

Keeping Austin Powered:

Planning for a Reliable Energy Future

Reliability Workshops

Agenda

Reliability Workshop



Building a Reliable Energy Future



About Austin Energy



The 2035 Plan



Site Selection Process



Breakout Sessions



Thank You

Building a Reliable Energy Future

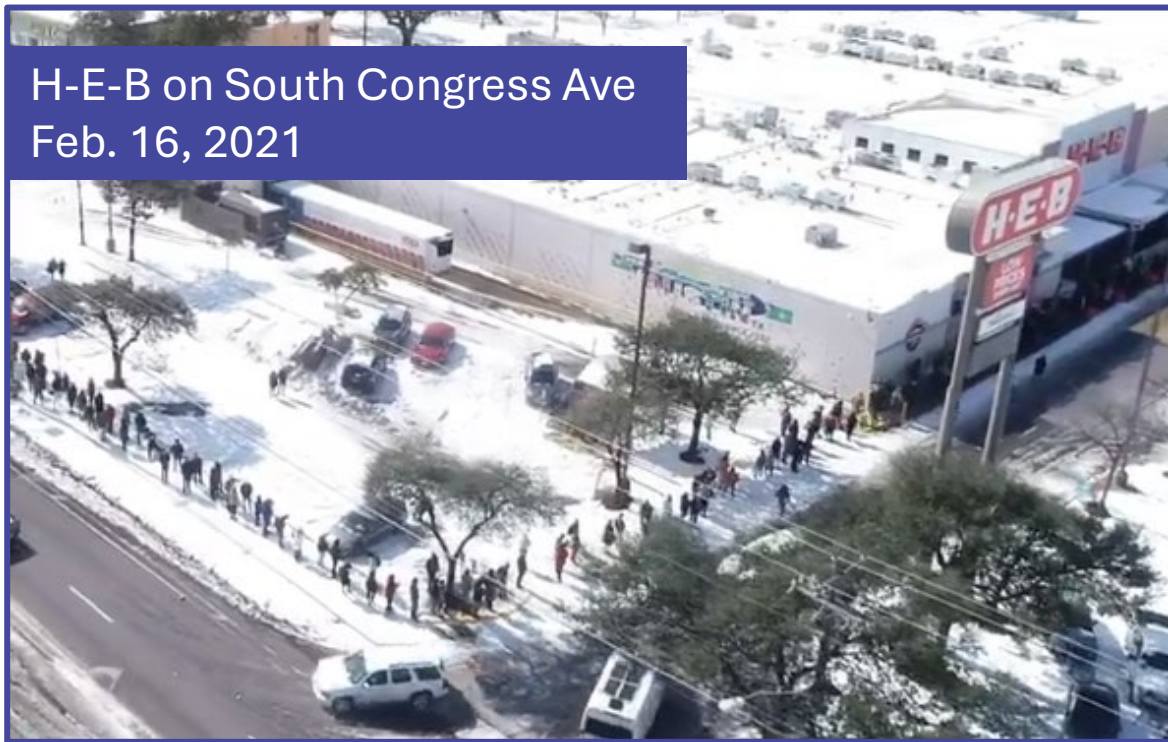
Why Do We Need A Reliable Energy Future?

We are in an era of **rising energy demand** while climate change drives the **need to decarbonize** energy generation.

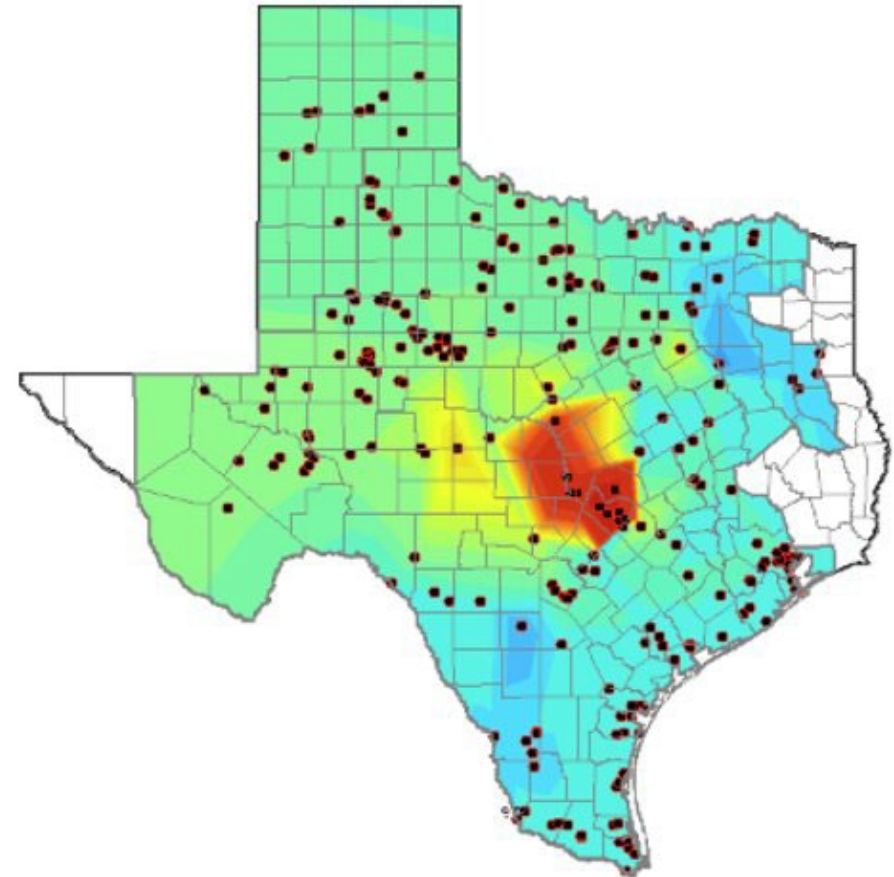


Risks We Face

Statewide Grid Outage Events



Localized Outages



How Do We Build A Reliable Energy Future?



Mitigate risk by taking action to protect and serve our community.

- Increase local generation capacity.
- Increase local transmission capacity.
- Implement the Electric System Resiliency Plan.
- Continue Austin Energy's track record of
 - Low customer bills,
 - Above-average reliability,
 - Industry-leading clean energy, and
 - Protecting vulnerable populations.

Austin Energy's Mission

Safely deliver clean, affordable, reliable energy and excellent customer service.



About Austin Energy



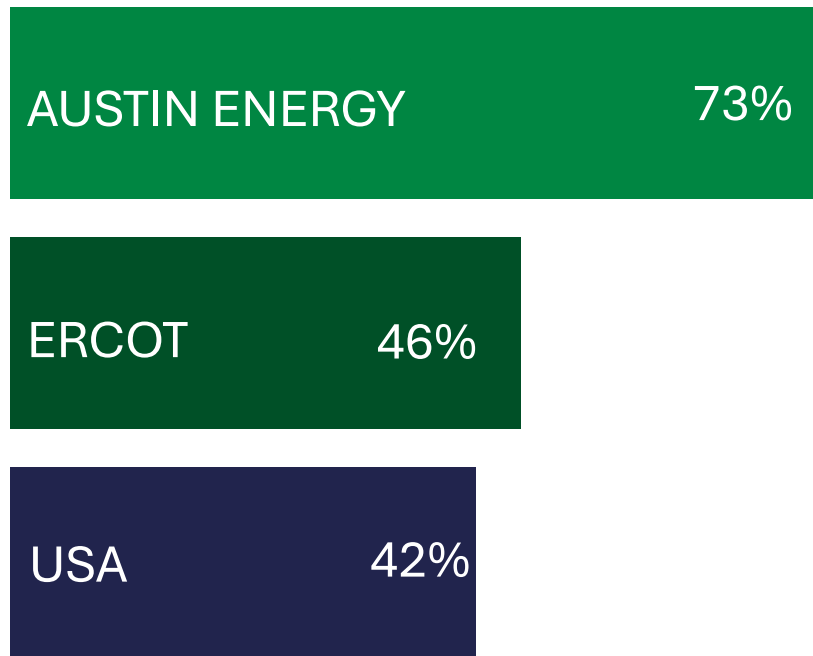
- Austin
- Bee Cave
- Cedar Park
- Creedmoor
- Del Valle
- Lakeway
- Pflugerville
- Rollingwood
- Sunset Valley
- Village of the Hills
- Westlake Hills

- Austin Energy Service Area
- Shared Service Area
- Austin City Limits
- Travis County

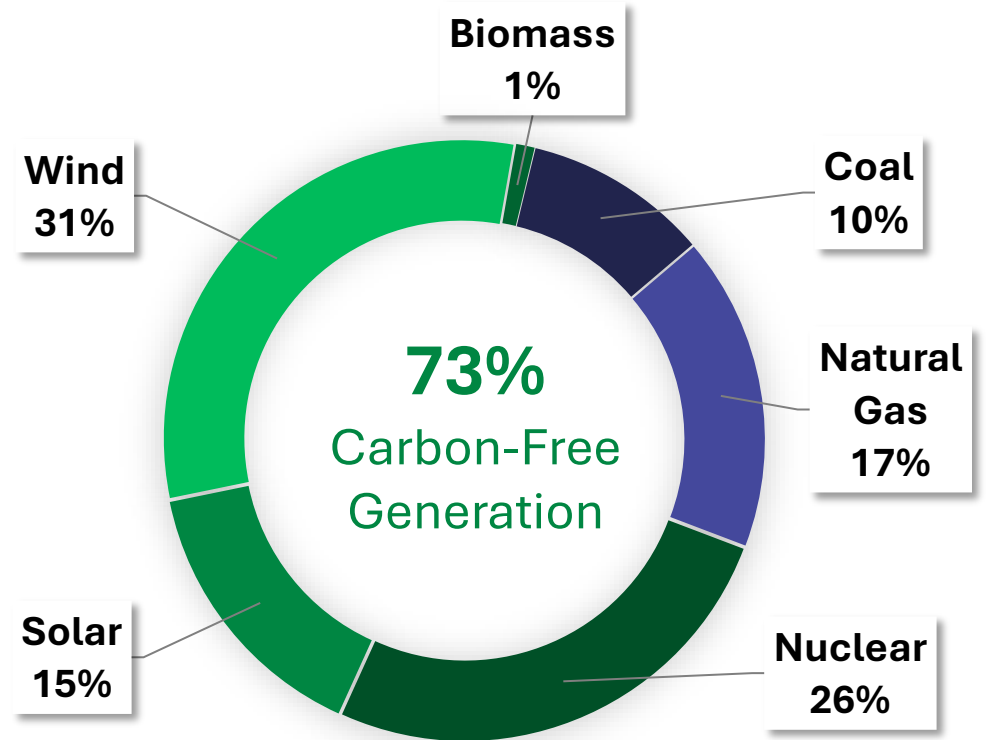
- Founded in 1895**
- 3rd Largest**
Municipally owned power utility in the nation
- 437-Sq-Mile**
Service territory
- 575,000+**
Customer Accounts
- Community-Owned & Not-for-Profit** No Shareholders
- Clean Energy Leader**
Within the ERCOT wholesale market and across the nation

Austin Energy is a Leader on the Path to Carbon Free

Carbon-Free Generation FY2025



Energy Generated from Austin Energy Assets FY2025

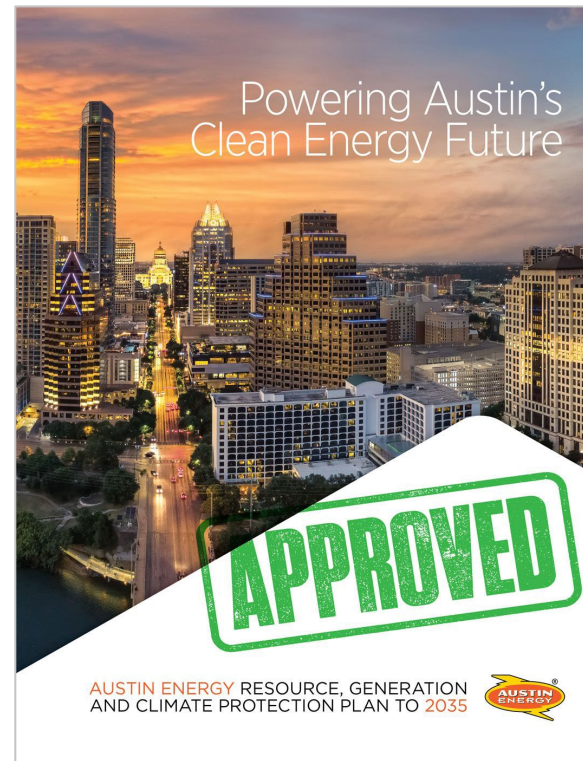


Austin Energy's Resource, Generation and Climate Protection Plan to 2035

We must meet Austin's **rising energy needs while enabling an equitable clean energy transition reflecting our **community's values**.**

Resource, Generation and Climate Protection Plan to 2035

Driven by Our Community's Core Values



- Reliability
- Affordability
- Environmental Sustainability
- Energy Equity



Tri-City Region

Solar and Storage Coalition



City of Austin District 2 Residential Customers



UNIVERSITY DEMOCRATS at the University of Texas at Austin



CENTRAL HEALTH



Citizens' Climate Lobby



Homeowners United for Rate Fairness (HURF)



Community Engagement for the 2035 Plan

Austin Energy hosted five stakeholder workshops between June and November 2024

- Created a diverse working group
- More than 40 participants from wide-ranging backgrounds



What We Heard



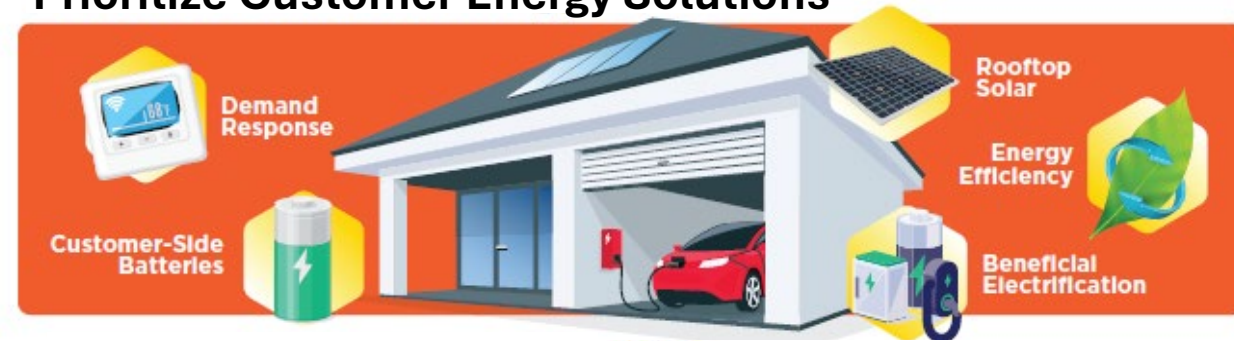
- Energy reliability is the community's highest priority, especially for critical-needs customers.
- Affordability must consider energy burden so costs don't harm vulnerable residents.
- Clean energy strategies should combine efficiency, electrification and carbon management.
- Austin Energy must navigate ERCOT's market rules, risks and operational trade-offs.

Approach to Achieving Reliability

In the 2035 Plan

An all-in approach to generation resources with a priority on clean energy and continuing a culture of innovation

Prioritize Customer Energy Solutions



Leverage Local Solutions



Achieve Decarbonization



Further Our Culture of Innovation



Customer Energy Solutions

Nearly 40 programs saving customers energy and money

- Residential
- Commercial
- Multifamily
- Key Accounts
- Builders & Developers



**Customer
Renewable
Solutions**



**Demand
Response**



**Energy
Efficiency**



**Electric Vehicles &
Emerging Technologies**



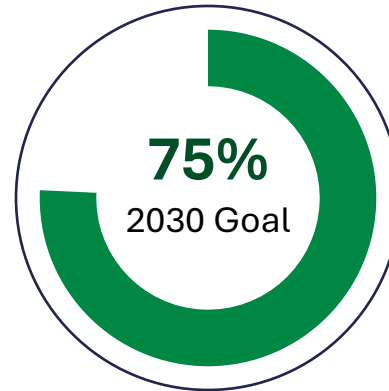
**Green
Building**

Customer Energy Solutions Goals Progress

Energy Efficiency



Thermal Energy Storage



Demand Response



Local Solar



Local Battery Storage



Local Solutions: Transmission Upgrades

- Upgrades help to increase reliability and import capacity
 - Adding new lines and substations
 - Upgrading transformers and existing lines
- Austin Energy invests \$100 million annually in transmission upgrades
- Timelines can be complicated and dependent on regulatory approvals



Local Resource Site Evaluation Process

Local Solutions: Utility-Scale Resources

To serve customers reliably and affordably, while advancing our clean energy goals, we need additional resources in our service area.

- Utility-Scale Solar
- Utility-Scale Batteries
- More Efficient Peaker Units

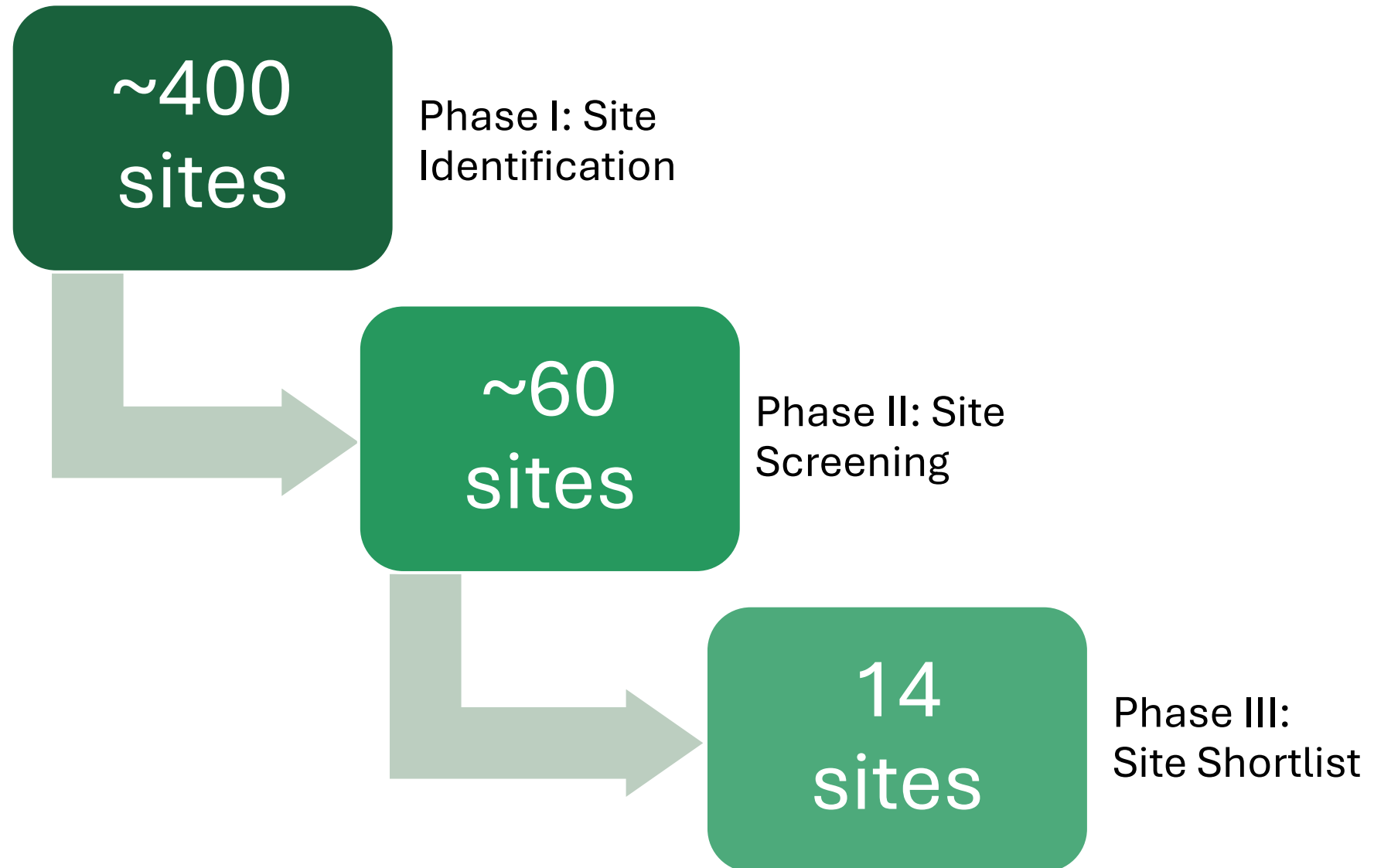


Site Evaluation Process

- **Challenge:** Need for generation/energy storage resources locally
- **Approach:** Phased process to identify and screen potential sites
 - **Phase I:** Site Identification
 - **Phase II:** Site Screening
 - **Phase III:** Detailed Due Diligence



Site Evaluation Process

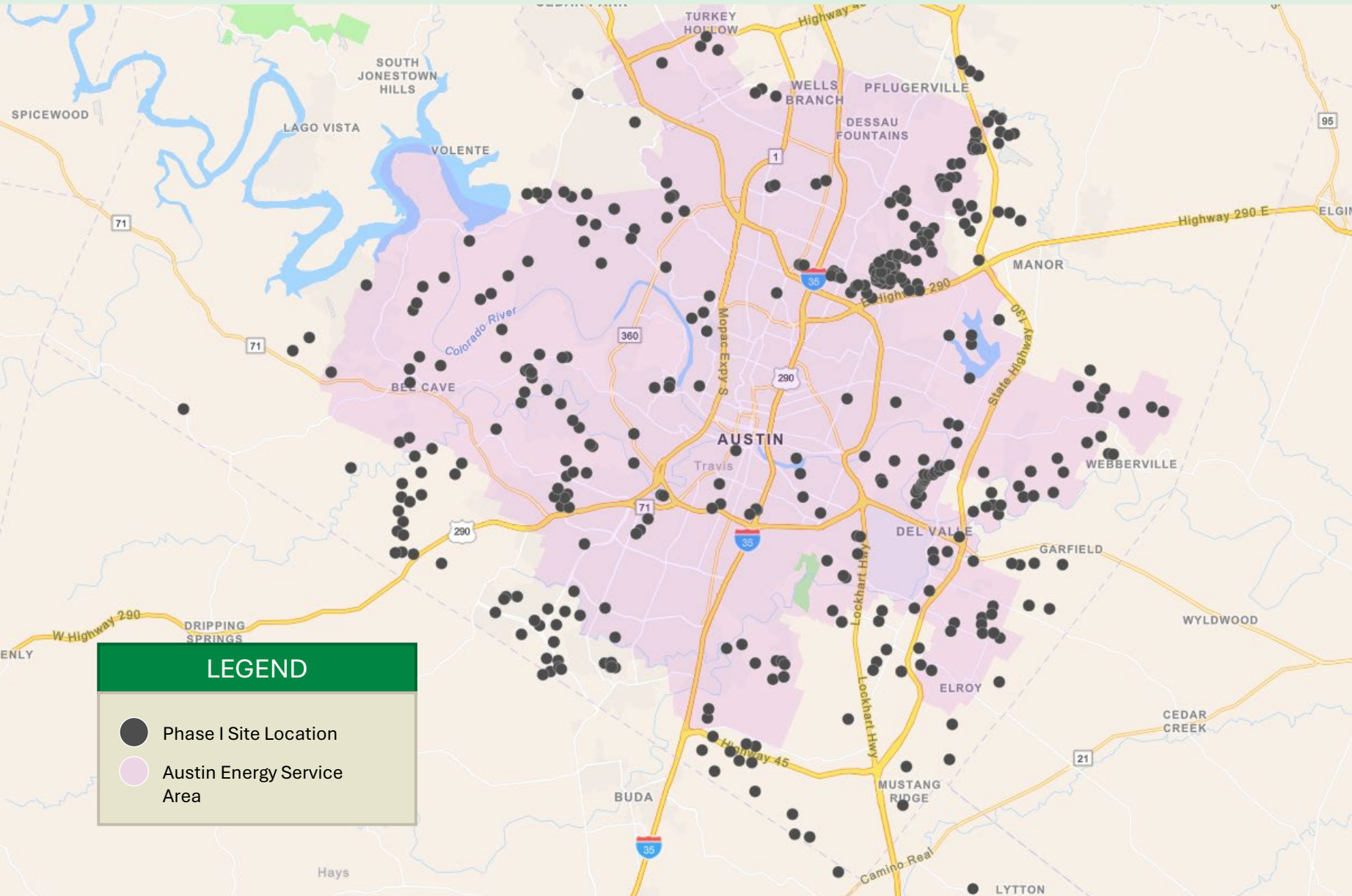


Phase I: Initial Site Identification

391 total sites

Initial Site ID Criteria:

- Proximity to Austin Energy service territory
- Ownership (preference for City-owned property)
- Size (developable acreage)
- Accessibility
- Proximity to 100-year FEMA floodplain
- Environmental constraints

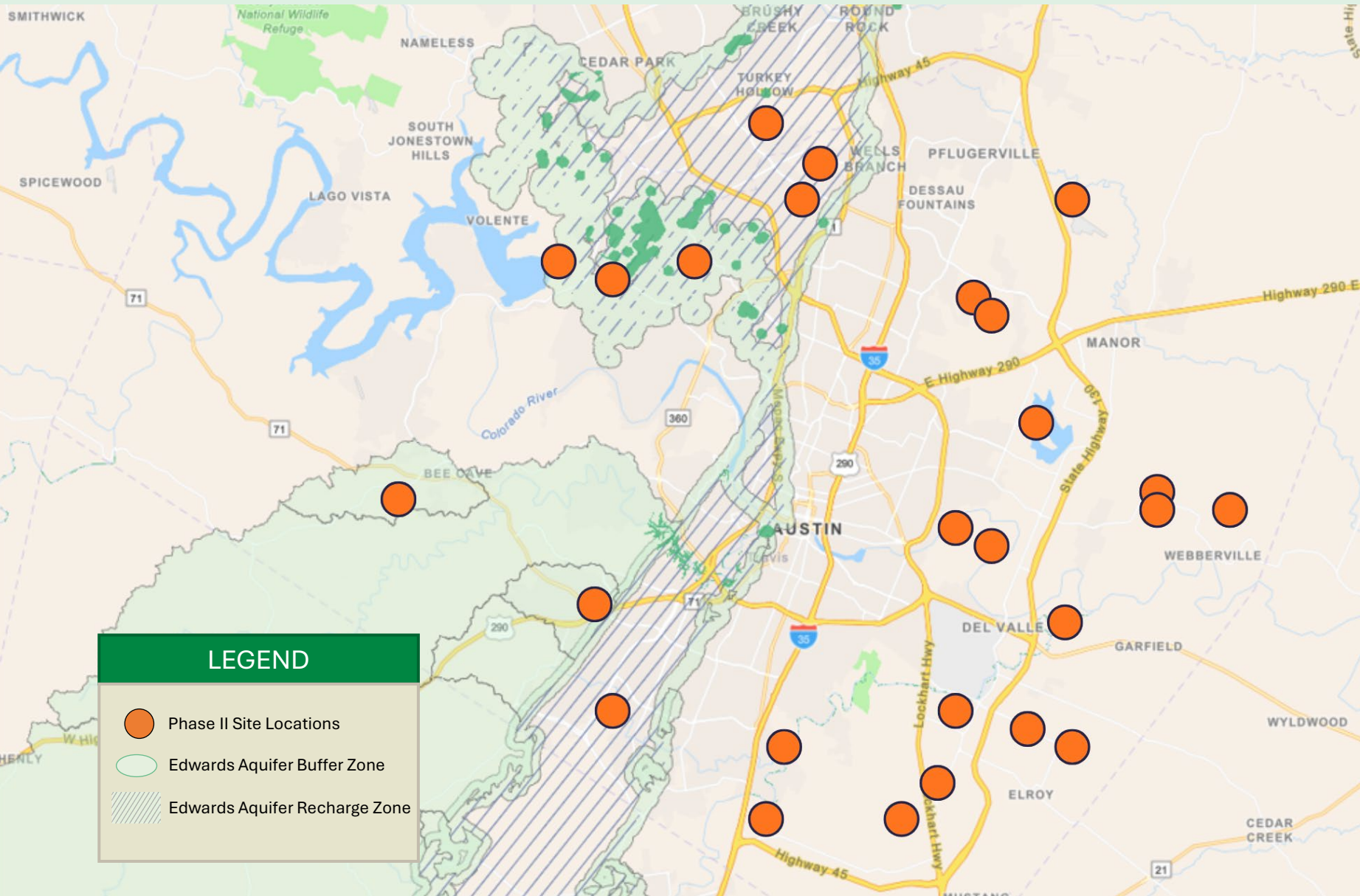


Phase II: Feasibility Screening

58 sites screened
from initial 391 sites

Screening Criteria:

- Topography
- Vegetation
- Wildfire risk
- Proximity to water service
- Proximity to high-volume natural gas infrastructure
- Proximity to transmission infrastructure

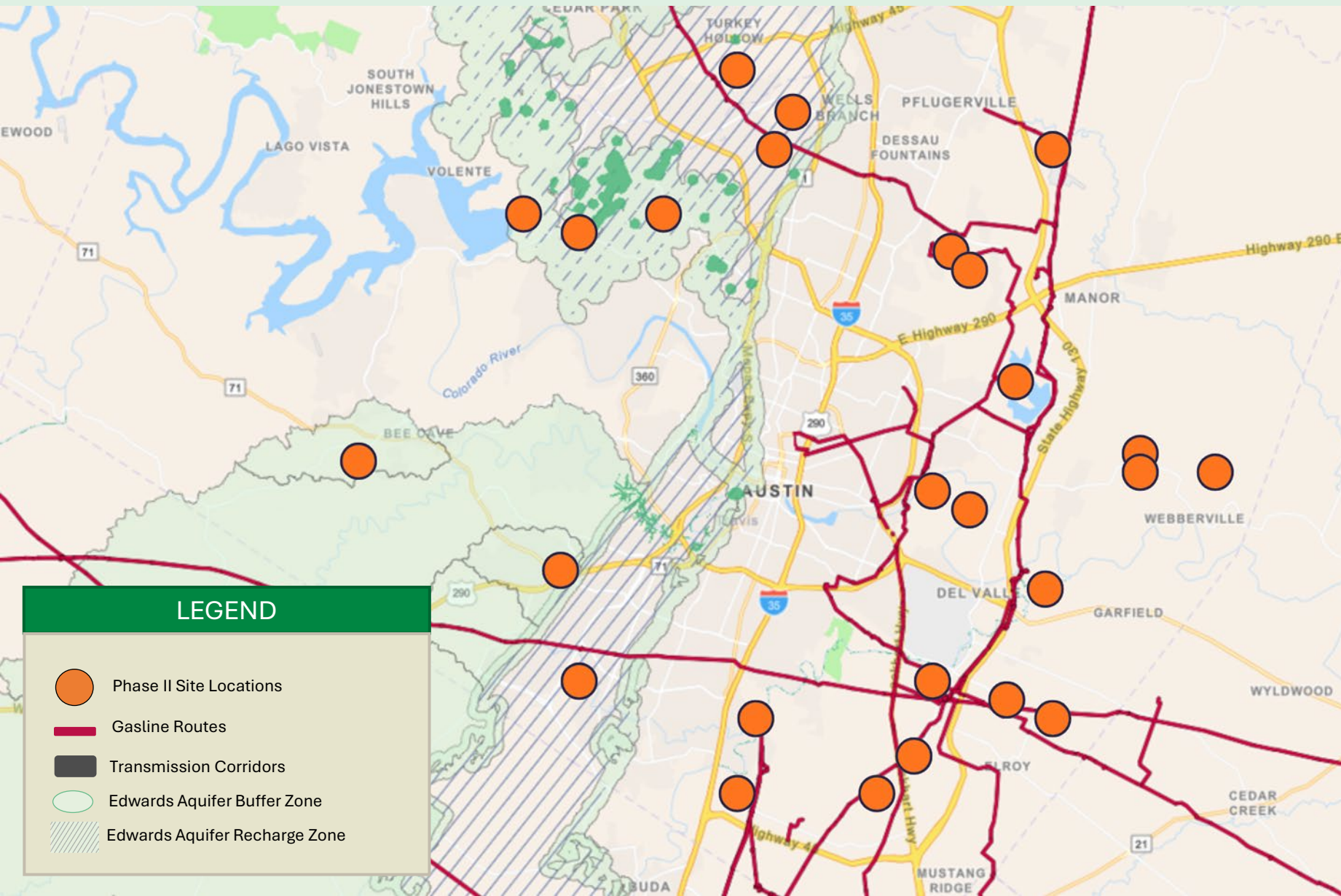


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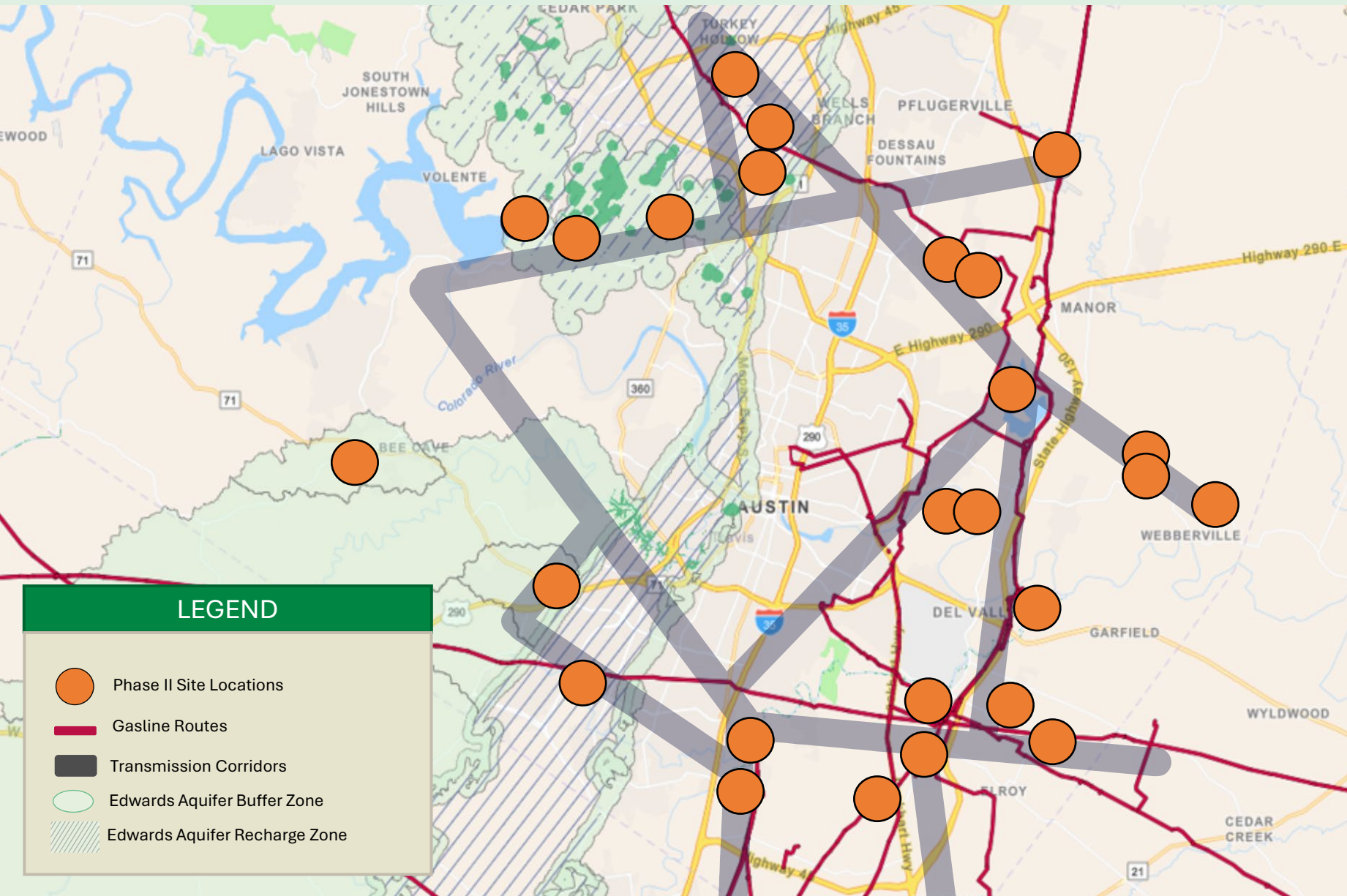


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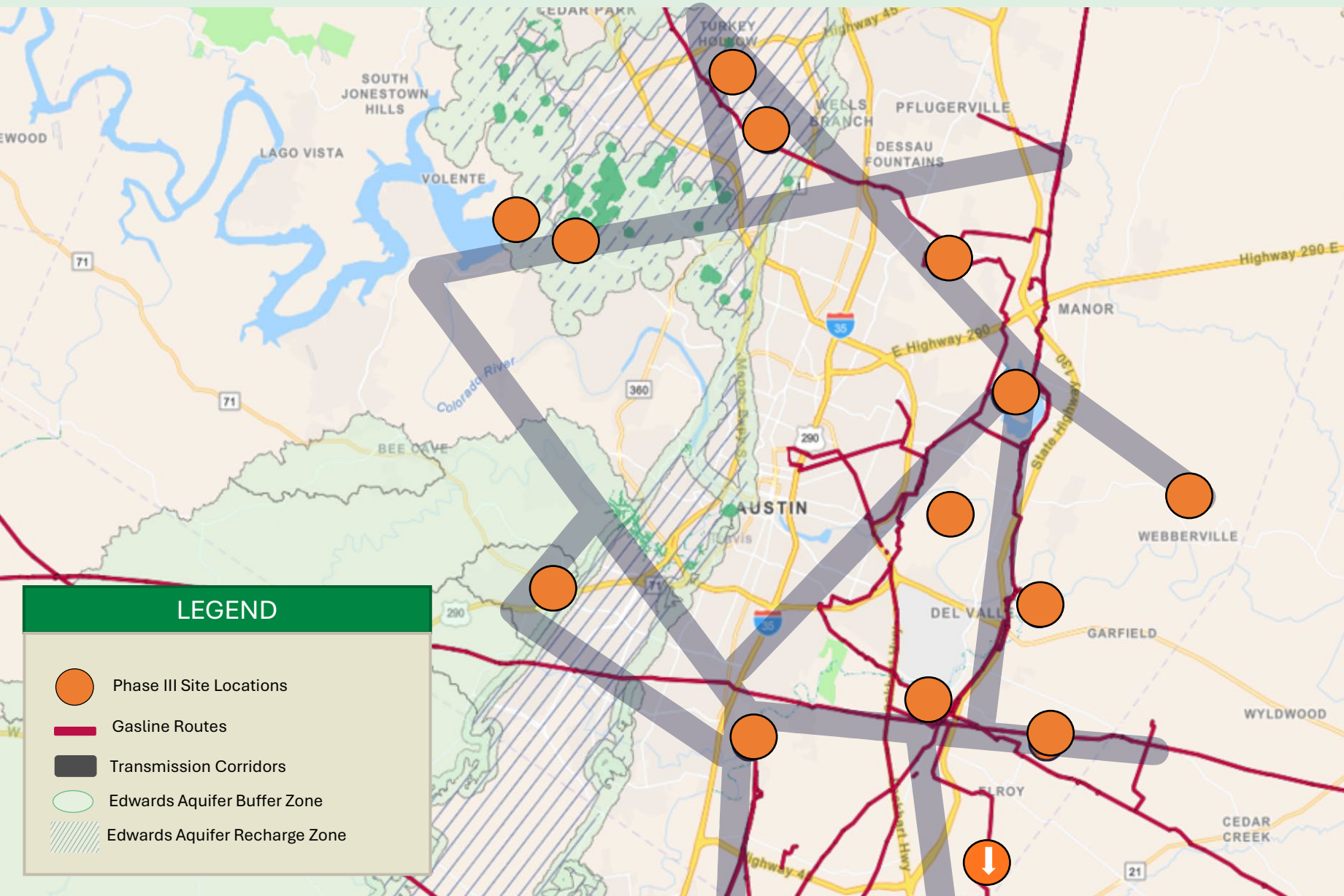


Phase III: Shortlisted Sites

14 shortlisted sites

Selected for more comprehensive site-specific due diligence:

- Current status of property
- Specific development restrictions due to environmental constraints
- Previous land use
- Redundancy of gas supply
- Existing reusable industrial infrastructure onsite/nearby
- Site visits



Breakout Session #1

- What did you like about the selection process?
- What is missing in the evaluation criteria or site selection process?

Overview of Technologies and Shortlisted Sites

Potential Technology: Utility-Scale Solar

Advantages:

- Abundant and free fuel source
- No emissions
- Low maintenance
- Low water use

Limitations:

- Requires a lot of space
- Intermittent/not 100% predictable
- Does not cover overnight or extreme weather needs



Webberville Solar Field (TX)

Potential Technology: Utility-Scale Battery Storage

Advantages:

- Help reduce demand during "peak" hours
- Charge at low cost, discharge at high cost
- Complementary technology to renewables and natural gas peakers

Limitations:

- Can only discharge for 2-4 hours at a time, then needs 2-4 hours to recharge
- Costs coming down, but still expensive
- Battery performance degrades over time
- Fire risk (incidents are rare and decreasing due to improved safety standards)



One of Jupiter Power's operational battery energy storage systems in Houston

Potential Technology: Peaker Units

Advantages:

- Quick start-up to respond to conditions
- Reliable and predictable
- Because they can be turned on and off relatively easily, these can be relied upon when electricity is needed the most

Limitations:

- Require access to reliable natural gas source
- Produce emissions (new models are more efficient and include emission controls)



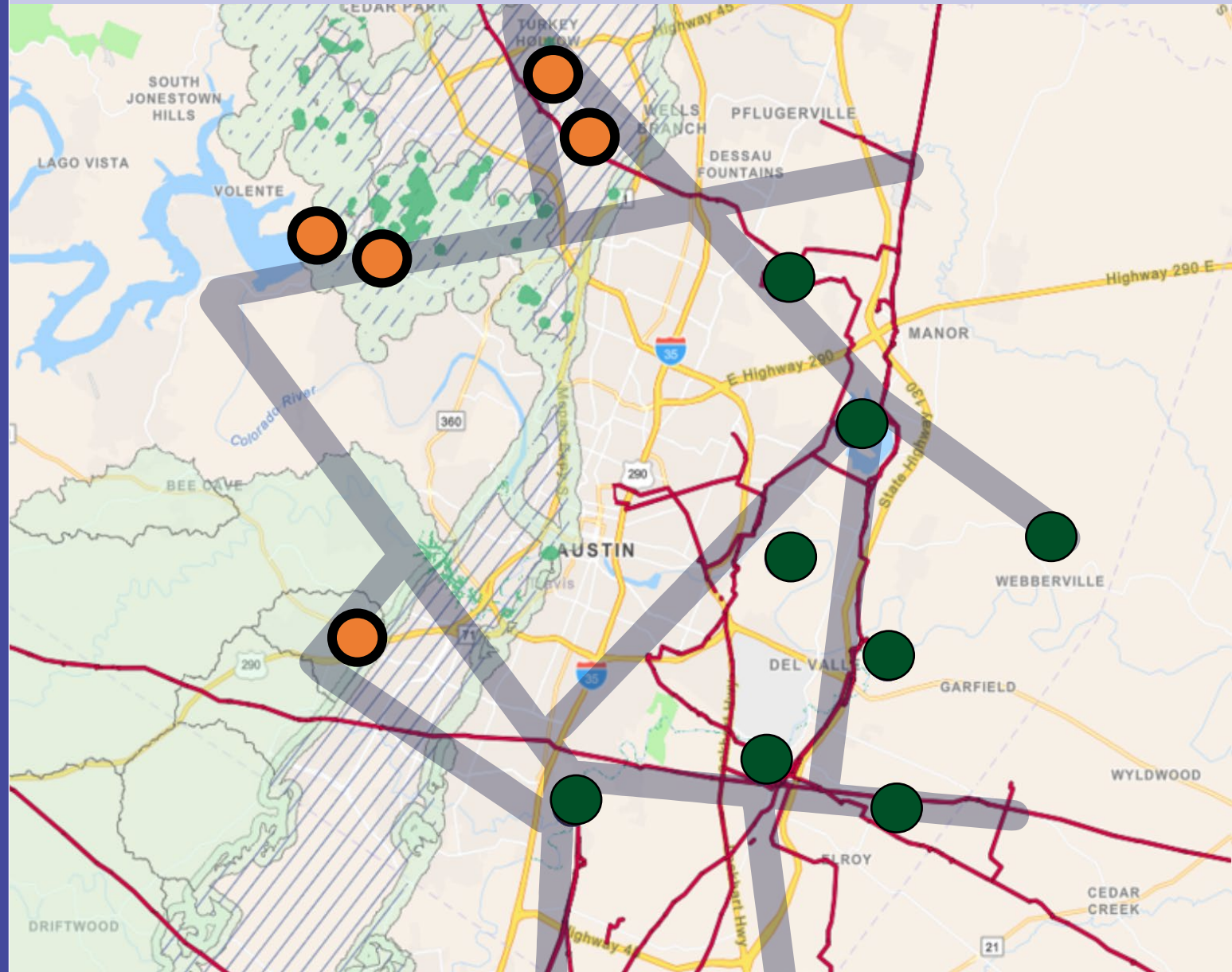
Shortlisted Sites 1-5

Advantages:

- West Austin location ideal for grid stabilization
- Existing industrial infrastructure (north area has privately owned generation plant)
- Existing transmission and substations

Limitations:

- Edwards Aquifer Recharge Zone
- Unknown gas supply and gas redundancy
- Third-party sites



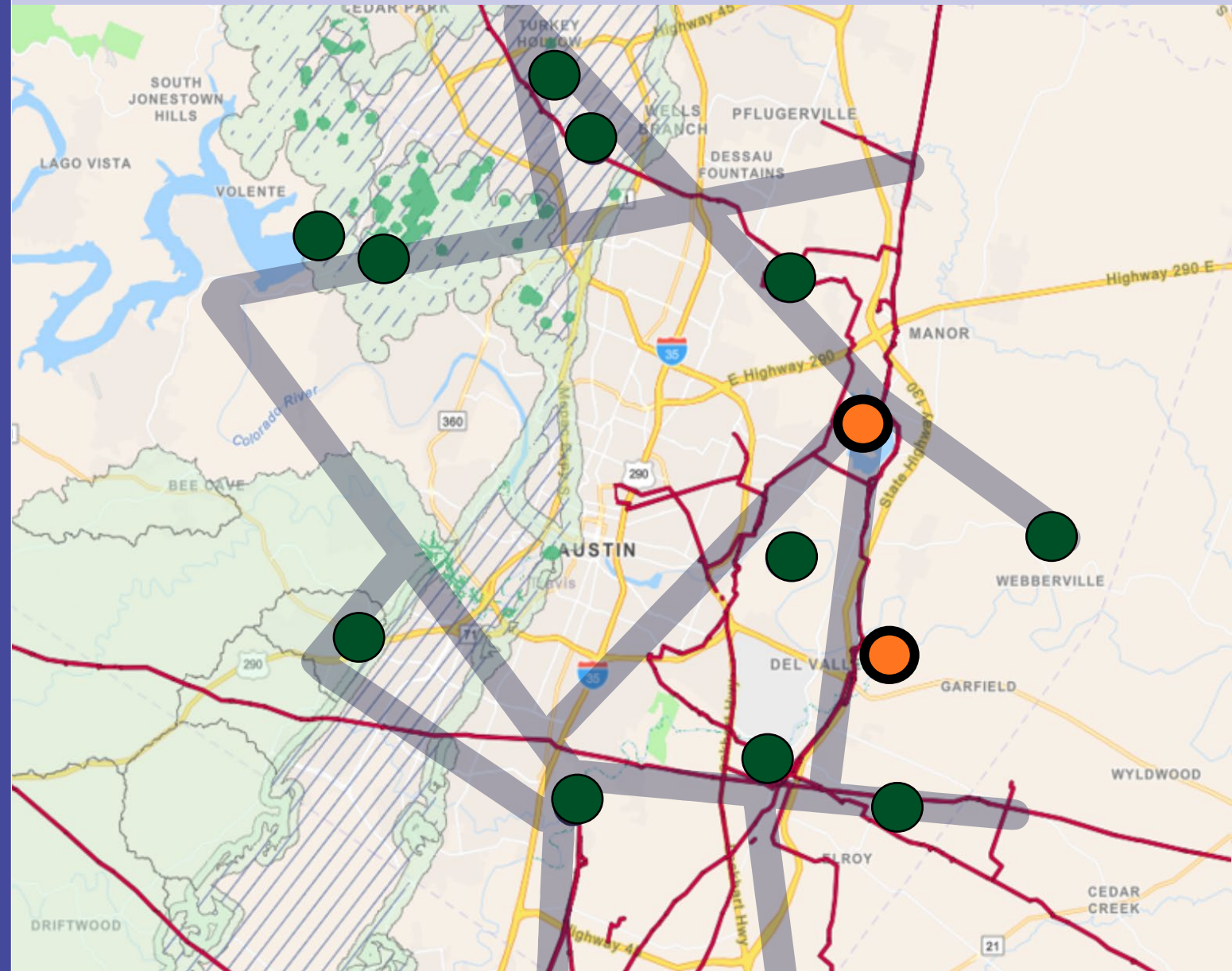
Shortlisted Sites 6 and 7

Advantages:

- City-owned land, Decker and Sand Hill Plants
- Existing industrial infrastructure
- Existing transmission infrastructure
- Redundant and adequate gas supply

Limitations:

- Flood hazard at Sand Hill, but projects in place to mitigate



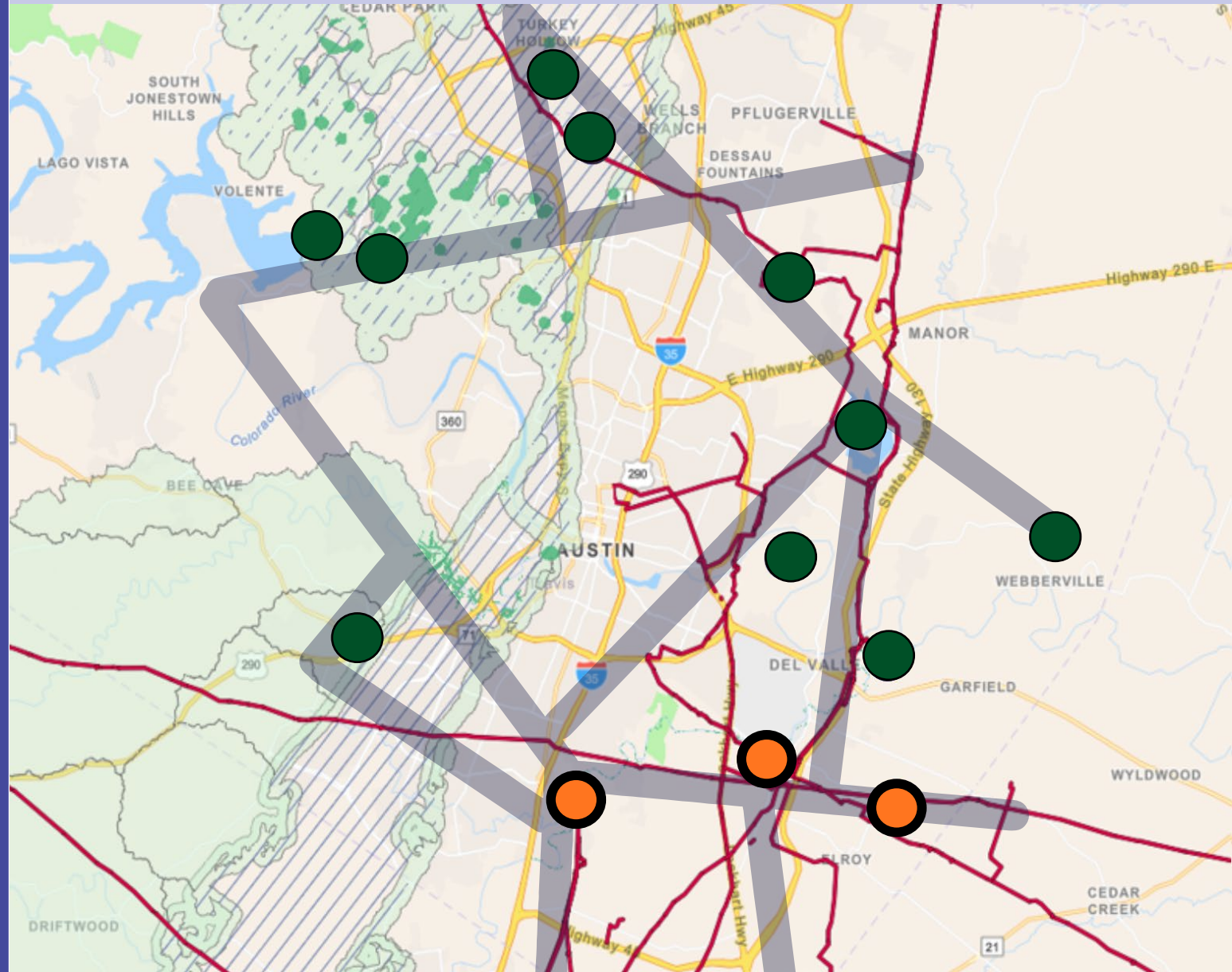
Shortlisted Sites 8-10

Advantages:

- Existing industrial infrastructure
- Existing transmission infrastructure
- Redundant and adequate gas supply

Limitations:

- Some third-party sites
- Near or in floodplain



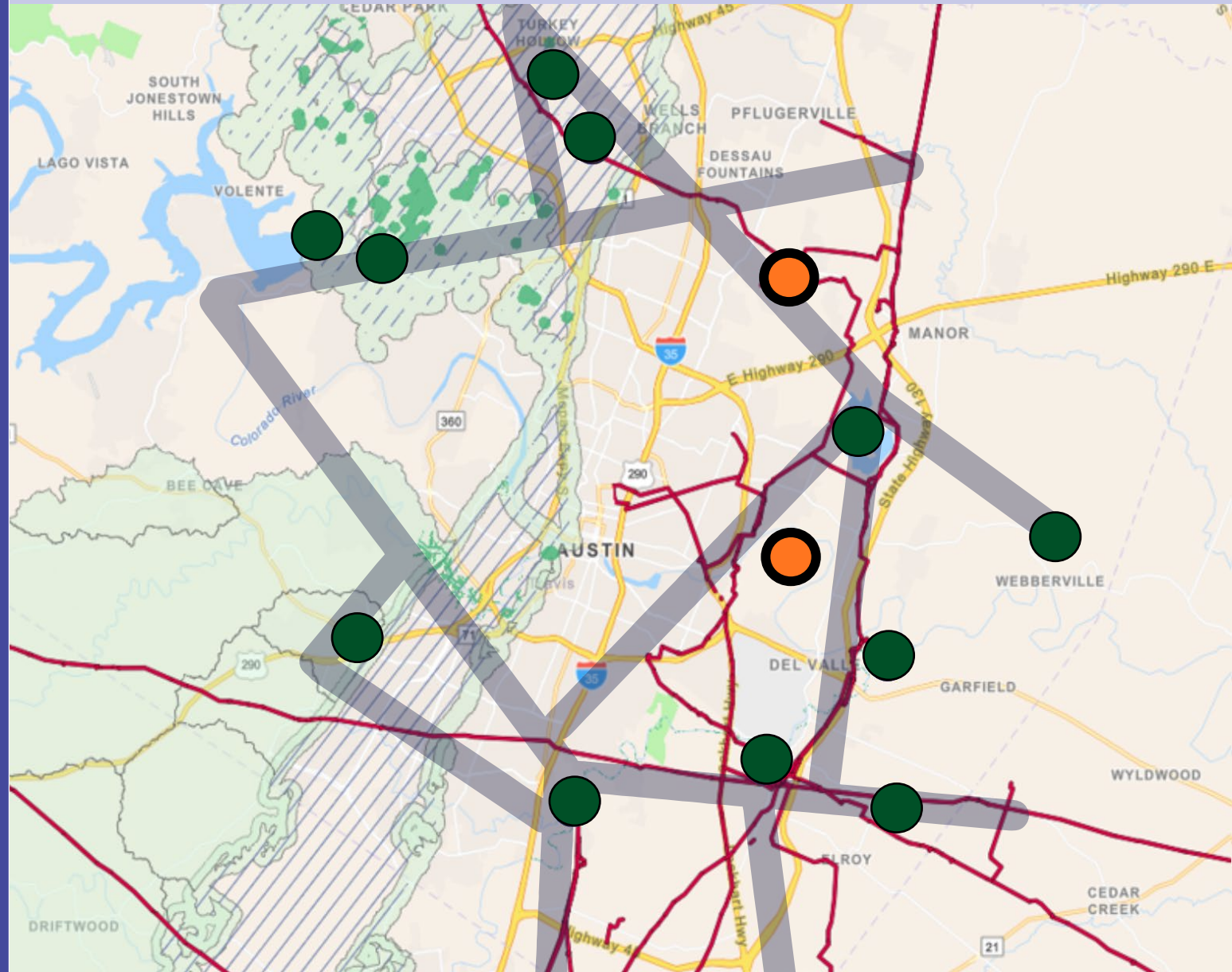
Shortlisted Sites 11 and 12

Advantages:

- Abundant space
- Existing industrial infrastructure
- Redundant and adequate gas supply

Limitations:

- Limited transmission infrastructure in some locations
- Third-party sites



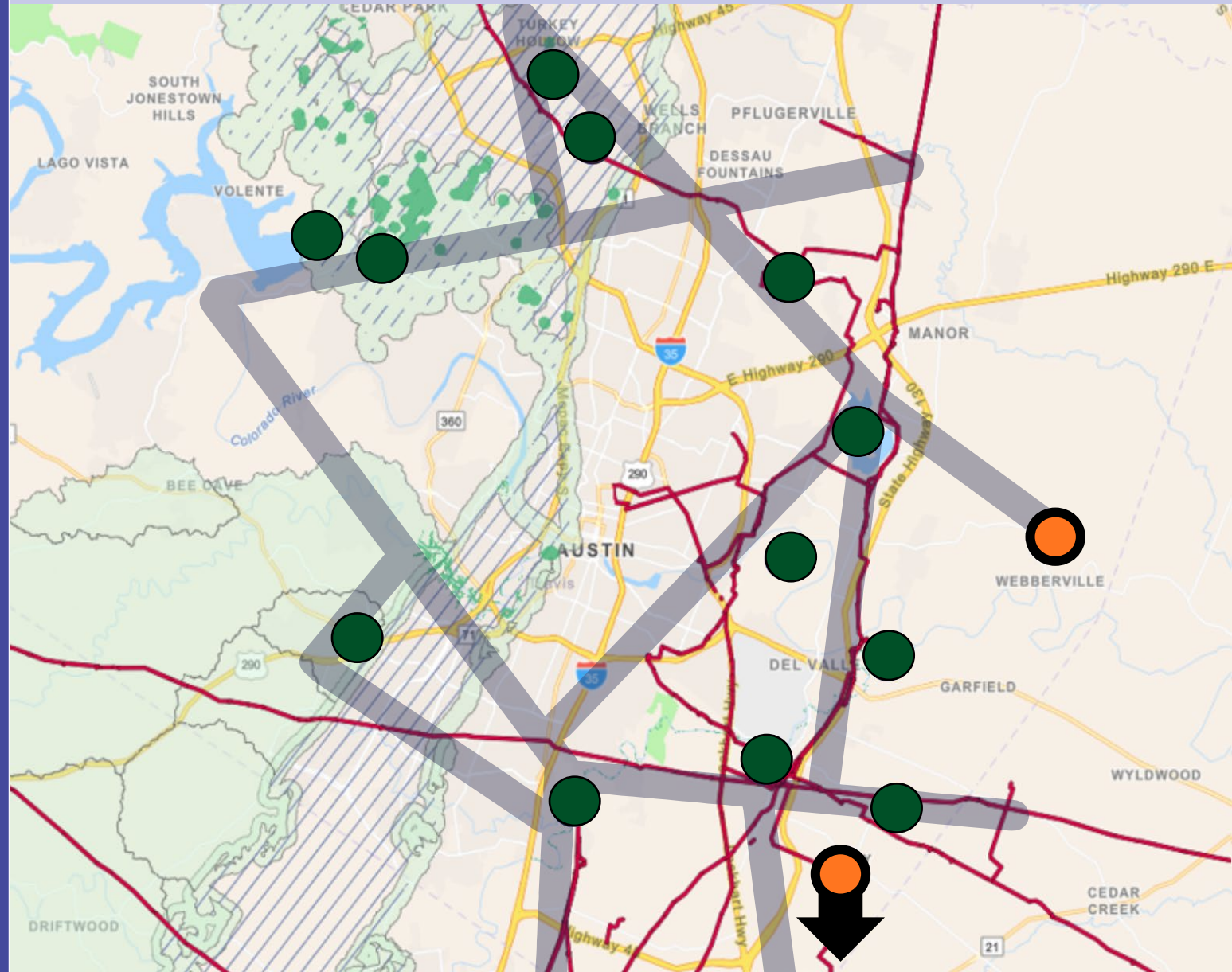
Shortlisted Sites 13 and 14

Advantages:

- Near City-owned land
- Abundant space
- Existing solar field nearby
- Near major energy import points

Limitations:

- No natural gas supply



Supporting Neighborhoods that Host Utility-Scale Resources

- Partner with impacted communities to identify and implement energy and environmental priorities
- Leverage local and regional partnerships to deliver innovative and sustainable solutions



Breakout Session #2

- What are your concerns?
- What does Austin Energy need to know about the general area?
- How can Austin Energy be a good neighbor if a site in the area is selected?
- Other suggestions?

Next Steps

Thank You

