



SRRTEP - Western Committee ComEd Supplemental Projects

February 14, 2025

Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

Need Number: ComEd-2025-003

Process Stage:

Need Meeting 2/14/2025

Project Driver:

Operational Flexibility and Efficiency

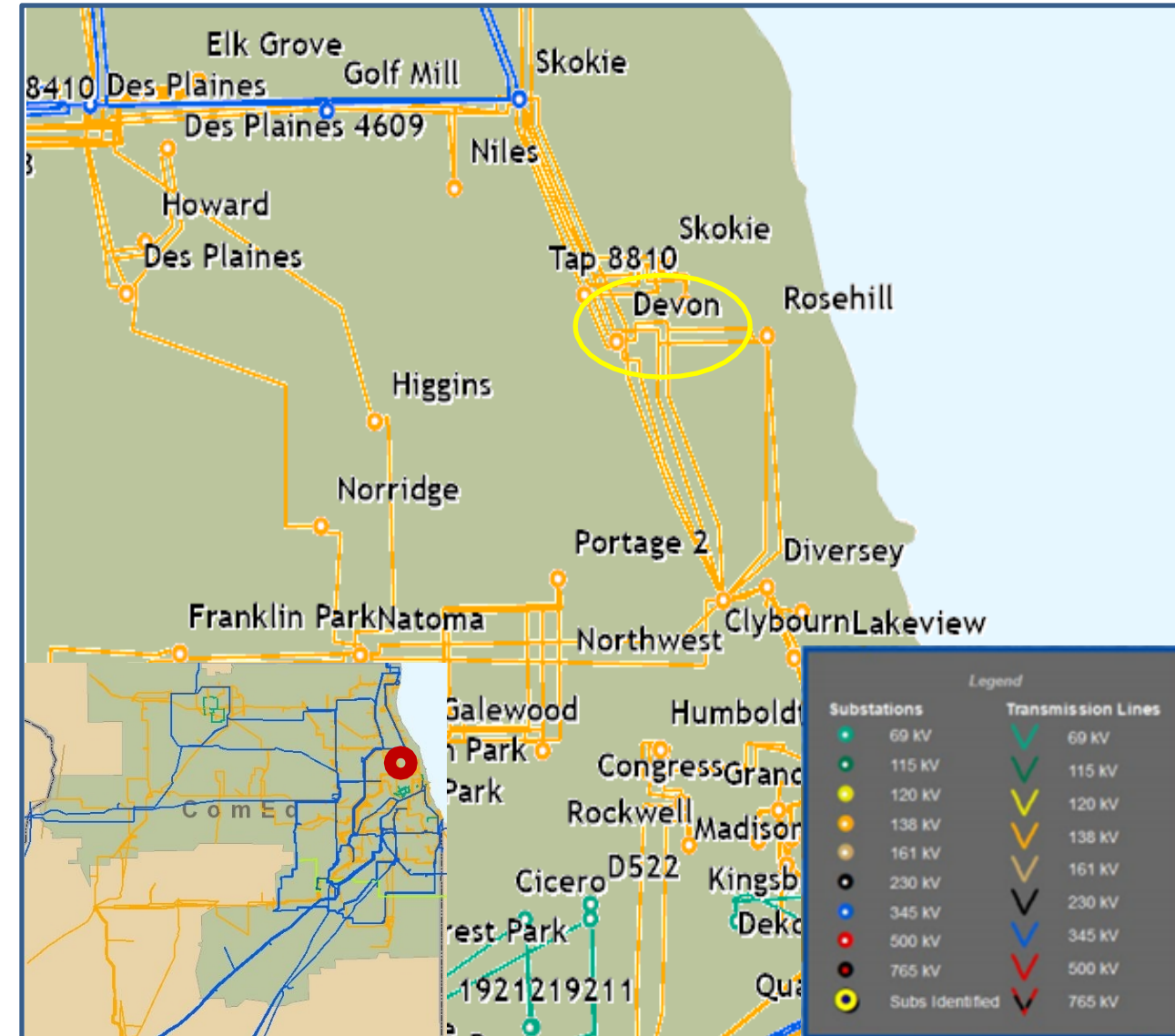
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

- Enhancing system functionality, flexibility, visibility, or operability
- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions

Problem Statement:

- Devon 138 kV is currently served by seven 138 kV lines, supplying four 138-12 kV distribution transformers. There are 138 kV line breakers on lines L8803 (Devon-Skokie), L11415 (Northwest-Rosehill-Devon), L8809 (Devon-Skokie), L11414 (Northwest-Rosehill-Devon), and L11411 (Northwest-Devon). 138 kV L11416 (Northwest-Devon) has a line circuit switcher. 138 kV L11416 (Devon-Skokie) has a line motor operated disconnect. 138 kV L8810 (Devon-Skokie) has a line disconnect.
- 138 kV oil circuit breakers for L11414 and L11415 were installed in 1953 and the L8810-L11411 oil circuit breaker was installed in 1962 at Devon substation. They are in deteriorating condition, lack replacement parts, and have elevated maintenance costs.



Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

Need Number: ComEd-2025-001

Process Stage: Solution Meeting 2/14/2025

Previously Presented: Need Meeting 1/17/2025

Project Driver:

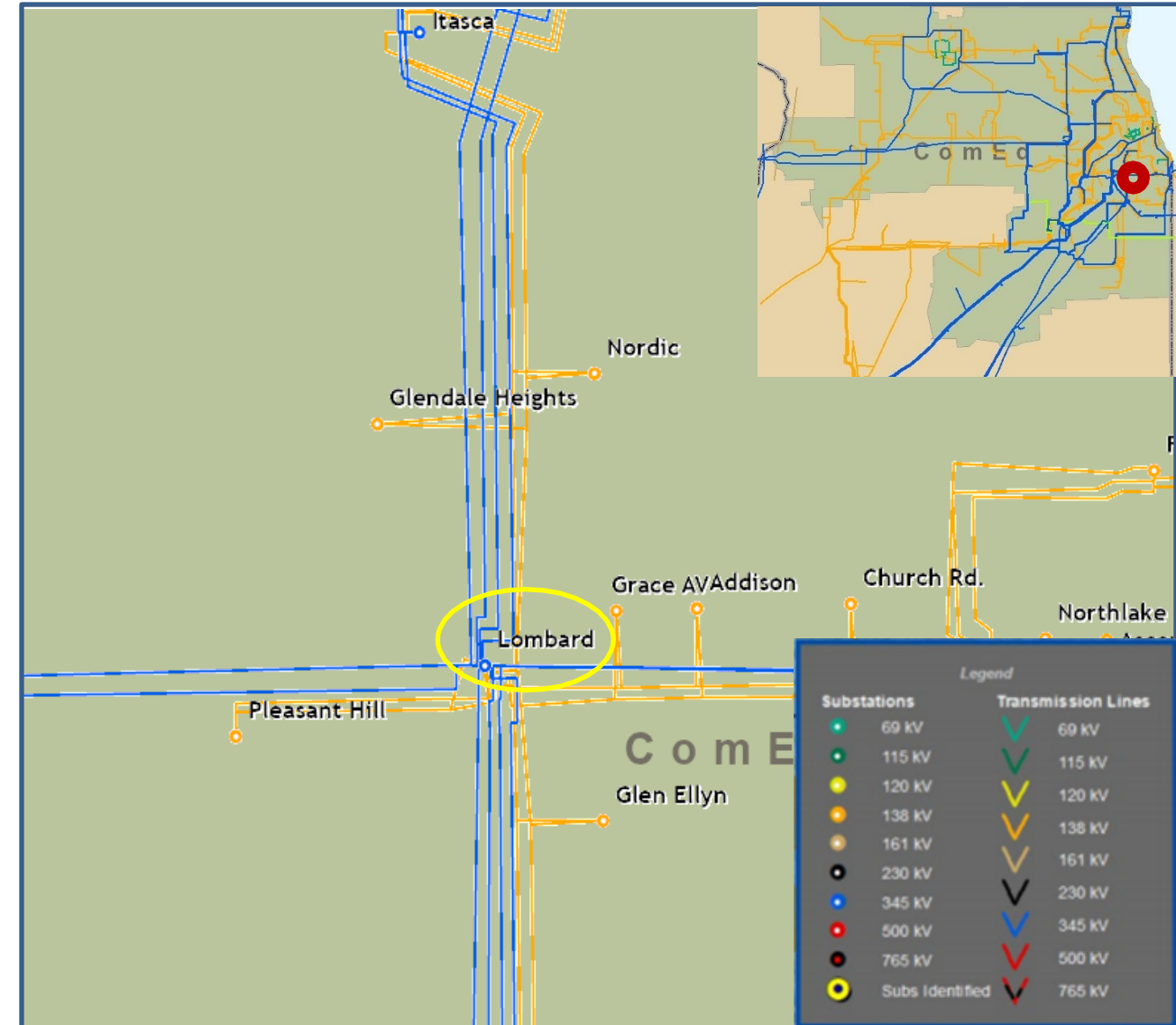
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions

Problem Statement:

The 138 kV 1200 A, 36kA L10301 wave trap at Lombard is over its rated fault current.

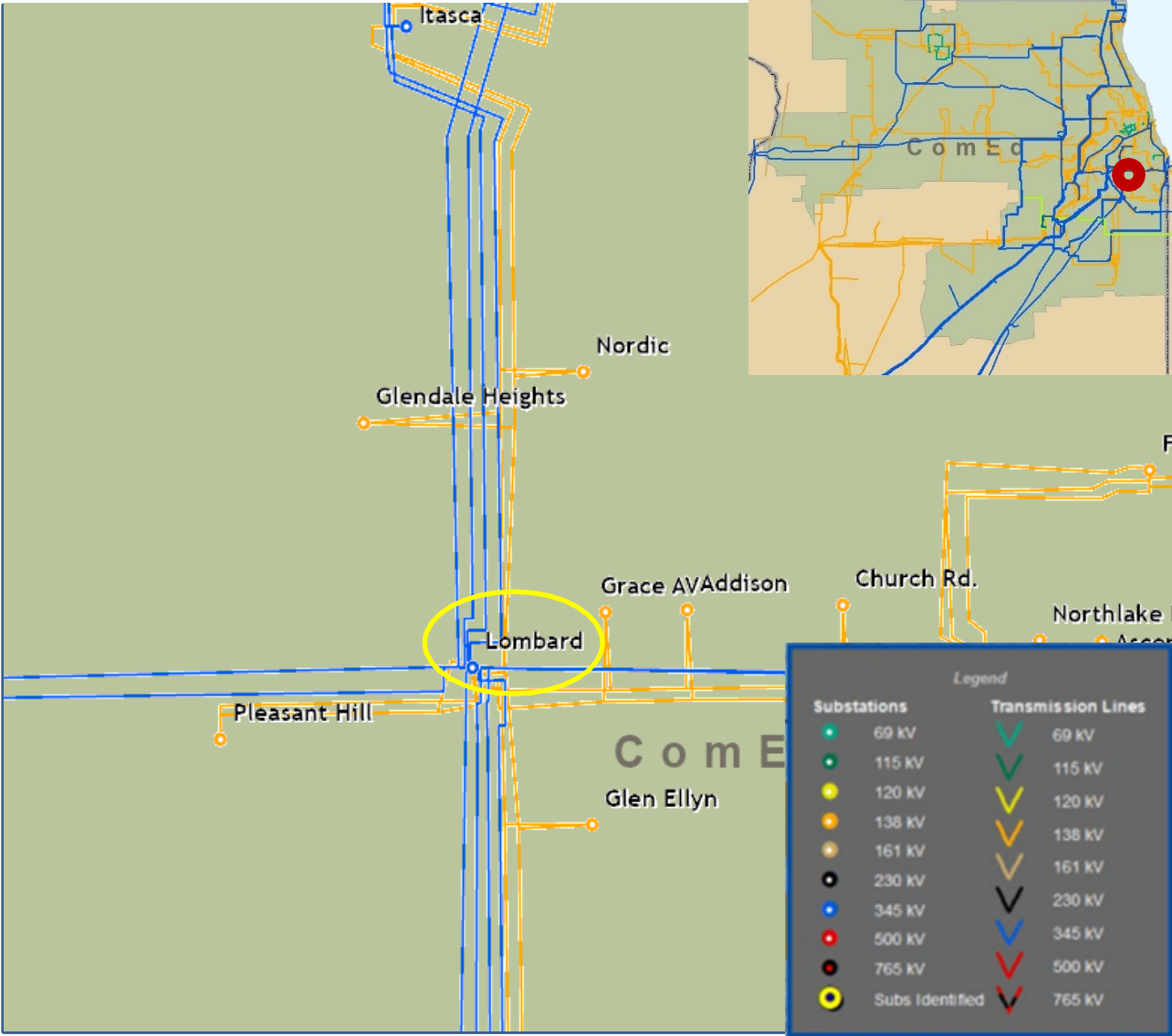


ComEd Transmission Zone M-3 Process 138 kV L10301 Wave Trap at Lombard

Need Number: ComEd-2025-001
Process Stage: Solution Meeting 2/14/2025
Proposed Solution:
 Upgrade wave trap on 138 kV Lombard – Lisle line L10301
 Existing rating 1200A, 36kA
 Proposed rating 2000A, 63kA

| Existing ratings (MVA) | SN/SE | WN/WE |
|------------------------|---------|---------|
| L10301 Lombard - Lisle | 292/321 | 316/343 |
| New Ratings (MVA) | SN/SE | WN/WE |
| L10301 Lombard - Lisle | 376/483 | 452/538 |

Estimated cost: \$ 0.15 M
Alternatives Considered:
 No feasible alternatives available
Projected In-Service: 12/31/2025
Project Status: Engineering
Model: 2029 RTEP



Need Number: ComEd-2025-002

Process Stage: Solution Meeting 2/14/2025

Previously Presented: Need Meeting 1/17/2025

Project Driver:

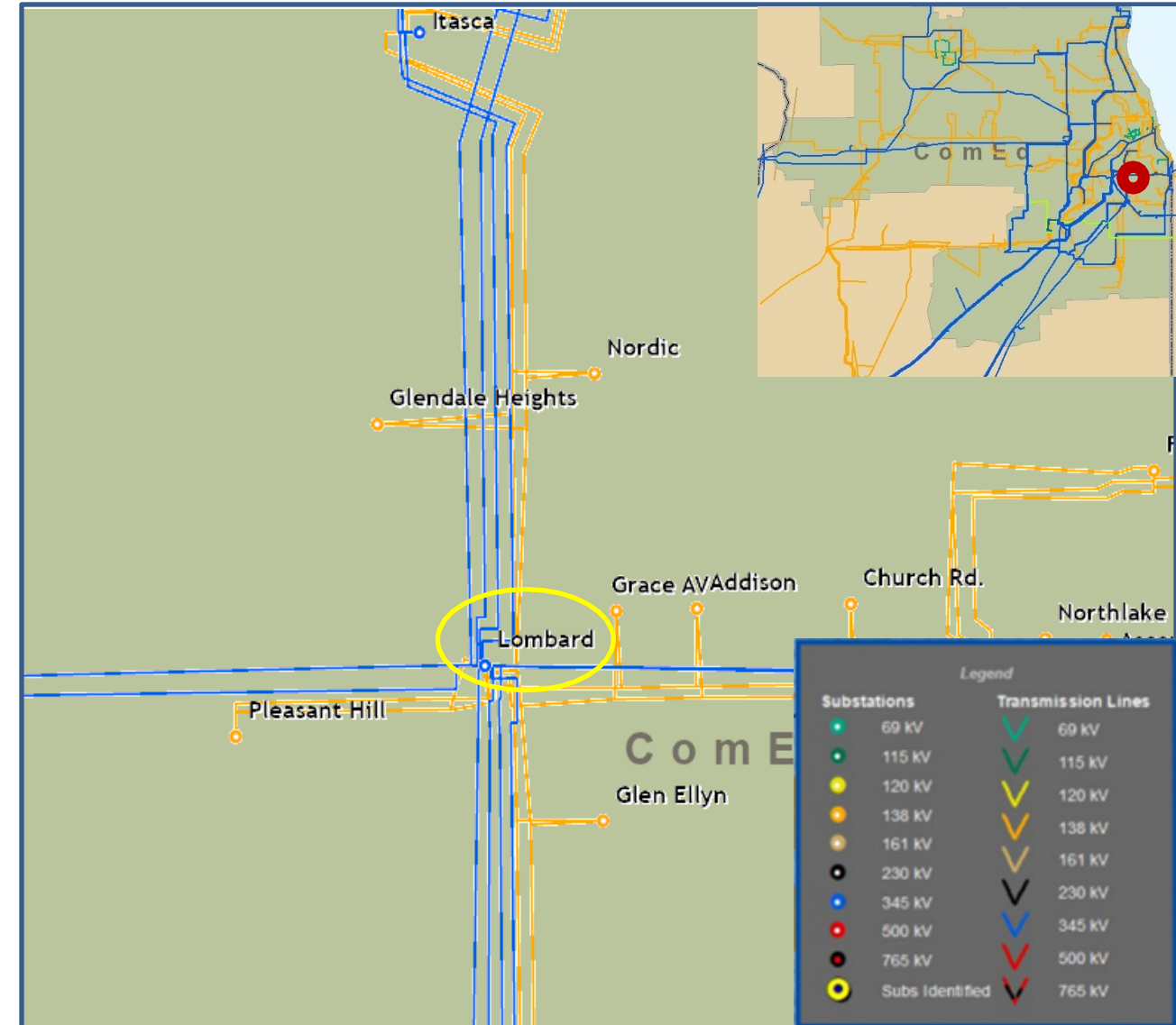
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions

Problem Statement:

The 138 kV 1200 A, 36kA L10302 wave trap at Lombard is over its rated fault current.

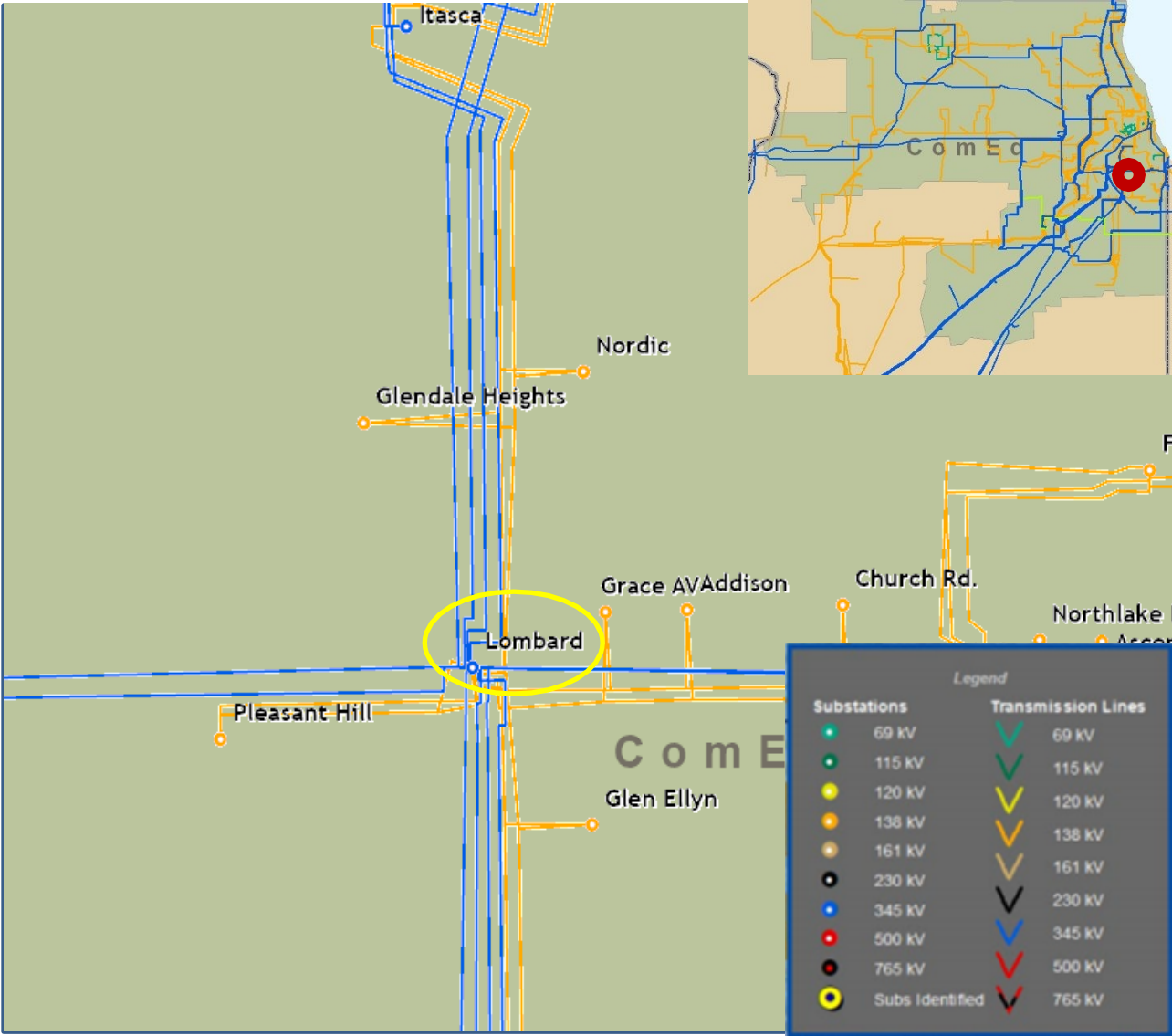


ComEd Transmission Zone M-3 Process 138 kV L10302 Wave Trap at Lombard

Need Number: ComEd-2025-002
Process Stage: Solution Meeting 2/14/2025
Proposed Solution:
 Upgrade wave trap on 138 kV Lombard – Lisle line L10302
 Existing rating 1200A, 36kA
 Proposed rating 2000A, 63kA

| Existing ratings (MVA) | SN/SE | WN/WE |
|------------------------|---------|---------|
| L10302 Lombard – Lisle | 292/321 | 316/343 |
| New Ratings (MVA) | SN/SE | WN/WE |
| L10302 Lombard - Lisle | 376/483 | 452/538 |

Estimated cost: \$ 0.15 M
Alternatives Considered:
 No feasible alternatives available
Projected In-Service: 12/31/2027
Project Status: Conceptual
Model: 2029 RTEP



Need Number: ComEd-2024-022

Process Stage: Solution Meeting 2/14/2025

Previously Presented: Need Meeting 11/15/2024

Project Driver:

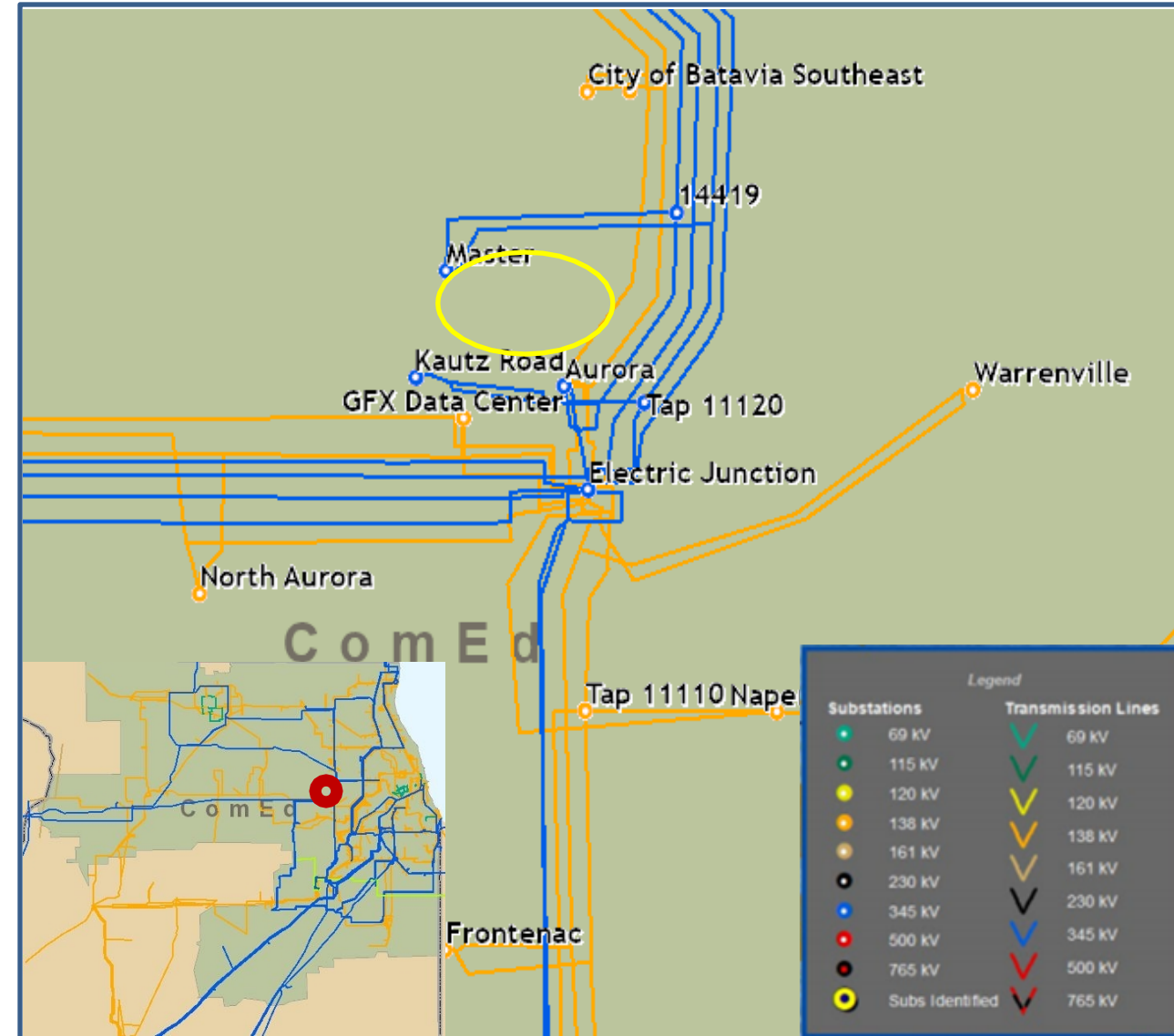
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Aurora area. Initial loading is expected to be 65 MW in June 2028, 72 MW in 2029, with an ultimate load of 91 MW.



Need Number: ComEd-2024-022

Process Stage: Solution Meeting 2/14/2025

Proposed Solution:

- New customer will be radially served by two new 0.3 mile, 138 kV lines from Bilter Road substation (ComEd-2024-002) to the customer site.
- New substation will be ultimate double ring bus configuration. Initial installation will be 5-138 kV CBs and 2-138/34 kV, 112 MVA transformers.

Estimated transmission cost: \$0M

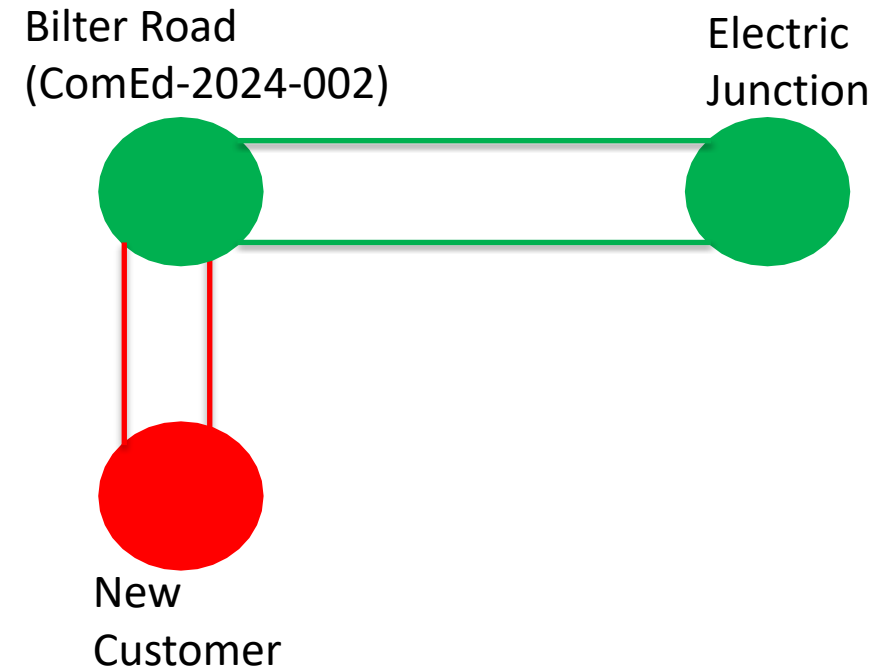
Alternatives Considered:

- Cut into 138 kV line Electric Junction – Aurora. Extend two 138 kV lines, 1 mile to customer location to connect to new double ring bus substation. This alternative was not selected due to higher overall cost.

Projected In-Service: 12/31/27

Project Status: Engineering

Model: 2029 RTEP



Appendix

High Level M-3 Meeting Schedule

Assumptions

| Activity | Timing |
|---|------------------------------------|
| Posting of TO Assumptions Meeting information | 20 days before Assumptions Meeting |
| Stakeholder comments | 10 days after Assumptions Meeting |

Needs

| Activity | Timing |
|--|------------------------------|
| TOs and Stakeholders Post Needs Meeting slides | 10 days before Needs Meeting |
| Stakeholder comments | 10 days after Needs Meeting |

Solutions

| Activity | Timing |
|--|----------------------------------|
| TOs and Stakeholders Post Solutions Meeting slides | 10 days before Solutions Meeting |
| Stakeholder comments | 10 days after Solutions Meeting |

Submission of Supplemental Projects & Local Plan

| Activity | Timing |
|---|---|
| Do No Harm (DNH) analysis for selected solution | Prior to posting selected solution |
| Post selected solution(s) | Following completion of DNH analysis |
| Stakeholder comments | 10 days prior to Local Plan Submission for integration into RTEP |
| Local Plan submitted to PJM for integration into RTEP | Following review and consideration of comments received after posting of selected solutions |

Revision History

2/4/2025 – V1 – Original version posted to pjm.com