



## Status Update: Texas City Transmission Improvement Project - ERCOT Independent Review

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RPG Meeting  
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# Current Status

- ERCOT provided status updates on TNMP Texas City Transmission Improvement Project at the May and July 2020 RPG meetings.

[http://www.ercot.com/content/wcm/key\\_documents\\_lists/189719/Texas\\_City\\_Transmission\\_Improvement\\_Project\\_-\\_May\\_19\\_RPG.pdf](http://www.ercot.com/content/wcm/key_documents_lists/189719/Texas_City_Transmission_Improvement_Project_-_May_19_RPG.pdf)

[http://www.ercot.com/content/wcm/key\\_documents\\_lists/189732/Texas\\_City\\_Transmission\\_Improvement\\_Project\\_-\\_July\\_21\\_RPG.pdf](http://www.ercot.com/content/wcm/key_documents_lists/189732/Texas_City_Transmission_Improvement_Project_-_July_21_RPG.pdf)

- ERCOT worked with the TSP for cost estimates and feasibility of the short-listed Options 3, 4, 5 and 6 to accommodate the confirmed 93 MW load associated with 63 MW cogeneration plant in Texas City (In-service Date: May 2022).

# Outline

- Recap
- Cost Estimates of the Short-Listed Options 3, 4, 5 and 6
- Recommended Option
- Congestion Analysis for the Recommended Option
- Deliverables

## Recap

- Reliability issues were identified in the study base case without system upgrades.
- No reliability issues were observed with any of the four short-listed Options 3, 4, 5 and 6 for 93 MW of a new confirmed load with an associated 63 MW cogeneration plant under NERC and ERCOT planning criteria, and planned maintenance outage scenarios provided by TSP.
- In addition, the results of sensitivity analysis for the additional potential 140 MW load indicated that additional reliability issues would need to be addressed if the load meets all the requirement to be included in the planning models.

# Comparison of Short-Listed Options 3, 4, 5 & 6

- Based on the input from the TSP, ERCOT summarized the cost estimates of the short-listed options.

| Comparison  | Option 3* | Option 4* | Option 5* | Option 6* |
|---|-----------|-----------|-----------|-----------|
| Meet NERC and ERCOT Reliability Criteria                | Yes       | Yes       | Yes       | Yes       |
| Provide Operational Flexibility for Maintenance Outages | Yes       | Yes       | Yes       | Yes       |
| Cost Estimates** (\$Million)                            | 82.64     | 33.13     | 33.13     | 38.37     |

\* Maps of short-listed options are available in Appendix

\*\* Cost estimates were provided by TSP

- According to the TSP, Option 4 has construction challenges due to the industrial complex congestion along its path in Texas City. In addition, the cost estimate of Option 6 may increase if Amoco substation expansion is not feasible.

# Comparison of Short-Listed Options

- Based on the comparison of the short-listed options, ERCOT prefers Option 5 since it is the least cost option with relatively less construction challenges among the short-listed options while it addresses the reliability needs including the issues under planned maintenance outage conditions.

# Congestion Analysis

- Congestion analysis was performed for the preferred Option 5 using the 2020 RTP 2022 and 2025 economic cases.
- Option 5 did not result in any new congestions within the study area.

# ERCOT Recommendation

- ERCOT recommends Option 5 as the preferred option. The recommended project is described in the following table.

| Upgrades   | Length (mi) |
|--|-------------|
| A new 138-kV Cattail substation near Texas City Main | -           |
| A new 138/69-kV transformer at Texas City Main       | -           |
| A new Texas City Main - Cattail 138-kV line          | ~0.01       |
| A new Green Belt - Cattail 138-kV line               | ~2.5        |
| A new Cherokee - Cattail 138-kV line                 | ~1.5        |

- Estimated Cost: \$33.13 Million
- CCN is required for new lines (~4 mi)



# Deliverables

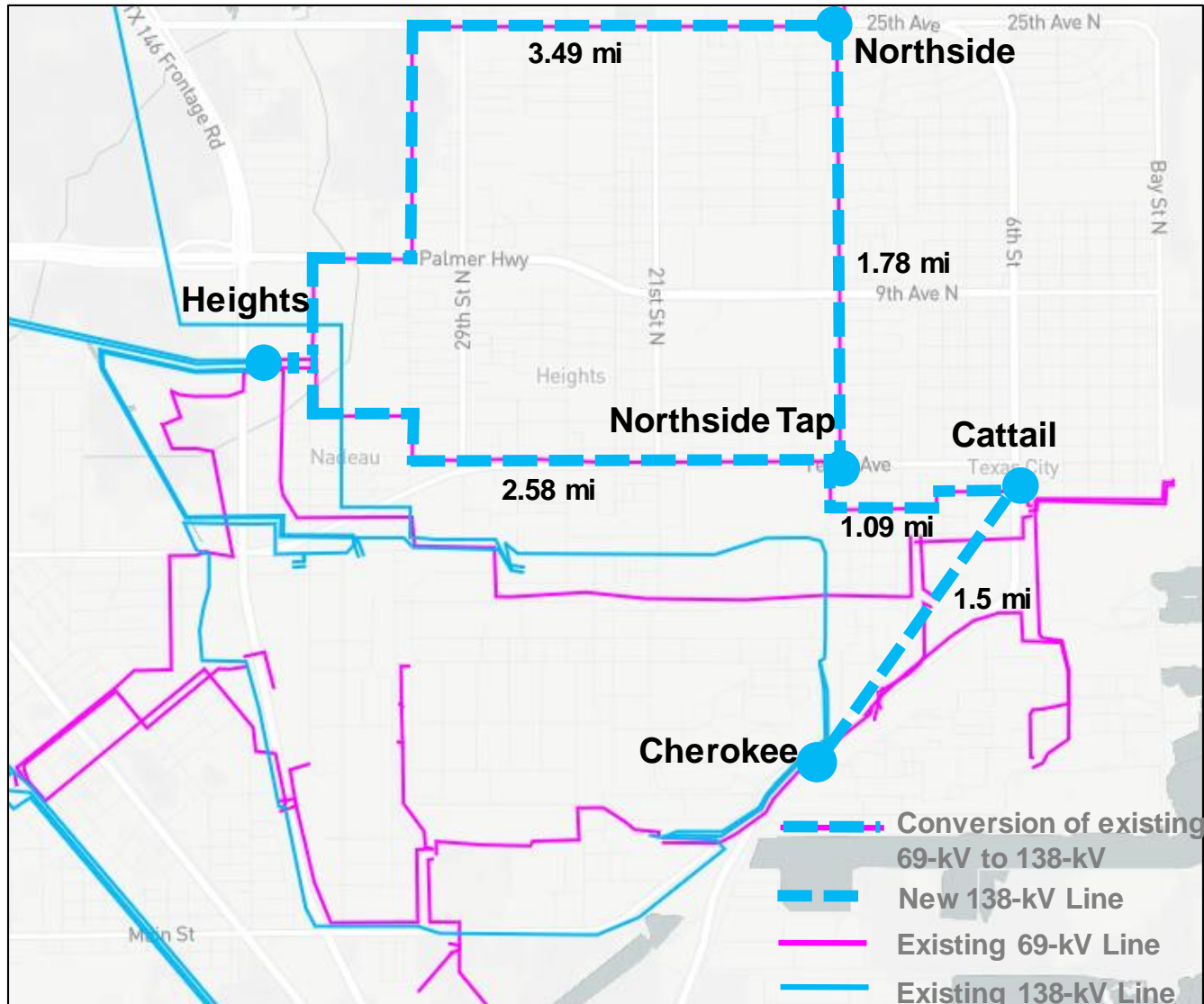
- Timeline:
  - EIR Report to be posted in the MIS – September, 2020



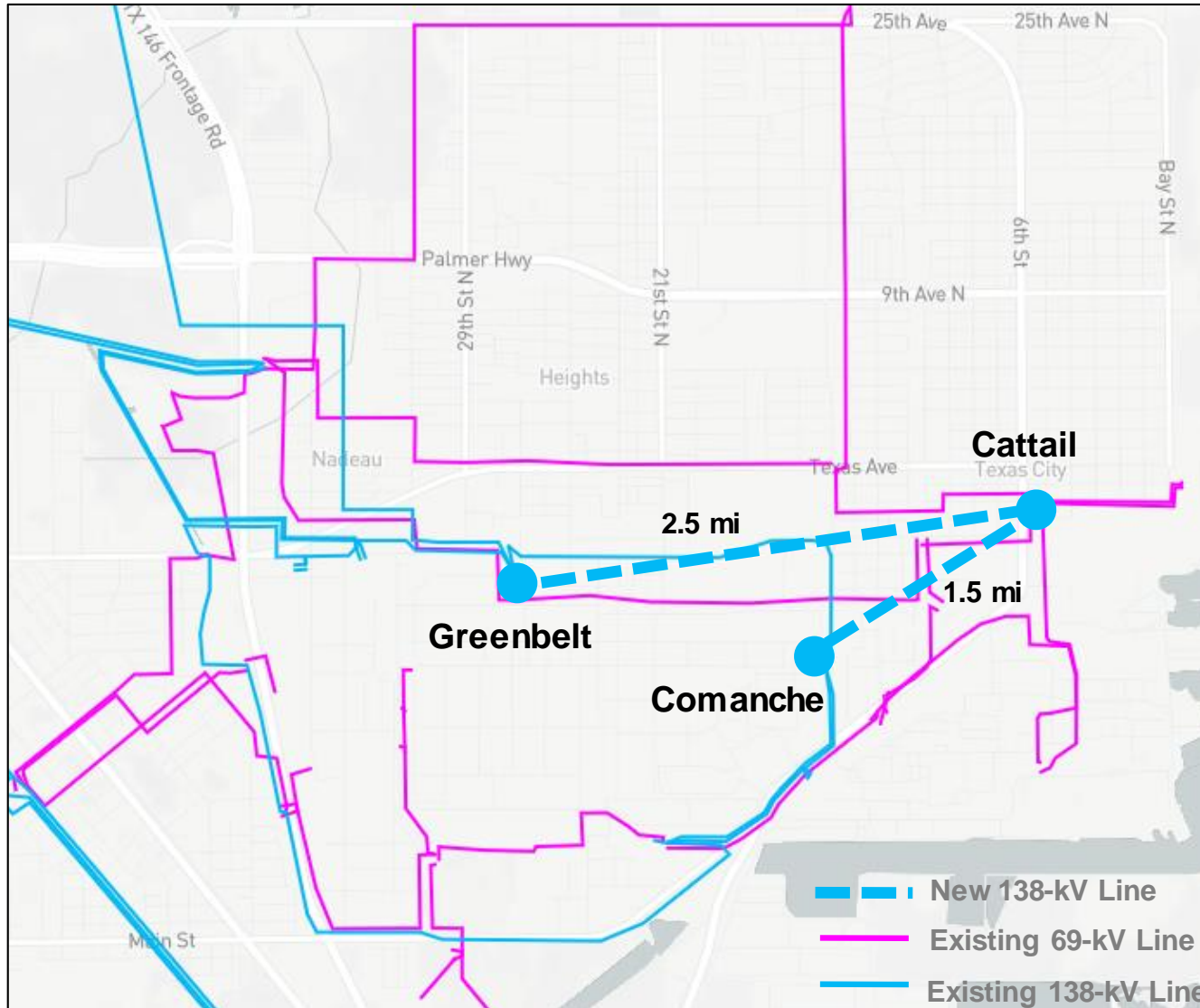
Stakeholder Comments Also Welcomed Through:

[SunWook.Kang@ercot.com](mailto:SunWook.Kang@ercot.com)

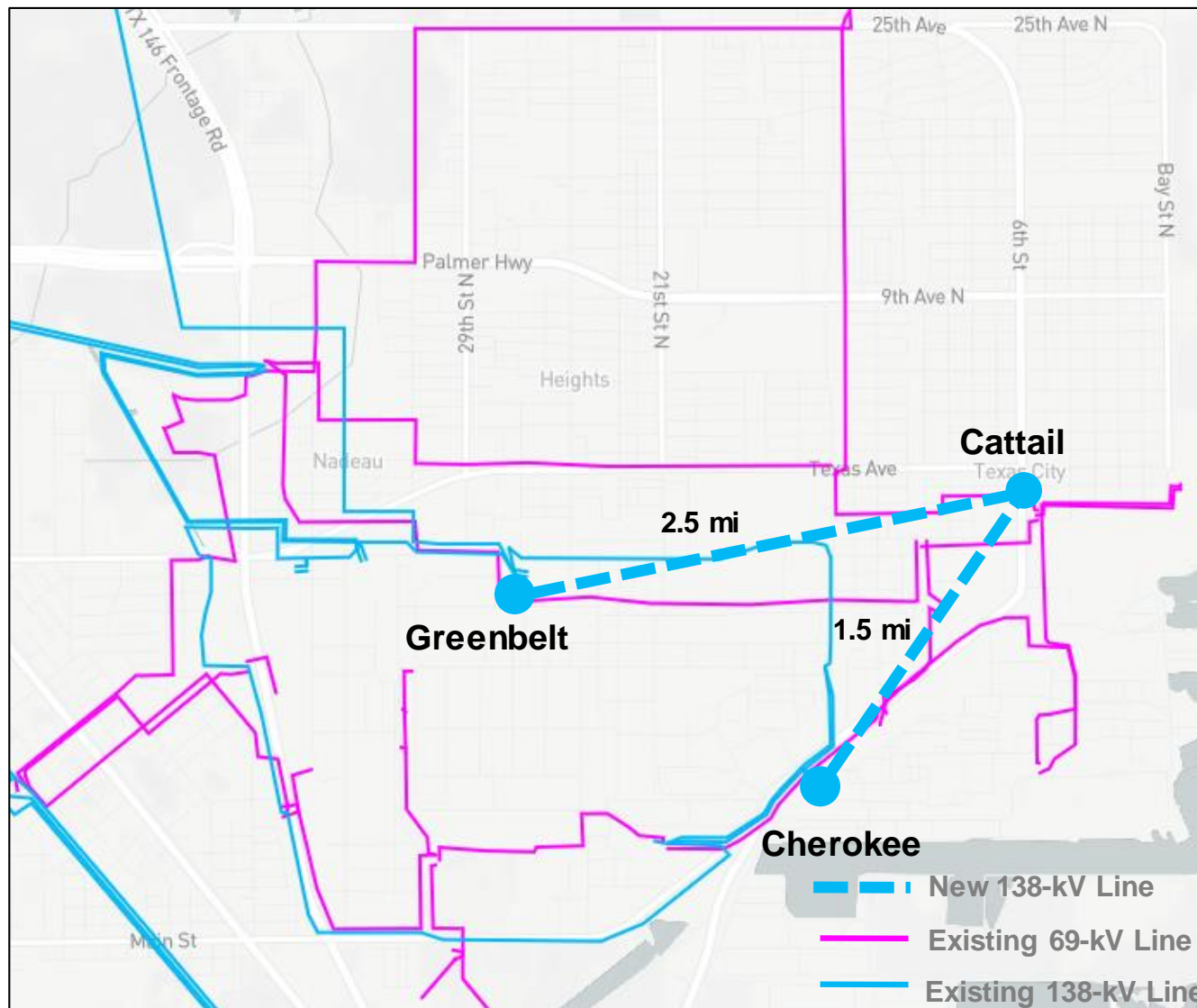
# Appendix: Map of Option 3



# Appendix: Map of Option 4



# Appendix: Map of Option 5



# Appendix: Map of Option 6

