<table>
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<tr>
<th>Icon</th>
<th>Repowering Downtown Austin</th>
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<td>Wind Turbine</td>
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Downtown Skyline 2000  Downtown Skyline in 2018
Downtown Customers

- **Residential Customers**
  - 15,000 - Population of Downtown Residents
  - 946 - Condo Units Under Construction
  - 3,297 - Condo Units Built Downtown Since 2000
  - 634 - Apartment Units Under Construction
  - 5,398 - Apartment Units Built Since 2000

Source: Downtown Austin Alliance
Downtown Customers

• Commercial Customers
  – 86,226 - Downtown Employees
  – 9 Million - Square Feet of Multi-tenant Office Space
  – 955,571 SF - Office Space Recently Completed (879,571 Multi-tenant)
  – 1,601,500 SF - Office Space Under Construction (1,151,500 SF Multi-tenant)

Source: Downtown Austin Alliance
Downtown Network

Safe, Extremely High Reliability, and Fully Redundant, Low Visibility
Downtown Network
Downtown Network Substations

Brackenridge Substation

Seaholm Substation
Repowering Downtown Project

Total cost of $60M over the next 6 years
Aligns with Council Policies

- **Strategic Direction** – Provides economic opportunity through safe, quality, and reliable utilities

- **Downtown Austin Plan** – Follows plan identifying new substation in Rainey Street District; supports goal of adequate infrastructure, utilities for vibrant downtown

- **Imagine Austin** – Promotes compact and efficient city that connects people

- **Austin Energy Strategic Plan** – Grid modernization, customer collaboration, financial health
In conjunction with the 2004/2005 rezoning of the Rainey Street Subdistrict to CBD to encourage dense development, a City of Austin report noted:

**Electric**
To support new, higher density development, a new electric substation must be constructed in the area. The estimated cost of a new substation adequate to serve redevelopment in the area is approximately $13 million dollars. Austin Energy owns a tract of land between East Avenue, Lambie Street and IH 35, immediately adjacent to the transmission circuit carrying power from the Pedernales Substation on the Holly Plant property to the Seaholm Substation adjacent to the Seaholm Plant. Without the construction of a new substation, Austin Energy cannot maintain adequate service for redevelopment of the Rainey Street area. The distribution feeders serving this area are all overhead lines built along the streets and back lot lines or alleys. For more information, contact Judy Fowler, Austin Energy (AE), (512) 322-6107, judy.fowler@ci.austin.tx.us
Proposed New Substation

Proposed New Substation
55 East Ave.
Proposed New Substation
Proposed New Substation
New Substation Drivers

![Diagram showing the intersections of Capacity, Resiliency, and Reliability.](image-url)
New Substation Drivers

• Capacity – Load Growth
  – New Central Business District development and anticipated redevelopment along the Waller Creek area
  – Existing Seaholm and Brackenridge substations will not support the anticipated demand and load growth
Capacity Drivers – New Development

- Waller Creek redevelopment
- U.M.C. Brackenridge redevelopment
- Medical District, Capitol Complex expansion
- A.P.D., Palm School, Municipal Court sites
- 37-story Fairmont, 33-story Mirabeau
- 1.4 million sq. ft. Waller Park Plaza
- Block 87
- Villas of Town Lake site redevelopment
- Rainey Street District development
- South Central Waterfront
Alternatives Considered

• Rebuild Brackenridge with increased capacity in new location
  – Unable to secure alternate suitable site
  – Cable tie limitations
  – Limited reliability in case of loss of substation

• Increase Seaholm capacity to serve anticipated demand
  – Short-term solution (2022)
  – Cable tie limitations
  – Limited reliability in case of loss of substation
Alternatives Considered

• Build new Downtown Substation large enough to serve anticipated demand
  – Cable tie limitations
  – Limited reliability in case of loss of substation

• Distributed Energy Resources/Demand Response/Energy Efficiency
  – Technically and economically not feasible due to limited rooftops capacity, significant battery storage requirements

• Alternative Sites
  – Limited by accessibility, geographically, and availability of properties
Proposed site meets the following key criteria:

- Geographically located to meet electrical requirements
- Accessibility to existing Transmission and Distribution Circuits
- Low impact to downtown residents and businesses
Site Selection Drivers

- Utilization of existing City of Austin property
- Highest and best use of City property to serve the City of Austin due to its proximity to IH-35 and TxDOT’s proposed service road widening
- Specifically purchased for this purpose
Smart Substation for a Smart City
• Exceed sustainability standards for project
• Exceed design criteria requirements
• Decrease substation footprint
• Involve citizens, stakeholders, boards and commissions in design of project
• Design to reflect values and culture of Austin and community
Smart Substation for a Smart City

• Provide interoperable infrastructure to leverage Distributed Energy Resources and Load Control
• Electrical Energy Storage capable
• LED, solar, security, and communication smart technologies
• Incorporate smart charging devices
• Enabling a Smart City and Smart Transportation future in Austin
New Substation Cost & Schedule

New Substation Costs: $26M

Key Milestones:

• Brief Mayor – June 2017
• CMO/Council Member Communication – July 2017
• Media & Website Release, Sign & RFQ Issued – July/August 2017
• RFQ – Engineering Consultant on Board – Winter 2017
• Engineering – Winter 2017 to Summer 2019
• Construction – Summer 2019 to Summer 2020
• Construction and Community Involvement Complete – Summer 2020
• Rebuild Brackenridge Substation – Summer 2020 to Summer 2022
Community Engagement Process

Key Elements of Effective Community Engagement

- Rich, 2-way methods
- Time-realistic tools
- Equity & proportionality
- Quality of listening, impact, accountability
- Clear, accessible information
- Resources
- Cultural relevance
- Empowered communities
- Trust

Purpose:
Quality public engagement offers opportunities for all voices to be heard and respected, which leads to better representation of the community, which in turn results in better decisions and policies

VI. created by the City of Austin Task Force on Community Engagement, 4/24/15
Community Engagement Process

• Hire community engagement contractor
• Follow City of Austin Community Engagement Task Force process model
• Partner with stakeholders to develop and implement community engagement
• Ensure all voices are heard and stakeholders have impact on decisions
Next Steps

- Stakeholder Communication
- Contract with Design & Communication Consultant ($1M)
- Install 3\textsuperscript{rd} 70MVA transformer at Seaholm ($3M)
Contact Us

• communications@austinenergy.com
• (512) 505-7888
• www.austinenergy.com/go/repowering