MIDTOWN SUBSTATION SITE RECOMMENDATION

PRESENTED BY:

LeeRoy Perez
Interim Senior Director, Substation & Transmission

March 2, 2020

Approval Requested
OBJECTIVES & TAKEAWAYS

• PROVIDE UPDATE ON CUSTOMER INVOLVEMENT & FEEDBACK
• APPROVE RECOMMENDED SITE
AGENDA

• PROJECT OVERVIEW
• CUSTOMER INVOLVEMENT
• BOARD PUBLIC INPUT SESSION
• RECOMMENDED LAYOUT
  o VISUAL RENDERINGS
• BOARD ACTION
All business decisions are based on our commitment to being one of the best-managed and most financially responsible utilities in the nation!
MIDTOWN SUBSTATION

PROJECT NEED

- Serve Midtown & North Central regional areas - identified in CoSA’s SA Tomorrow plan
- Increase capacity in the northern downtown area to support residential and commercial growth
- Strengthen reliability
- Target date: Jan 2023
Study Area
• Boundary (~ 1.6 square miles)

Major Land Constraint
• Habitable structures
  o Displacing of residents & businesses
CUSTOMER INVOLVEMENT
ENGAGEMENT SUMMARY

Open House
• Introduce project need
• Communicate reliability improvements
• Discuss project constraints

Neighborhood Meetings
• Received & evaluated valuable feedback
• Strengthen community acceptance

Collaboration Efforts
• Councilman Roberto Treviño initiated discussions between the community, H-E-B & CPS Energy

Board Public Input Session
• Presented collaborated site layout
• Additional community feedback
• Gain community trust
CUSTOMER INVOLVEMENT

- Open House
  - September 19, 2019
- Councilman Treviño & Neighborhood Association meetings
  - October 29, 2019
  - January 28, 2020
- Board Public Input Session
  - February 4, 2020
- Additional Outreach Efforts
  - Project website
  - Project brochure/FAQ/Questionnaires
  - Newspaper advertisement
  - Social media – Facebook/Twitter/Blog
Community expressed appreciation to CPS Energy, Councilman Roberto Treviño, & H-E-B for our collaboration efforts

Topics for consideration:

- Storm water drainage
- Asphalt color
- Trees/Grass
- Driveway width
- Lighting
- Project liaison
EXISTING STREET VIEW

Street view of existing conditions
EXISTING AERIAL VIEW

Aerial view of existing conditions
TYPICAL SUBSTATION

36th Street substation
Recommended site & H-E-B parking lot – street view of proposed conditions
Recommended site & H-E-B parking lot – aerial view of proposed conditions
REQUEST FOR APPROVAL

Project team requests Board approval to:

• Purchase the strategic site
• Execute property exchange and shifted layout with H-E-B
• Execute planning and construction of the Project
  o Acquire associated right-of-way/easements

Board approval requested
Thank You
GAS-INSULATED TECHNOLOGY

**BENEFITS**

- **Safety**
  - Arc-flash proof

- **Security**
  - Physical security increased as system is in a building

- **Environmental**
  - Protect against external wild life
  - Less impervious cover (drainage)
  - Sensors continuously monitor insulating gas

- **Reliability/Resiliency**
  - Not susceptible to external elements
  - No major maintenance for 25 years under normal operations conditions
  - Operating life cycle greater than 50 years

- **Affordability**
  - Less property required provides cost savings
  - Higher initial capital costs but lower O&M costs
  - Cost savings of displacing of residents & businesses

A 145 kV class GIS operated at 115 kV located in an enclosure in an urban area (high-side arrangement)
CUSTOMER FEEDBACK

ELECTRIC & MAGNETIC FIELDS

- EMF exposure exists in homes and workplace
- *According to the National Institute of Environmental Health Services (NIEHS):
  - 60 Hz is low frequency energy perceived as harmless
  - No consistent pattern of biological effects from exposure to EMF has emerged from laboratory studies
  - EMF produced by substation equipment is typically indistinguishable from background levels beyond the perimeter
- Existing 4.5 mile long transmission line adjacent to site across rail road tracks
- No federal or state EMF regulations exist
- Recommended shifted layout provides a spatial buffer

PUBLIC INVOLVEMENT
OPEN HOUSE INITIAL FEEDBACK

- Electric & Magnetic Fields (EMF)
- Traffic
- Runoff & Drainage
- Aesthetics

District 1 Councilman Roberto Treviño facilitated a meeting on October 29, 2019 with Monte Vista Terrace Terrace neighborhood association.
PUBLIC INVOLVEMENT
NEIGHBORHOOD ASSOCIATION
ADDITIONAL FEEDBACK

• Lighting
• Noise
• Radio interference
• Pocket park/green space

• Vegetative wall
• Alternative site
• Spatial buffer
• Shifting site onto neighboring property

District 1 Councilman Roberto Treviño facilitated a follow up meeting with Monte Vista Terrace neighborhood association on Jan. 28, 2020
NEXT STEPS

- Notify customers of project approval & details of addressing Board public input session feedback

Mar 3, 2020

Project Manager will continue updating the community throughout the life of project