# Achieving Chicago's Carbon & Equity Goals

Presented by

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Over a century of **INNOVATION** focused on improving grid **RELIABILITY** 

**S&C's Vision:** Empower People to Transform the Grid

#### **Objectives:**

- Reduce the duration of power outages from hours to seconds — or to no outage at all
- Design systems to withstand the impacts of major weather events



### S&C solutions save 2.9B customer-outage minutes each year



# **Biggest Challenges to Achieving Carbon & Equity Goals**

#### Major Initiatives That Will Improve Environmental Impact

Electrification of transportation

Shift to renewable generation sources

**Biggest Challenge:** The need to attach to aging electrical distribution infrastructure

If the system is unreliable and experiences an outage...

EVs aren't charging

Renewables are kicked offline and unable to provide energy



# **Key Obstacle to Overcome**

## Accelerate Electric Grid Reliability Programs, and Apply System Wide



Main line restoration

Chattanooga 55% 👢 4.7M pounds



Main line restoration + Plus laterals

Gulf Power 50%



#### S&C will work with stakeholders to:

Understand the benefits of restoration and lateral grid modernization Accelerate system wide reliability improvement programs



# **Benefits to Addressing This Obstacle**

## A More Reliable Grid is Foundational for EV's and Renewable Generation



#### More EVs are **able to charge**



Most renewable resources of generation can stay online



# **Final Statement**

Regarding Grid Modernization, to achieve Chicago's Carbon & Equity goals, the most critical obstacle to overcome is **ensuring that the grid is modernized** with adequate reliability and resilience to support, and not diminish, Chicago's Carbon and Equity goals and benefits.

An unreliable distribution system is like having butter and syrup without the pancakes...

you NEED that delivery mechanism.



