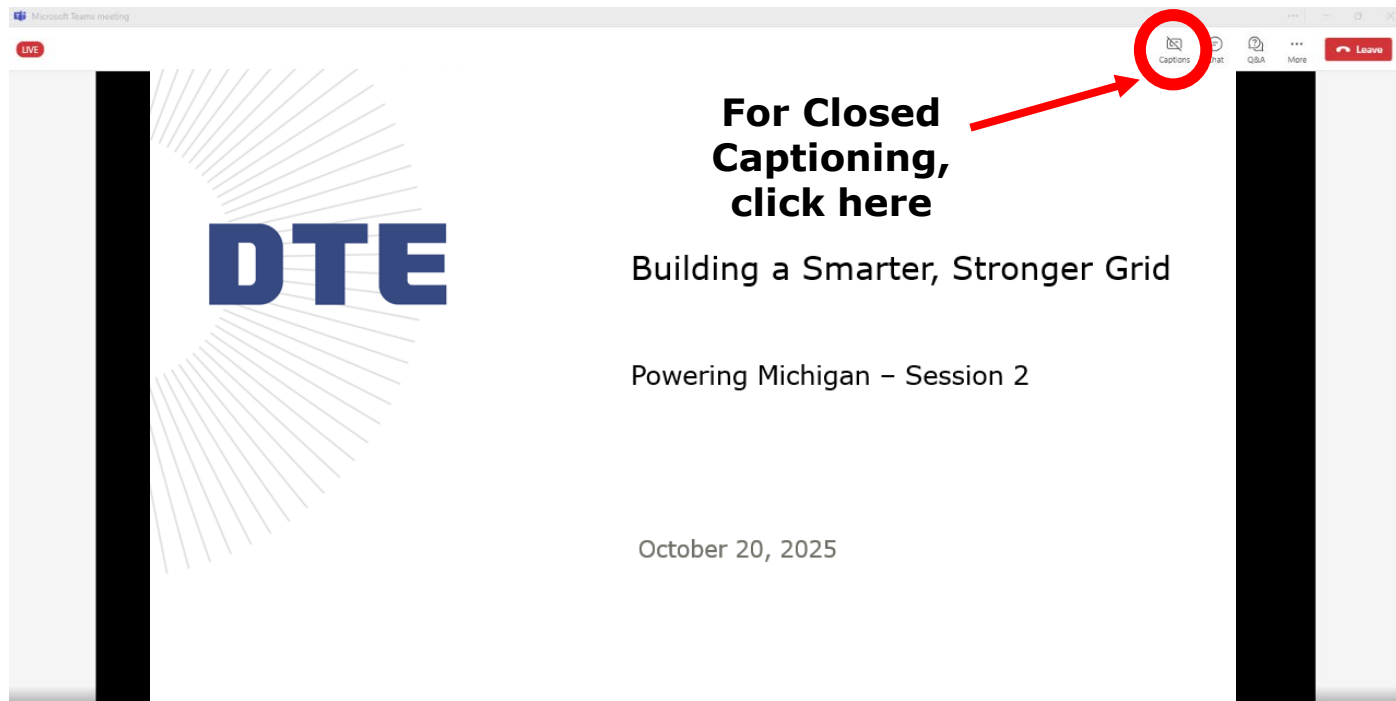


# Building a Smarter, Stronger Grid

## Powering Michigan – Session 2

October 20, 2025

# Helpful Hints – Closed Captioning



The screenshot shows a Microsoft Teams meeting window. On the left, a presentation slide is displayed with the DTE logo and the text "Building a Smarter, Stronger Grid", "Powering Michigan – Session 2", and "October 20, 2025". On the right, the Teams meeting controls are visible. A red circle highlights the "Captioning" button, which is represented by a speech bubble icon with a double checkmark. A red arrow points from the text "For Closed Captioning, click here" to this button.

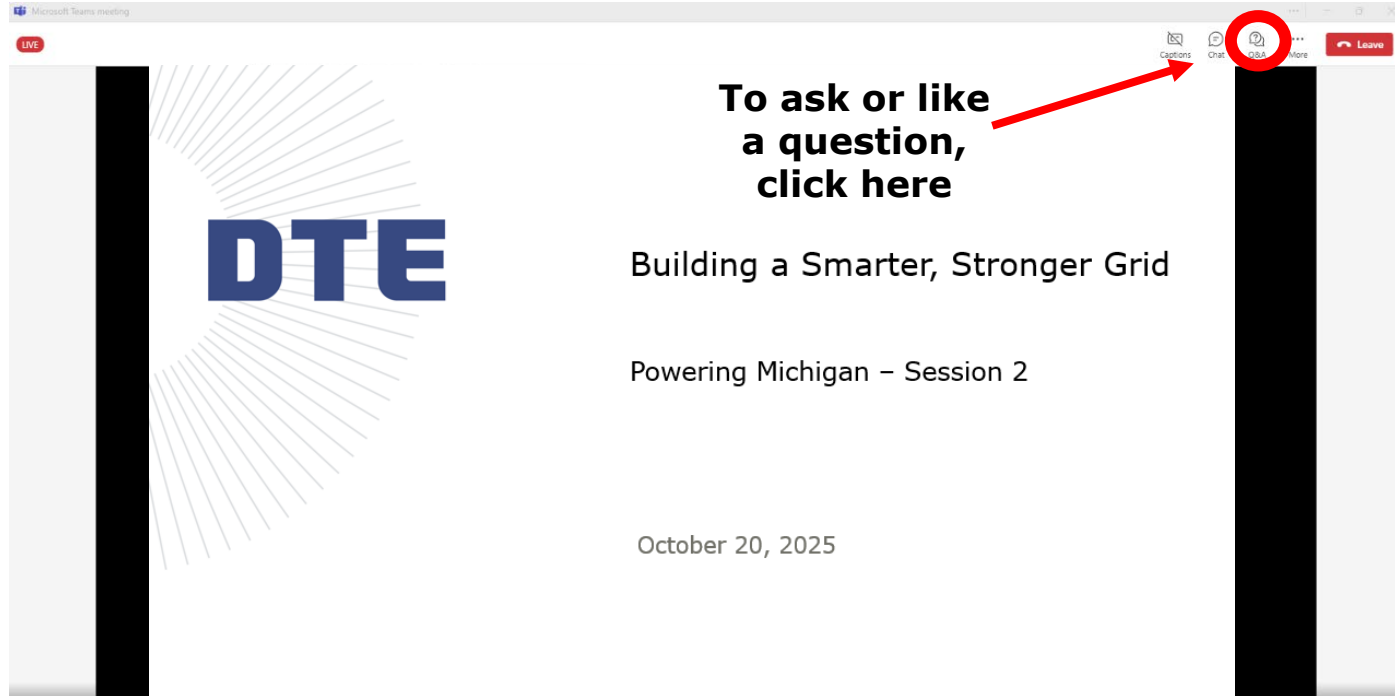
**For Closed Captioning, click here**

Building a Smarter, Stronger Grid

Powering Michigan – Session 2

October 20, 2025

# Helpful Hints – Q&A



The screenshot shows a Microsoft Teams meeting window. On the left is a vertical black bar. The main content area displays the DTE logo (a stylized sunburst) and the text "DTE". Below the logo, the text "Building a Smarter, Stronger Grid" and "Powering Michigan – Session 2" are visible. At the bottom, the date "October 20, 2025" is shown. On the right side of the meeting window, there is a vertical black bar. Above this bar, the meeting controls are visible, including icons for "Captions", "Chat", "Q&A", and "More". The "Q&A" icon is circled in red, and a red arrow points from the text "To ask or like a question, click here" to it. A "Leave" button is also visible in the top right corner.

**To ask or like  
a question,  
click here**

Building a Smarter, Stronger Grid

Powering Michigan – Session 2

October 20, 2025

# The focus for today is the Distribution System Plan, or DSP

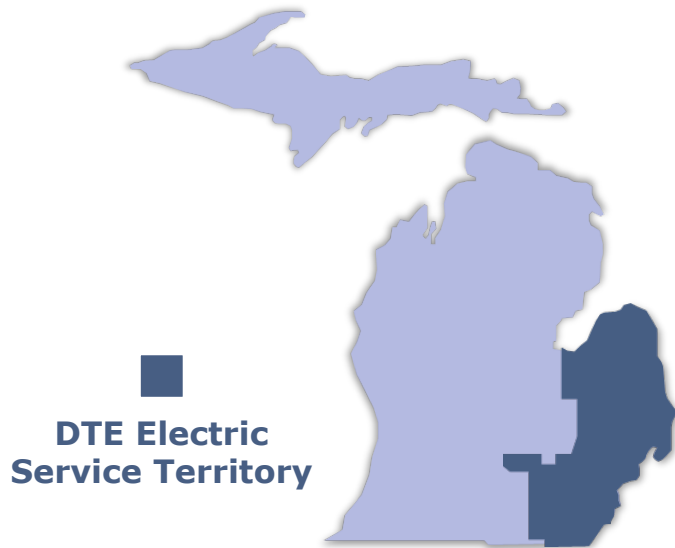
## Powering Michigan Series

- Session 1 – October 1, 2025:  
A look at our energy system and planning processes
- Session 2 – October 20, 2025:  
Building a smarter, stronger grid
- Session 3 – November 3, 2025:  
Planning our clean energy future

### Planned agenda for today:

- ❑ Overview of DTE Electric and the distribution system
- ❑ Summary of the DSP purpose and process
- ❑ Reminder of our 4-point plan to improve reliability
- ❑ Preview of other DSP content, including enabling technologies and cost effectiveness approach
- ❑ Ways to connect with the DSP team
- ❑ Q & A

# DTE Electric Overview



- Founded in 1903
- Own and operate generation and distribution assets
- Serving 2.3M customers in southeast Michigan
- Nearly 10,000 employees

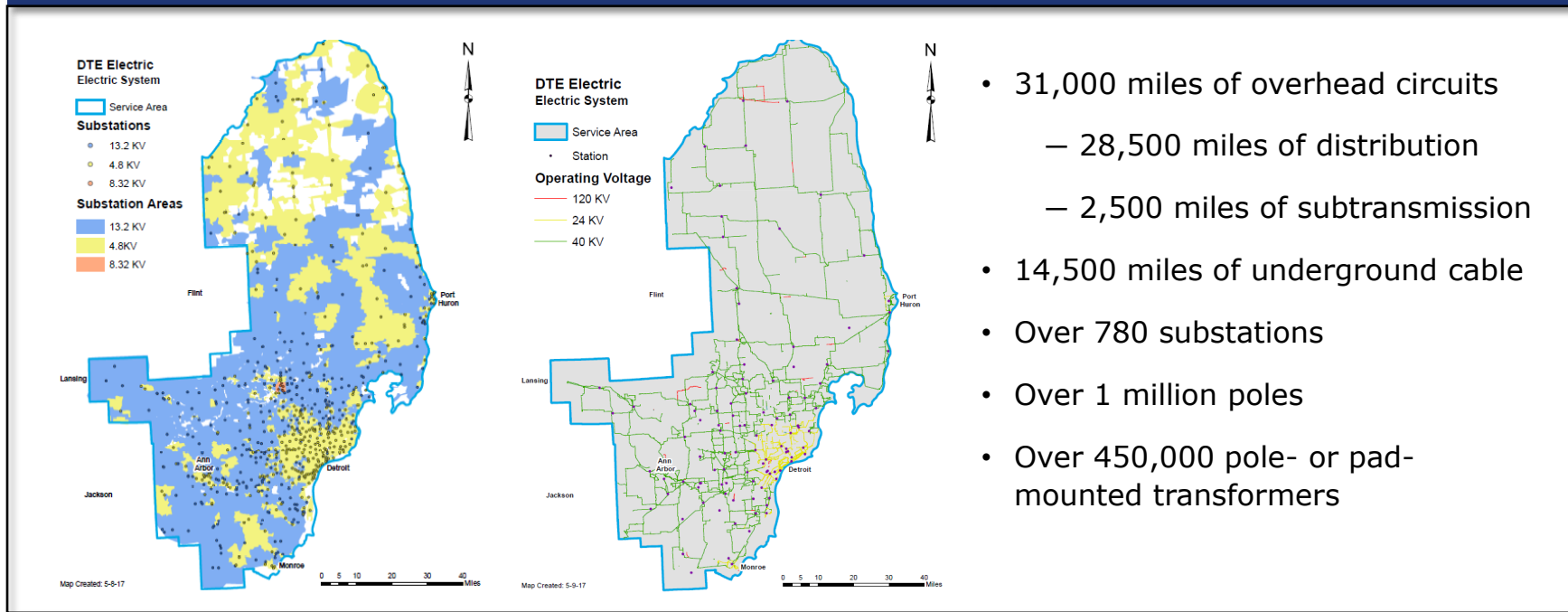
**Now let's walk through the energy system to understand electricity's journey from being generated to distributed to your home or business**

# The Electric System



# DTE's electric grid is vast and serves over 2.3M customers

## DTE Electric Distribution System



- 31,000 miles of overhead circuits
  - 28,500 miles of distribution
  - 2,500 miles of subtransmission
- 14,500 miles of underground cable
- Over 780 substations
- Over 1 million poles
- Over 450,000 pole- or pad-mounted transformers

# Our planning is guided by the following objectives



## **SAFE:**

**Public and employees are kept free from injury**



## **RELIABLE AND RESILIENT:**

**Minimal equipment outages and disruptions to customers**



## **AFFORDABLE:**

**Cost-effective service provided to all customers**



## **CUSTOMER ACCESSIBILITY:**

**Flexible energy options available to all customers**



## **CLEAN:**

**Operate in an environmentally sustainable manner and achieve low carbon aspirations**



# The DSP allows for review of the utility's strategic roadmap

## Definition



- The Distribution System Plan (DSP) details a five-year investment plan as well as an extended 10-15 year outlook from the date of filing

## Requirements



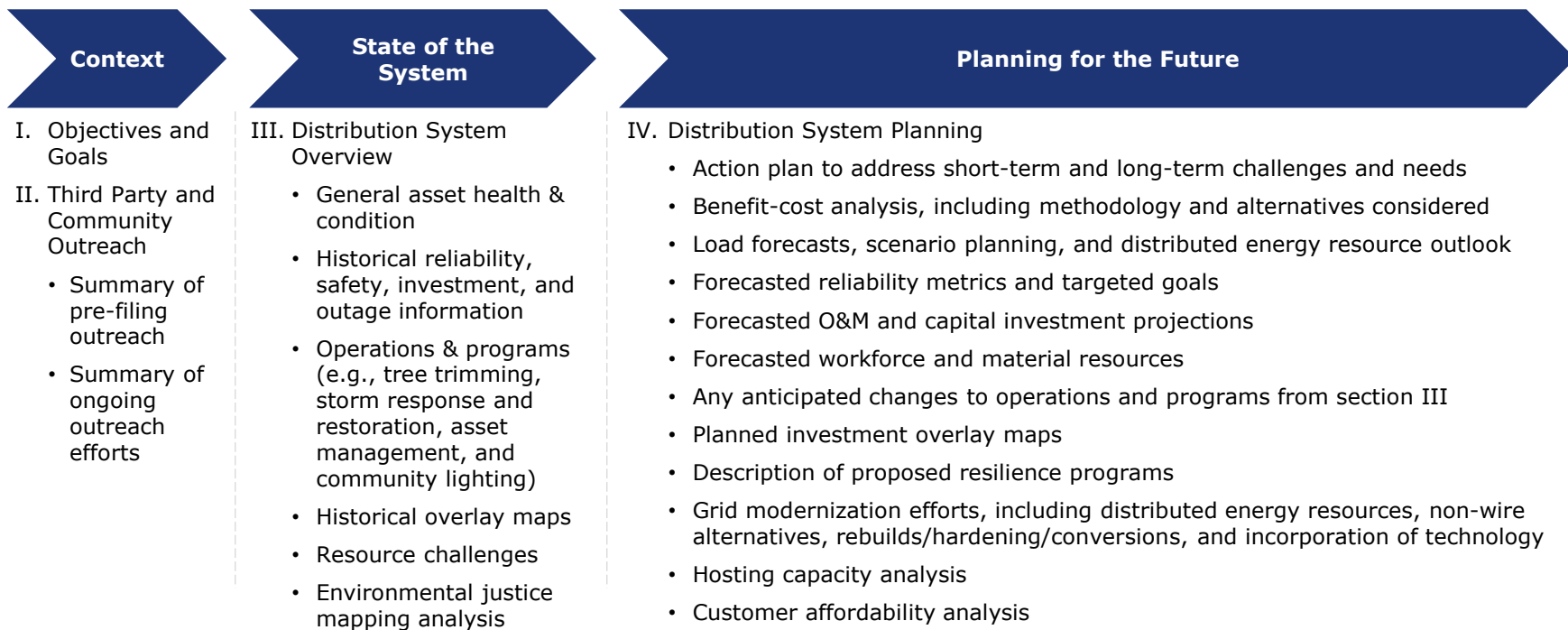
- Per guidelines, a utility must file a DSP every three years (or as otherwise ordered by the Commission)
- The Utility must include an action plan to address the established short-term and long-term challenges and needs

## Review Process



- The process allows the Commission and other interested parties an opportunity to fully evaluate significant and necessary investments
- Investments proposed in the DSP must align with future rate proposals

# In July, the Commission provided filing guidelines for the DSP



# We will file the next DSP – our fourth to date – by June 30

## DTE Electric Company



## 2023 Distribution Grid Plan

September 29, 2023  
MPSC Case No. U-20147

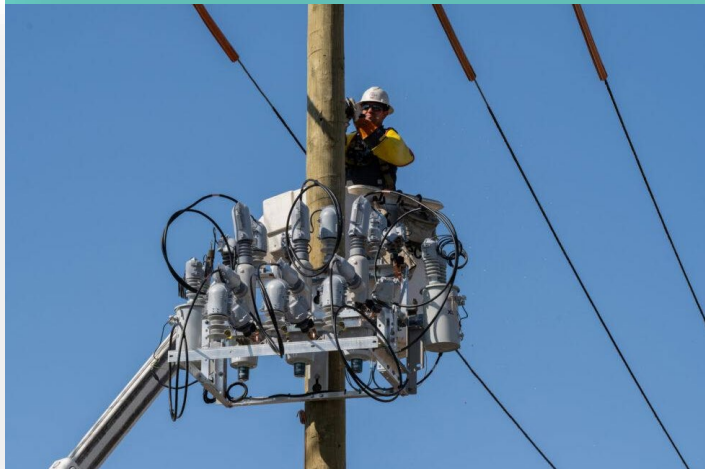


- In 2016, the Commission directed DTE, Consumers and other utilities to develop a five-year distribution investment and maintenance plan
  - DTE filed plans in 2018, 2021, and 2023
  - The 2021 plan was the first to contain a 15-year view of the grid and a 5-year review of investment
- The Commission has directed DTE to file the next iteration of the DSP (previously known as the Distribution Grid Plan, or DGP) by June 30, 2026

**The next pages offer a preview of some of the investment programs and content that will be included as part of the upcoming DSP**

# The DSP will include an update on DTE's 4-point plan (1 of 4)

## 1 TRANSITIONING TO A SMART GRID



- DTE plans to fully automate the electric grid by 2029 with smart devices to reduce outages
- DTE's new technology, like reclosers:
  - Helps crews pinpoint damage, making restoration faster
  - Allows us to isolate the damage and re-route power so the lights stay on for more customers while crews make repairs
- So far this year, smart devices have helped customers avoid more than 19,000 outages

# The DSP will include an update on DTE's 4-point plan (2 of 4)

2

## UPDATING EXISTING INFRASTRUCTURE



- DTE is actively inspecting and upgrading poles, cross arms, transformers, and other equipment throughout its service territory
- New, modern pole-top equipment is made of stronger materials, experiences less deterioration from the elements, and can better withstand increasingly severe weather
- DTE has inspected and upgraded more than 575 miles of electric equipment throughout its electric service territory so far this year - with plans to do more by year end

# The DSP will include an update on DTE's 4-point plan (3 of 4)

3

## REBUILDING SIGNIFICANT PORTIONS OF THE GRID



- DTE is working to rebuild significant sections of the electric grid including new, modern substations and entirely upgraded circuits
  - Areas with older infrastructure and lower voltage systems are being converted and updated to higher voltage to increase capacity and improve reliability
- DTE has recently completed seven new substation projects and have several others in various stages of construction, from Ann Arbor to Detroit to Port Huron and more

# The DSP will include an update on DTE's 4-point plan (4 of 4)

## 4

### TRIMMING TREES



- Tree trimming is one of the most effective methods to improve electric reliability
- Trees account for half of the time our customers are without power
- DTE has trimmed nearly 40,000 miles of trees since 2015
- By the end of this year, we will have trimmed our entire system over the last five years

# Technology-related opportunities will be included in the DSP to further advance the grid and improve reliability and efficiency

## Technology Investment Opportunities in Consideration

### Enhanced Grid Visibility and Control



- Enhanced grid visibility and control with technologies and advanced metering as enablers for Distributed Energy Resources (DERs)
- Next generation metering system with real-time data collection

### Last Mile Communications



- Hybrid approach of fiber/wireless network to meet the communication needs of the modern grid
- Enable smart grid growth while staying independent from bandwidth-limited public carriers

### Asset Inspection Technology



- Launch a drone program to support asset management, storm restoration, and tree trimming
- Use autonomous and pre-planned flights for inspections and at-risk equipment identification

### Asset Analytics & Condition Monitoring



- Leverage available technologies for real-time equipment monitoring
- Improve analytics to proactively identify high risk assets resulting in increased system reliability



# The next DSP will have increased justification for investment; four cost-effectiveness methods are being considered

|                                                                                  | Method                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Key Driver(s)                                                        |
|----------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
|  | Monetized Benefit-Cost Analysis | <ul style="list-style-type: none"> <li>Analytical approach comparing dollar value of benefits versus costs</li> <li>Utilization of robust industry valuation framework for reliability-driven projects (e.g., interruption cost estimate, or ICE, calculator and avoided reactive spend)</li> </ul>                                                                                                                                                                | Reliability                                                          |
|                                                                                  | Hybrid                          | <ul style="list-style-type: none"> <li>Combination of monetary benefits and descriptive justification that together demonstrate cost effectiveness</li> <li>Potentially includes alternative studies to provide further support on selected projects</li> </ul>                                                                                                                                                                                                    | Combined benefits of safety, capacity, reliability, resiliency, etc. |
|                                                                                  | Least Cost and Best Fit         | <ul style="list-style-type: none"> <li>Coupled with alternative studies (e.g., non-wire alternatives) to demonstrate adherence to “least cost and best fit” standard</li> <li>Applicable for projects that fulfill utility obligations to serve customer load</li> </ul>                                                                                                                                                                                           | System loading relief                                                |
|                                                                                  | Descriptive Justification       | <ul style="list-style-type: none"> <li>Robust descriptive discussion to demonstrate cost effectiveness for benefits that are hard to monetize or quantify</li> <li>Also applicable for investments that have gained industry-wide support, are for compliance purpose or still in pilot stage, have relatively small total project/program spend (e.g., &lt;\$8M), or significant portion of spend has already occurred prior to filing (e.g., &gt;50%)</li> </ul> | Various                                                              |

# The planning process is underway to deliver a robust DSP



# Questions and Comments



- What problems do you think we should be working to solve with the DSP?
- What goals and possible solutions should we be considering?
- How should DTE balance affordability with reliability?

# Your voice matters!



- Email us any questions or comments at [DTE.DSP@dteenergy.com](mailto:DTE.DSP@dteenergy.com)
- Join Session 3 of Powering Michigan on November 3 at 5:30 pm to learn more about how we are planning our future energy mix
  - Visit [dtecleanenergy.com](https://dtecleanenergy.com) for more information
- Come learn more at the Community Open House at the Canton Public Library on November 17 from 4-6 pm