



# **Grapevine Switching Station Project - ERCOT Independent Review**

ERCOT Transmission Planning

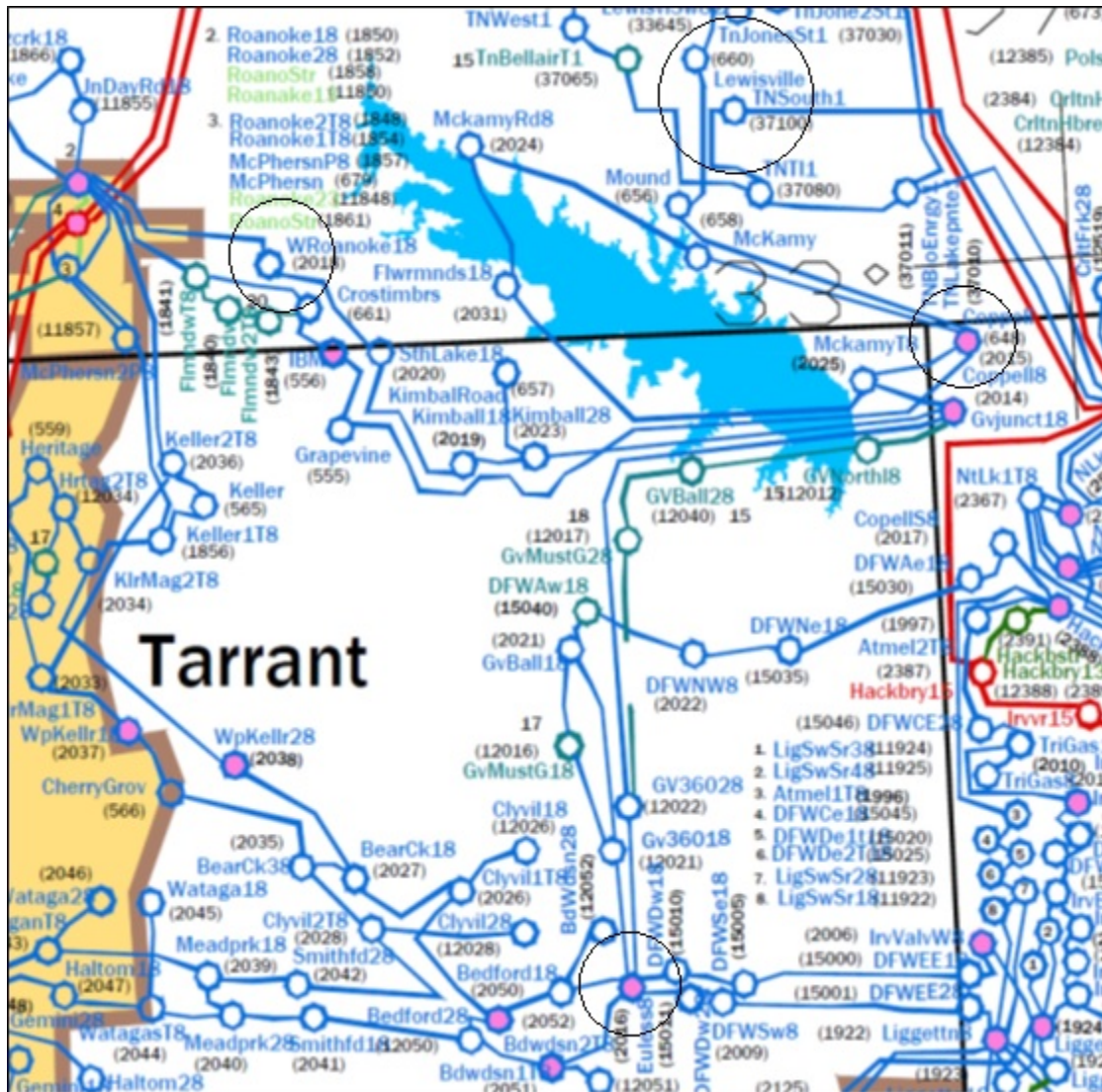
Regional Planning Group

July, 2018

# Overview

- ONCOR submitted the Grapevine Switching Station Project
- Tier 2 project estimated cost of \$25 million
- Proposed for the 2019 timeframe
- Reliability Issues
  - Voltage Collapse
  - Consequential Load Loss

# Grapevine Area



## Options Studied

- Option 1 – Preferred Option – New Grapevine Switching Station - \$25 million
- Option 2 - Greenfield 138 kV line from Lewisville (BEC) – Coppell (BEC) - 6.36 miles – \$12.72 million
- Option 3 - Roanoke – Coppell 138 kV line – 19.88 miles - \$39.76 million

# Study Results

Option Type	N-1-1 Reliability Issues Resolved?	Cost Estimate (\$Million)
Option 1	Yes	25
Option 2	Yes	12.72
Option 3	Yes	39.76

Reliability issues are resolved with all 3 options

## Options 2 and 3 - Challenges

- Longer time frame – Will not meet 2019 reliability need
- Option 3 has higher costs
- Residential area in both paths – Difficulties with ROW
- Additional costs maybe incurred

## ERCOT Recommendation

- ERCOT recommends Option 1 to resolve reliability issues

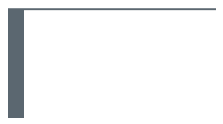
## Next Steps

ERCOT Independent Review report to RPG



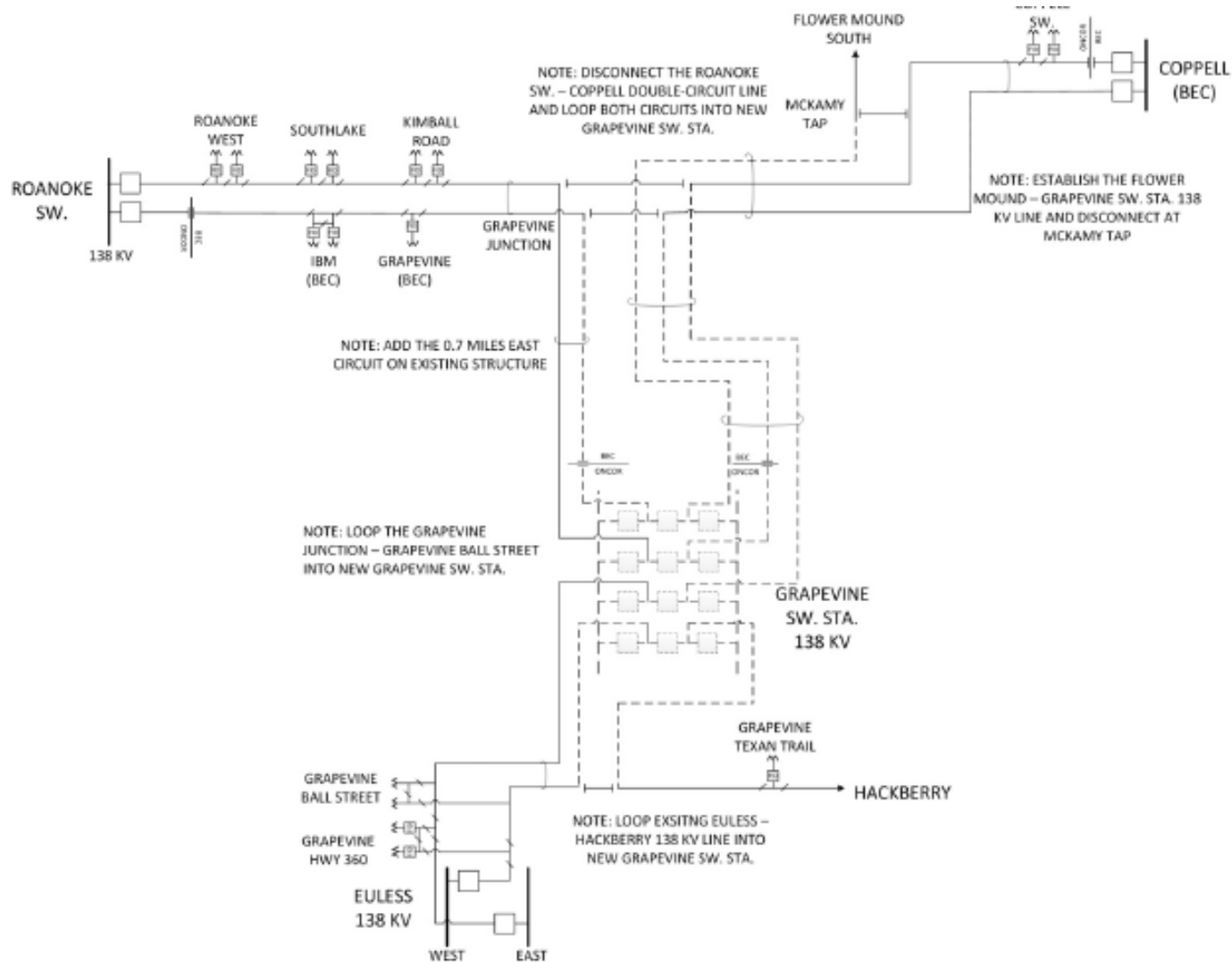


Any Stakeholder Comments: [rpg@ercot.com](mailto:rpg@ercot.com)



# Appendix

# Grapevine Switching Station



Source: Oncor report filed with RPG on Feb 9<sup>th</sup> 2018

# Grapevine Project Key Changes

- 12 breakers at Grapevine Sw Sta in breaker and a half layout
- Two Roanoke – Grapevine Sw Sta 138 kV lines
- Two Eules – Grapevine Sw Sta 138 kV lines
- McKamy to Grapevine Sw Sta and two Coppell – Grapevine Sw Sta 138 kV lines – Triple circuit structure
- Hackberry to Grapevine Sw Sta 138 kV line