

February 2021 Winter Storms After-Action Report

Follow-up Actions Pertaining to ERCOT-Mandated Load Shed

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Topics

- Austin Energy February 2021 Winter Storms After-Action Report
- Impact of ERCOT-Mandated Load Shed
- Circuit Reconfiguration and Sectionalizing
- Key Actions to Add Circuits and Further Capacity to Manual Load Shed
- After-Action Report Status of Follow-up Actions
- Questions & Comments





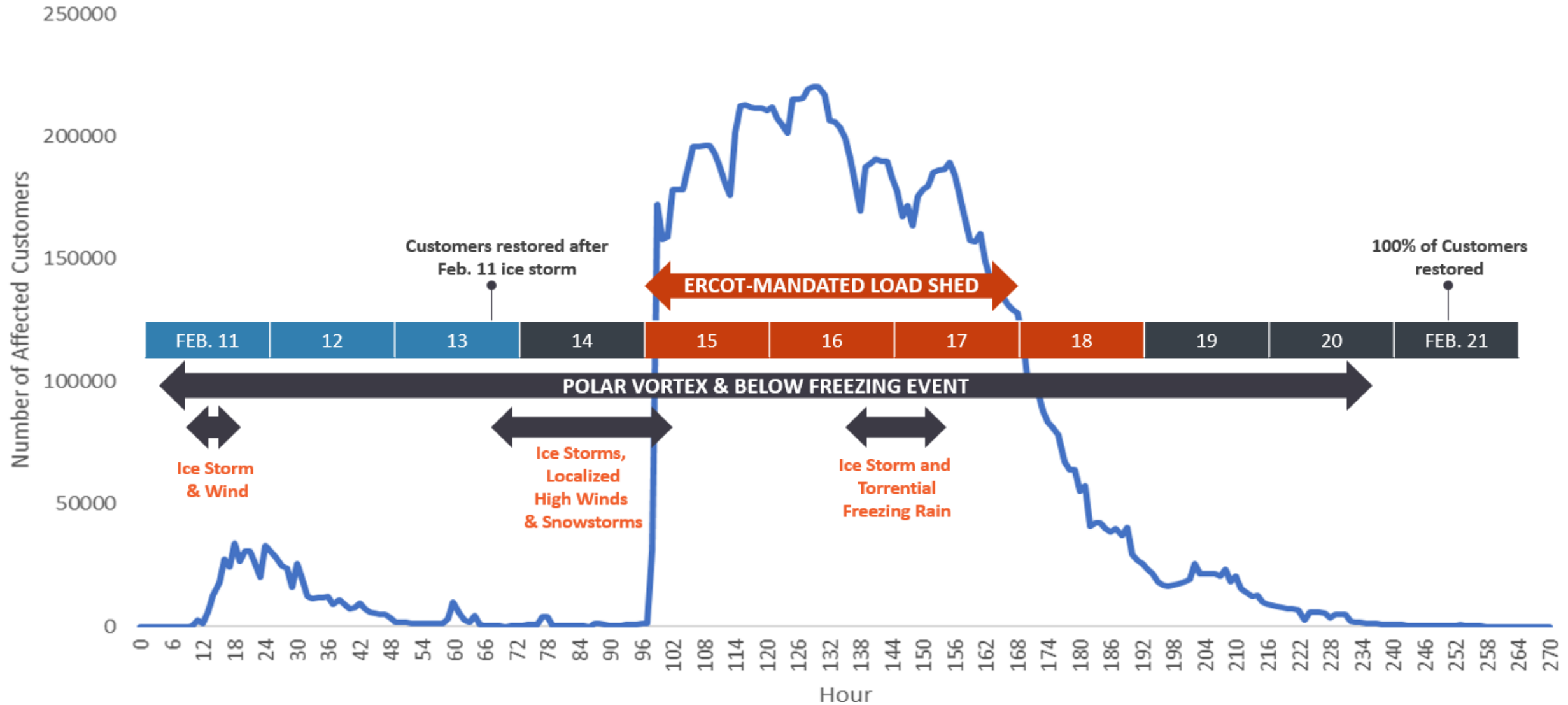
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ERCOT must mandate Load Shed at any time, frequency, duration or level to stabilize the Texas Electric Grid

Austin Energy has a broad strategy to meet ERCOT-Mandated Load Shed



Impact of ERCOT-Mandated Load Shed



Electric Circuit Portfolio for ERCOT-Mandated Load Shed

Category of Circuit	Characteristics of Circuit
Manual Load Shed	Can be used for cycling
Under Frequency Load Shed (UFLS)	Required by ERCOT to be reserved and pre-programmed Can be used for cycling in specific situations
Dedicated / Industrial	Circuits and customers that cannot be cycled Customer-side curtailment instead of power interruption
Downtown Underground Network	Circuits likely damaged or destroyed by cycling Customer-side curtailment instead of power interruption
Critical Load – Life Sustaining	No life-sustaining facilities lost power



Circuit Reconfiguration & Sectionalizing

Each situation must be carefully evaluated by skilled engineers and field technicians for feasibility.

Some factors to consider

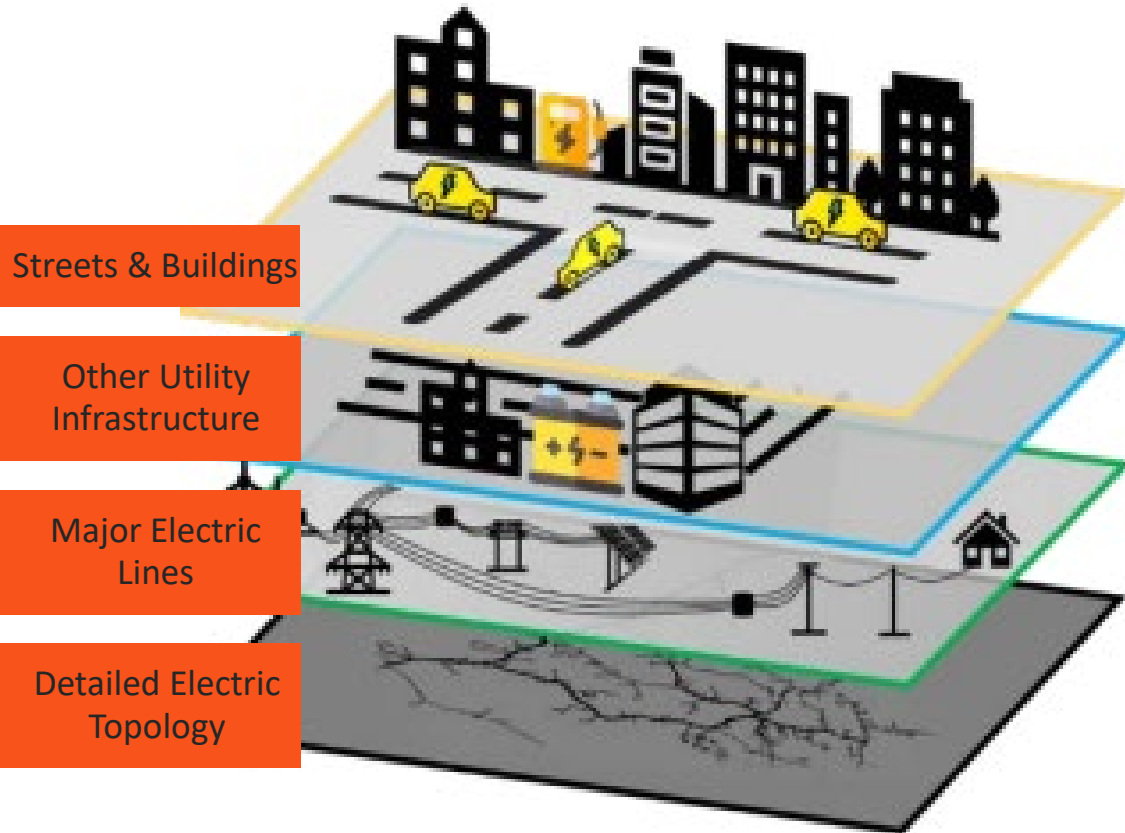
- Sectionalizing originally implemented for reliability, not load shed
- Location of critical load customers
- Pole loading, circuit density and 3rd party attachments
- Affordability (dependent on the situation)

Load Shed Sectionalizing Pilot

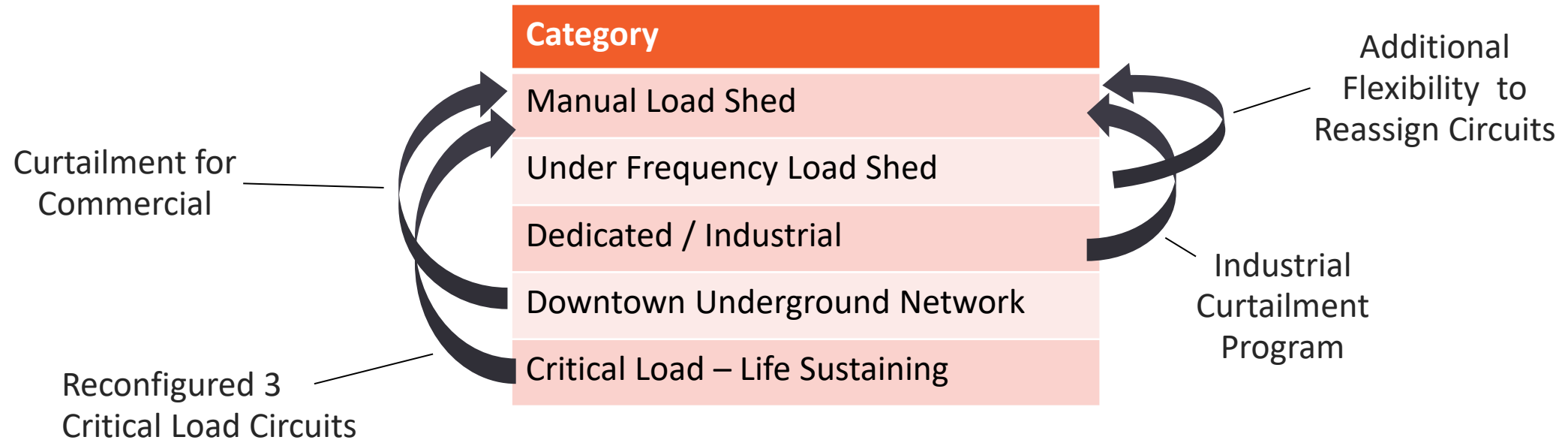
- Analyzing 7 circuits for manual intervention
- More circuits would require automation

Primary challenges of large-scale Sectionalizing

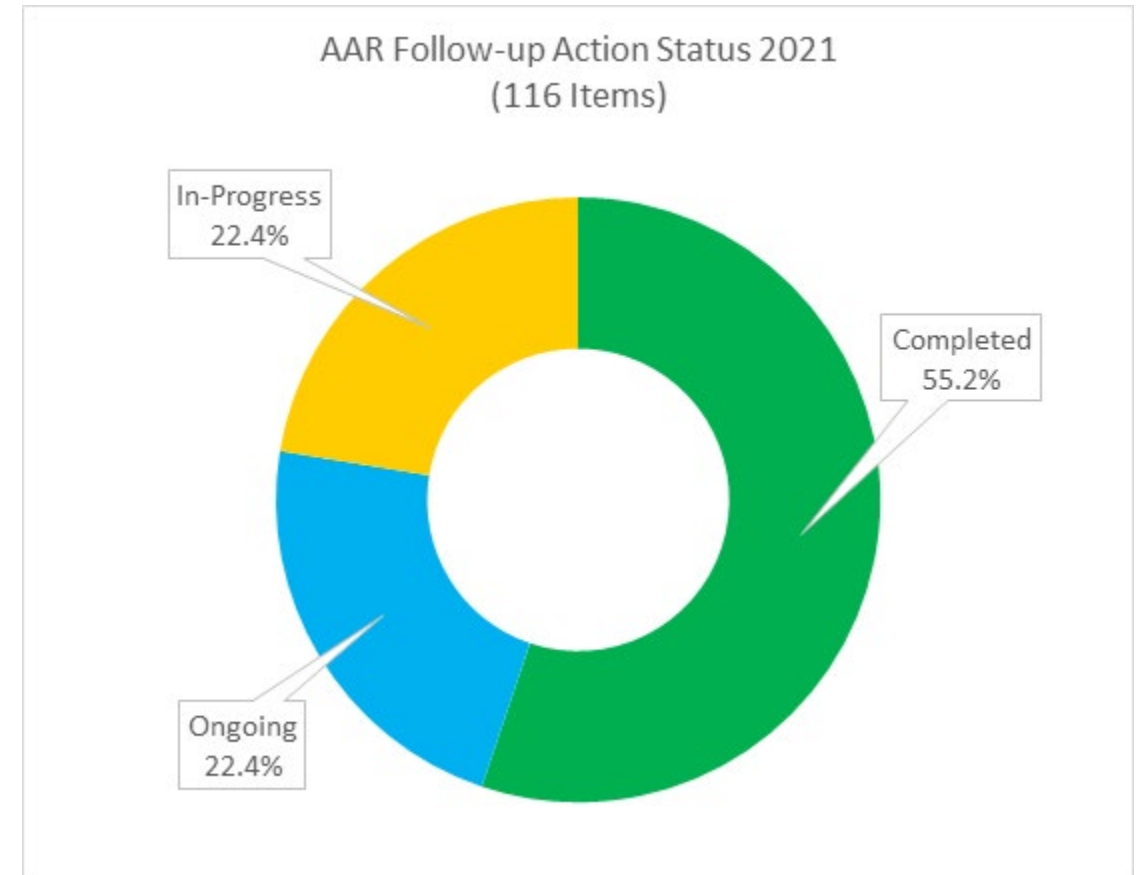
- Critical load customers must be at head end of circuit
- Changes to Control Center computer
- Build-out of two-way wireless communications system
- New equipment and modify existing equipment on poles
- At least a 3–5-year timeline



Key Actions to Add Circuits and Further Capacity to Manual Load Shed



After-Action Report Status of Follow-up Actions



Questions and Comments

Thank You!

