

- Thank you Tonya, Chair Scott and members of the Committee.
- My name is Chris Laird and I am the Vice President of Electric Operations, including oversight of the construction, operation and maintenance of Consumers Energy's electric system.
- Through my nearly 25 years with the company, I have held nearly every position in the restoration process from guarding down wires, scheduling and dispatching crews, even as a lineworker out restoring power for our customers.
- I understand the restoration process, what goes into preparing for a storm, and the challenges our crews face when a storm like this causes the amount of damage it did to our state.
- Specific to this event, I lived it – for 10 days, 20 hours a day. I personally don't rest until our last customer is restored.
- To start, this storm was extremely unique. We were prepared, but the severe weather created a number of distinct challenges in the restoration process.
- The extreme winter weather featuring ice up to $\frac{3}{4}$ of an inch thick on the lines, winds over 45 miles per hour and freezing rain hit Michigan between February 22 and March 3, with 485,000 customers losing power across our service territory in three waves.
- Our hardest hit areas were Kalamazoo, Hillsdale, Branch, Jackson, Lenawee, Washtenaw, Montcalm and Newaygo counties. The first wave of weather that impacted our system ranks as a top ten event in our

company's history, the combination of all three ranks as the second largest ever.

- I experienced it firsthand while out in the field following the first wave of extreme weather. I was driving in Kaimazoo to stop at our mobile command unit and could not get down the road because of the amount of trees and limbs blocking my path.
- Ice of that thickness doesn't just damage electric lines. It takes down mature trees, tree limbs, electric poles, or crossarms – all of which create an outage for a customer. We saw 4 times as many wire downs in this storm than that of a typical summer thunderstorm.
- We make it a priority to go and put eyes on every down wire to ensure they are safe to the public and our crews. Our priority is to relieve any situation where a public safety officer – such as police or firefighter is guarding that down wire so we can secure the line and free up our public safety officers to attend to other needs in their community.
- Our expertise is in preparation, and we exercised the same processes ahead of this storm that we do in any other event including staffing at all positions, both internal and out in the field, ensuring we had crews staged around the clock in our southern territory.
- We increased our resource response by tripling our field workforce-- adding more lineworkers, contractors and forestry crews to the system before the weather hit in locations we expected damage and outages.
- We operate an "all hands on deck" approach to support our customers and lineworkers in the field.
- However, it is more than just field employees. We also had employees supporting the restoration efforts in positions such as dispatch, control centers, emergency management, damage assessment and data analytics.

- Our goal was to have a majority of customers restored by Sunday night after the first wave of weather. We achieved that goal with 98% of our customers restored by having a record number of crews on our system.
- We were confident in our preparations leading into the storm. We saw where the weather was likely to hit and got crews to those locations.
- Less than 2% of our customers impacted had a longer restoration time than others. With those outages, we were dealing with massive amounts of damage from the ice to lines, tree limbs and branches.
- To provide a quick perspective, our lineworkers will restore power for up to 16 hours in a row, rest for eight hours – and then return to work. We also stagger our resources and shift start times to ensure we have crews restoring power every hour of the day and night.
- We continue to work 24/7 to restore power as quickly and as safely as possible for all of our customers and until the very last customer is restored.
- Our crews train for these conditions, and they're ready to help the communities we serve.
- However, restoration jobs can only move quickly when the job site is clear. In some cases, after rain came and the ice melted, our crews came to sites completely underwater where a small creek had been located but that turned into a large river or a lake where an open field used to be.
- In those challenging conditions, we utilize amphibious vehicles to help our crews get to the pole or line in question which adds to the restoration time.
- In certain areas, we had reports of significant amounts of services to homes down in small areas. Knowing the challenges those customers

faced we placed 82 crews on 74 miles in Hillsdale on the Pittsford, Frontier - Tamarack substation and circuit.

- The damage was serious. Our crews experienced many challenges but performed at a high level replacing cross arms, poles, transformers, re-strung roughly 95 miles of cable and repaired switches.
- Our restoration efforts continued despite the increased rains and higher wind speed creating additional challenges for crews to fly buckets, clear debris and replace poles.
- I cannot stress this point enough – safety is our top priority in a restoration event – to ensure our crews and the public go home to their families at the end of the day.
- With any major event, we conduct internal after-action reviews to better understand what worked well and identify ways to further enhance our processes for future restorations.
- We are very early on in our evaluation, but I can identify a few key areas we are taking immediate action on.
- In this storm, we had some inconsistencies with our estimated time of restoration or ETRs which is when a customer can expect to receive their power to be restored.
- The ETR model uses a combination of outage counts and historical data to automatically predict ETRs for customers.
- When the new system we use to track outages was implemented, the data pulled in multiple jobs in our system skewing the numbers for power restoration by projecting extended customer restoration times.

- With each extension, a customer who has signed up for alerts, would receive that update via text, leading to multiple alerts to customers.
- We attempted an emergency change in the middle of the storm to fix this but quickly found a defect that needed more attention and data analysis.
- On March 8, when outages had subsided, we implemented a change to the fix the ETR system giving us better control over the data without creating multiple alerts to customers.
- Another issue we identified during the first wave of the storm was that our outage management software was having data quality issues with multiple outages appearing for the same customer premise. For example, one at the circuit level and one at an individual premise.
- I want to be clear and reiterate this point -- we never once understated the number of customers we had out.
- We have already begun working with our operations team to repair the defect.
- We know from our customers there was a lot of frustration with ETRs changing and the company not being clear on how long this restoration was going to take to complete.
- We recognize the impact that has had on the patience of our customers. We are sorry and will learn from this storm and improve.
- I want to close by stressing just how historic this storm was. Whether it was the weight of ice on the lines, poles snapped, wires on the ground, heavy rains and strong winds causing our crews to delay getting up in buckets to get to the hazard - our service territory experienced severe damage.

- Yet despite these obstacles our crews persevered, and our restoration team continuously assessed damage and routed an increasing number of lineworkers to the most pressing jobs.
- For more than 135 years, Consumers Energy has been dedicated to world class reliability performance and that dedication will continue. As the vice president of electric operations, I can assure you that the entire Consumers Energy team is committed to strengthening our electric system, shortening the outage time for customers, and improving the customer experience in an outage situation.
- Thanks again for the opportunity to be with you today and Tonya and I would be happy to answer any questions you may have for us.