



SRRTEP - Western Committee ComEd Supplemental Projects

June 14, 2024

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-2023-005

Process Stage: Solutions Meeting 6/14/2024

Previously Presented: Need Meeting 8/18/2023

Project Driver:

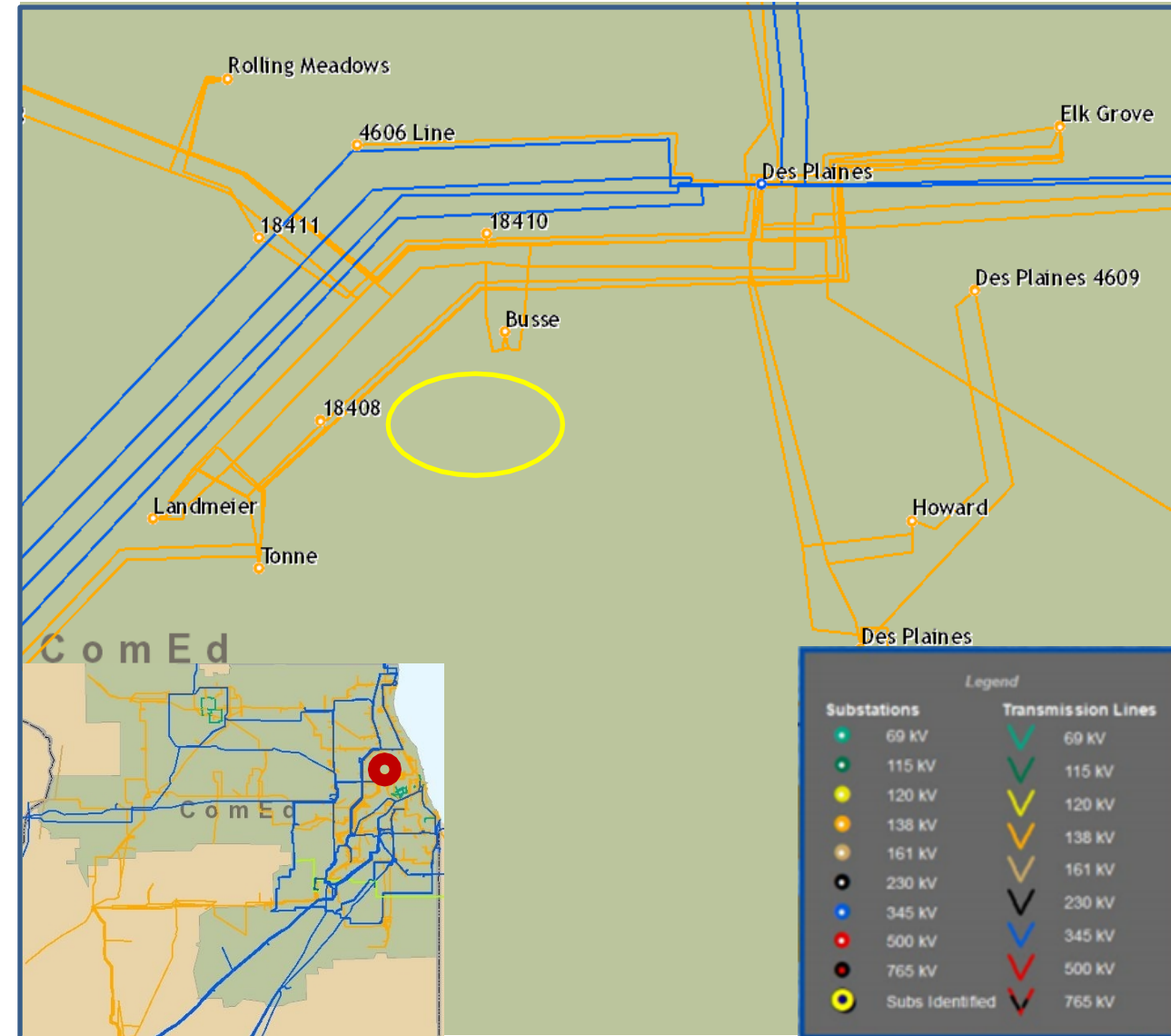
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in Elk Grove. Initial loading is expected to be 60 MW in August 2026, 270 MW in 2028, with an ultimate load of 270 MW.



Need Number: ComEd-2023-005

Process Stage:

Solutions Meeting 6/14/2024

Proposed Solution:

- Expand TSS Elk Grove to the east and build a new 138kV GIS building. Existing overhead 138kV transmission lines, L.18407 and L.18408, will be cut over from the existing GIS building to the new GIS building via overhead conductors. The new GIS will be tied to the existing GIS through two new bus ties.
- The new GIS station will install fourteen 138 kV CBs in a breaker and a half configuration.
- Customer will be radially served with four 138/34 kV, 112MVA transformers.

Estimated transmission cost: \$130.9M

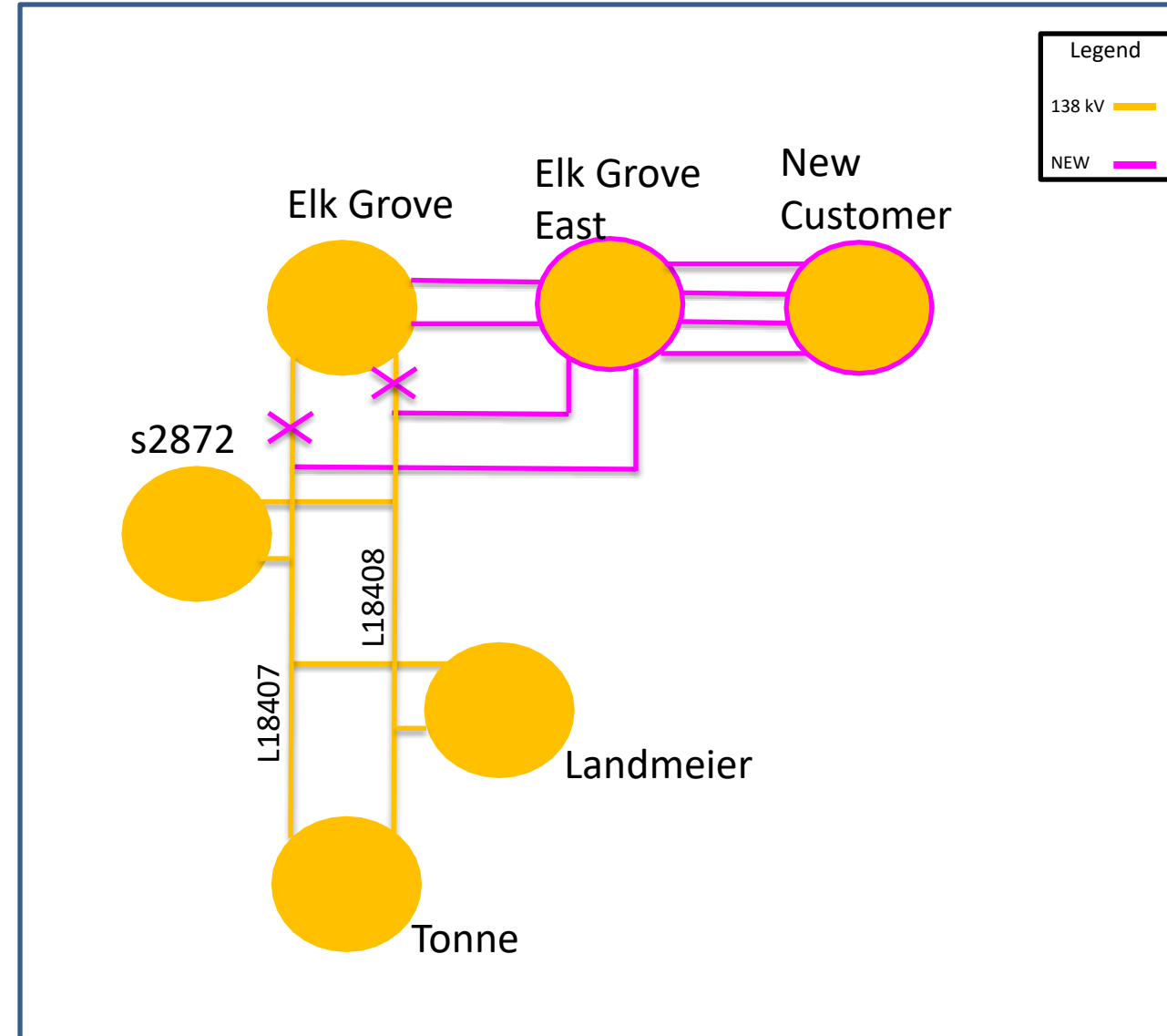
Alternatives Considered:

Extend 2 radial 138 kV lines to customer location to connect to new eight (8) 138 kV CB, double ring bus substation. This alternative was not selected due to limited flexibility to serve future area load.

Projected In-Service: 8/30/26

Project Status: Engineering

Model: 2028 RTEP



Need Number: ComEd-2023-009

Process Stage: Solutions Meeting 6/14/2024

Previously Presented: Need Meeting 9/15/2023

Project Driver:

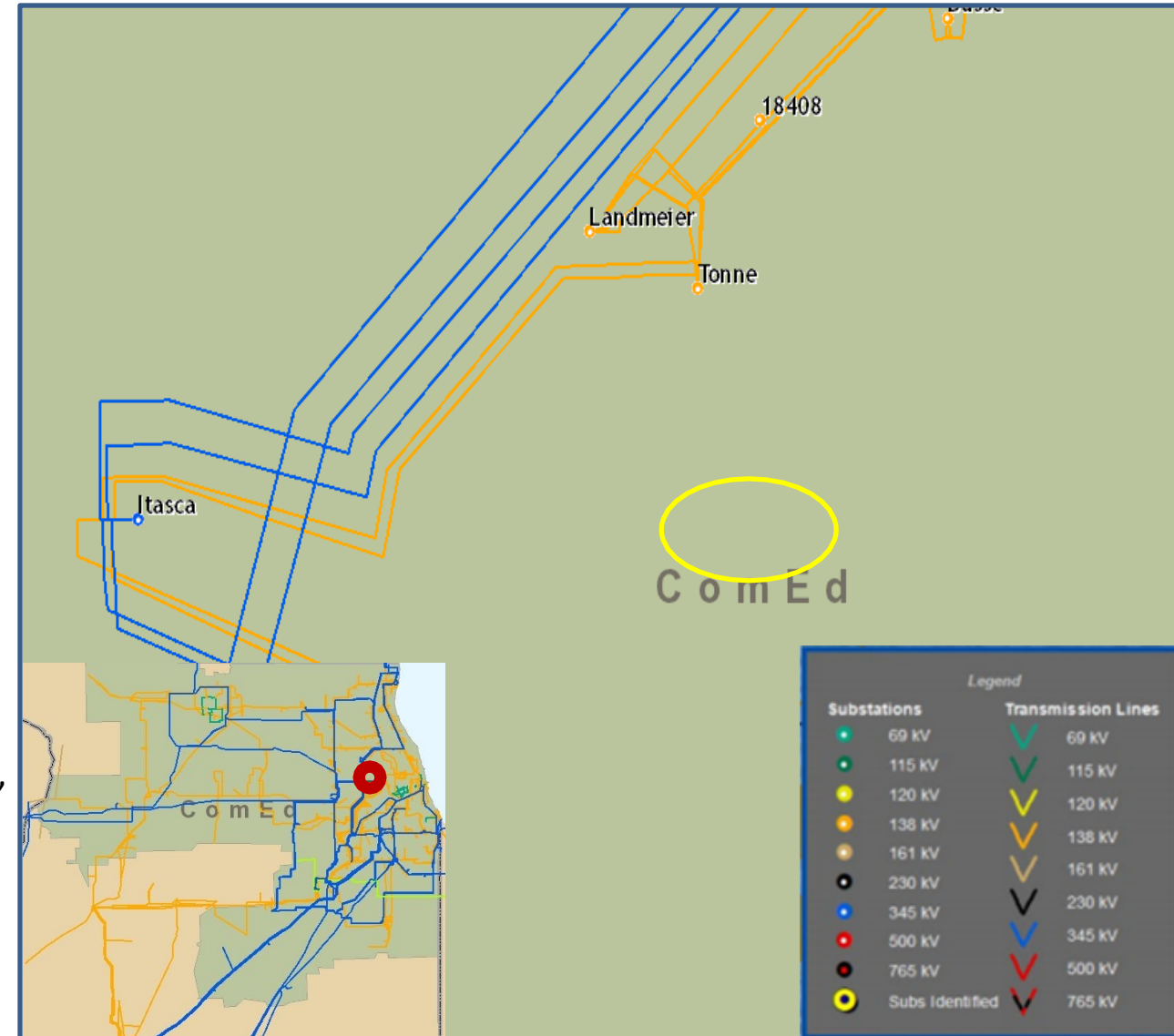
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Itasca area. Initial loading is expected to be **96 MW** in **December 2026**, **177.5 MW** in 2028, with an ultimate load of **272.7 MW**.



Need Number: ComEd-2023-009

Process Stage:

Solutions Meeting 6/14/2024

Proposed Solution:

- New customer will be radially served by expanding the bus at Itasca with 2 new bays to connect 2 new, 3-mile 138 kV lines from Itasca to the customer site. Customer substation will be twelve 138 kV CB double ring bus configuration with four 138/34 kV transformers.

Estimated transmission cost: \$9.9M

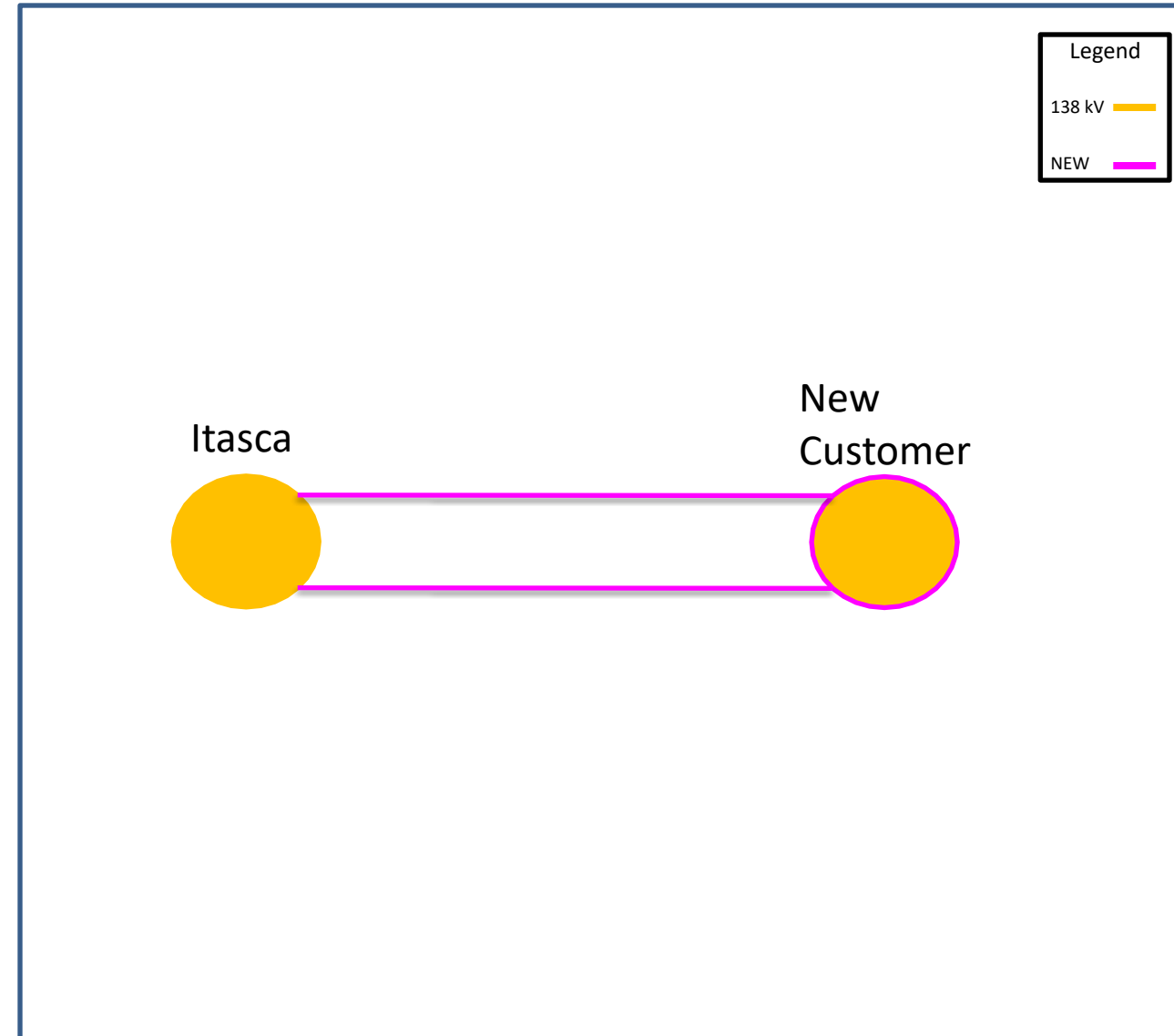
Alternatives Considered:

Cut into 138 kV Tonne – Itasca lines with a new double ring bus substation. Extend 138 kV lines 3 miles to customer location to connect to a new twelve (12) 138 kV CB double ring bus substation. This alternative was not selected due to higher cost.

Projected In-Service: 12/1/26

Project Status: Engineering

Model: 2028 RTEP



Need Number: ComEd-2024-013

Process Stage:

Solution Meeting 6/14/2024

Previously Presented:

Need Meeting 4/19/2024

Project Driver:

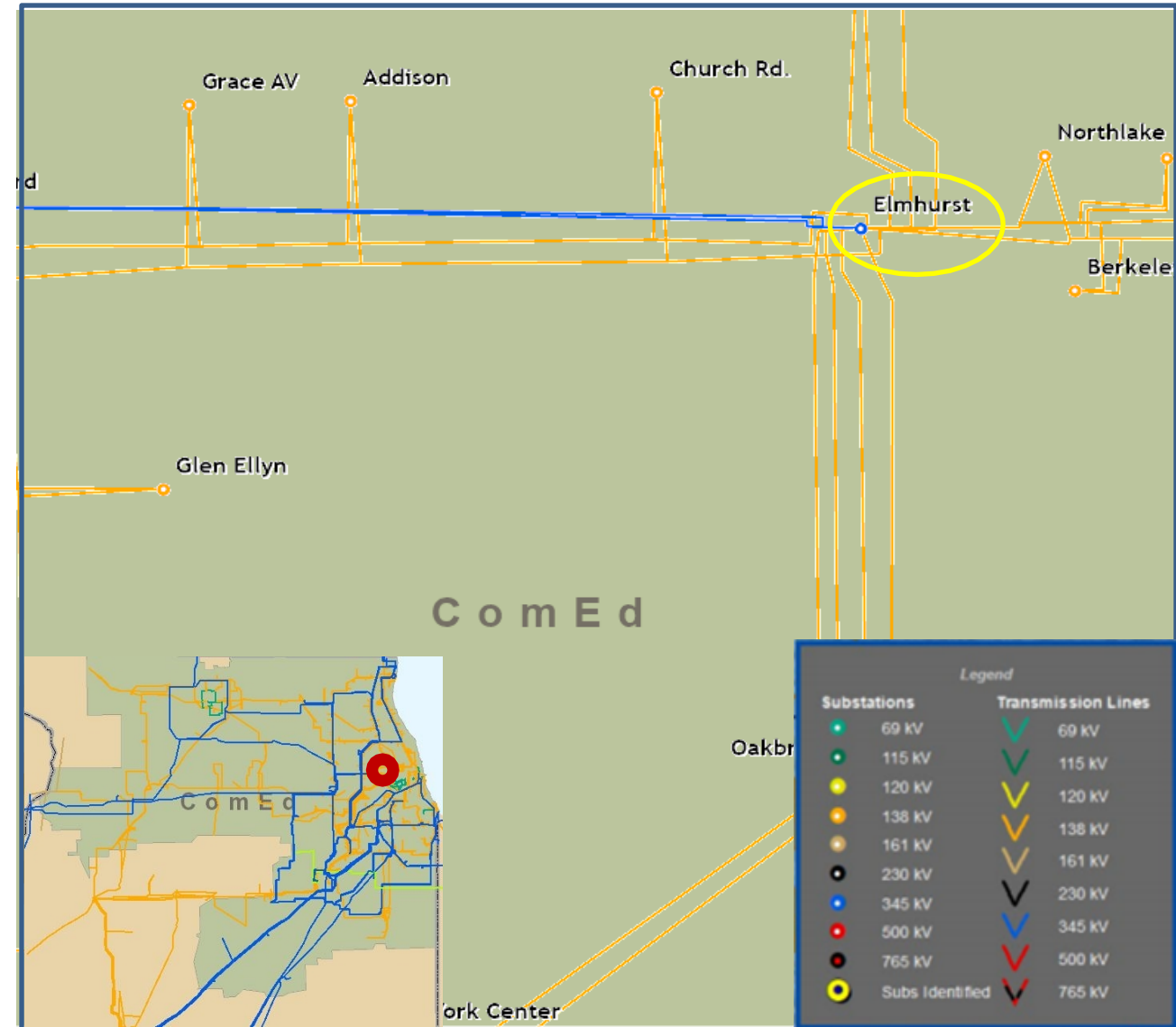
Customer Service

Specific Assumption Reference:

- Transmission System configuration changes due to new or expansion of existing distribution substations

Problem Statement:

ComEd Distribution has a customer requesting service in the Elmhurst area. Initial loading is expected to be 53 MW in January 2025, 103 MW in 2028, with an ultimate load of 103 MW.



Need Number: ComEd-2024-013

Process Stage:

Solution Meeting 6/14/2024

Proposed Solution:

Phase 1:

- Install two new 60 MVA, 138/34 kV distribution transformers at Elmhurst to a new 34 kV terminal
- Install two new 138 kV BT CBs between Bus 3 and Bus 4

Estimated transmission cost: \$6M

Phase 2:

- Install third new 60 MVA 138/34 kV distribution transformer at Elmhurst

Estimated transmission cost: \$0

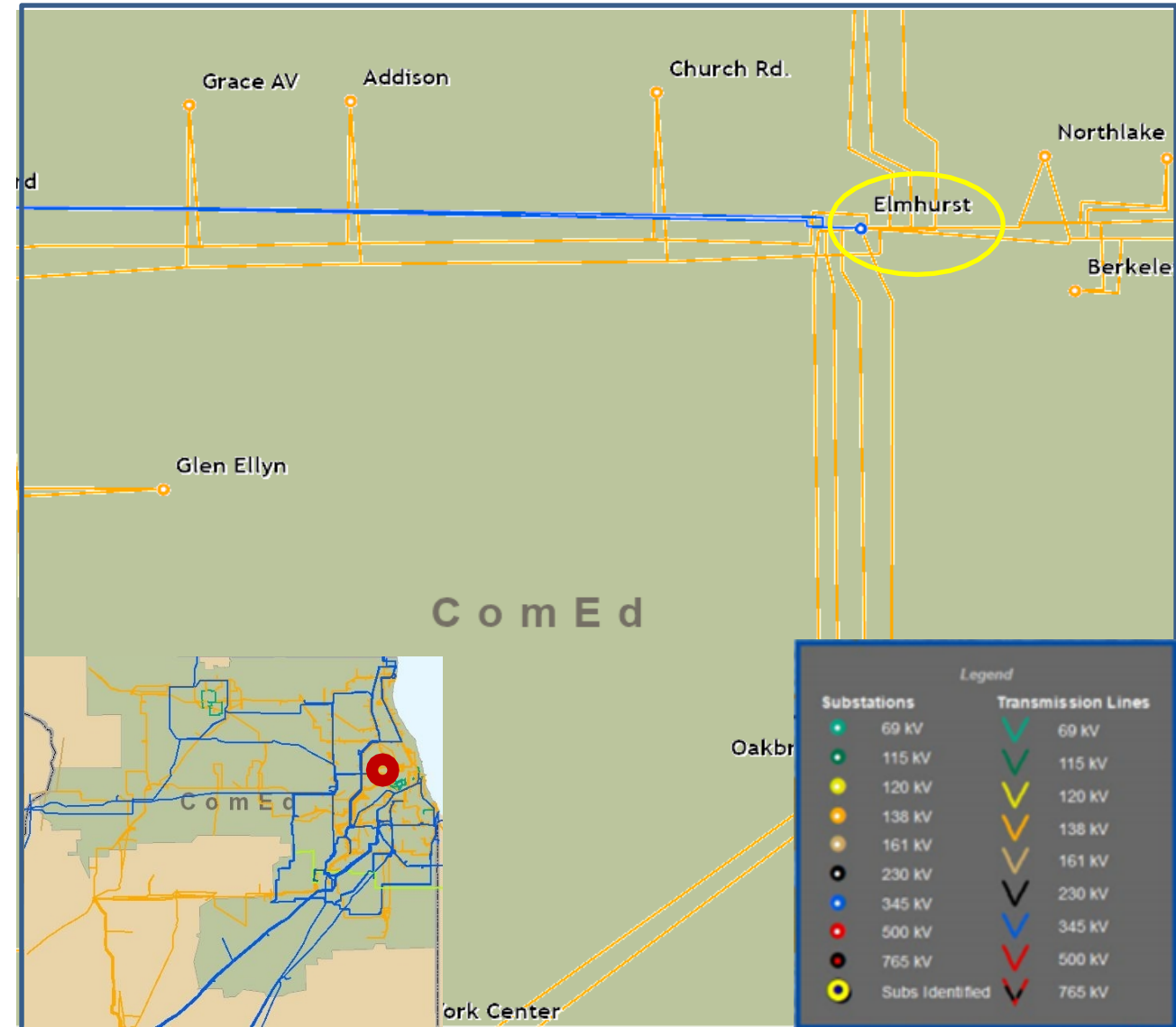
Alternatives Considered:

No feasible alternatives available.

Projected In-Service: Phase 1: 8/1/2025, Phase 2: 6/1/2027

Project Status: Engineering

Model: 2028 RTEP



Need Number: ComEd-2024-006

Process Stage: Solutions Meeting 6/14/2024

Previously Presented: Need Meeting 1/19/2024

Project Driver:

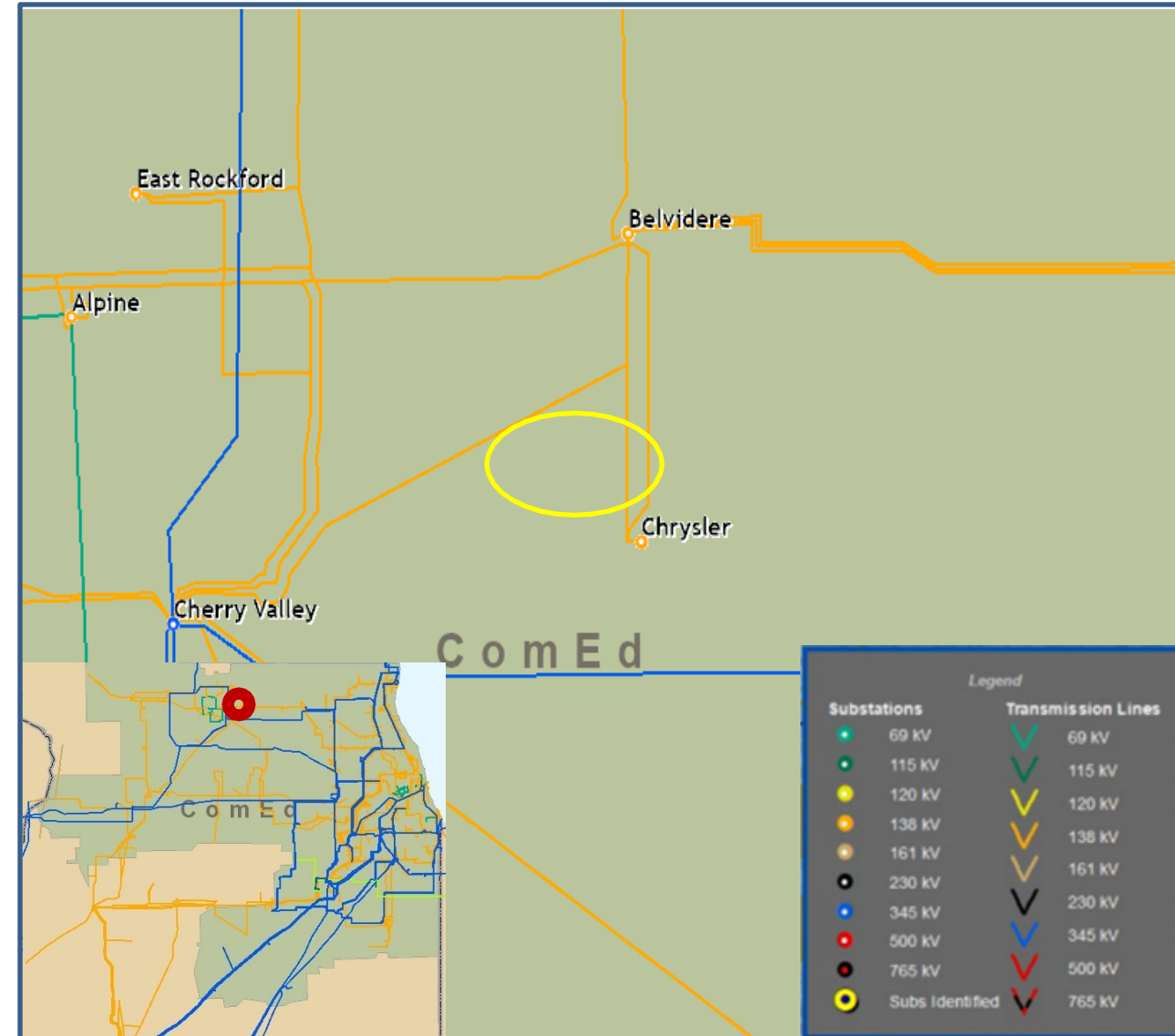
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Belvidere area. Initial loading is expected to be 42 MW in December 2026, with an ultimate load of 42 MW.



Need Number: ComEd-2024-006

Process Stage:

Solutions Meeting 6/14/2024

Proposed Solution:

- 138kV service will be installed from overhead high voltage distribution lines L15623 and L15624. Four wood double circuit poles will be replaced with steel poles and three new poles will be installed
- Customer substation will be double ring bus configuration with six 138 kV CBs and two 60MVA, 138/34 kV transformers.

Estimated transmission cost: \$0M

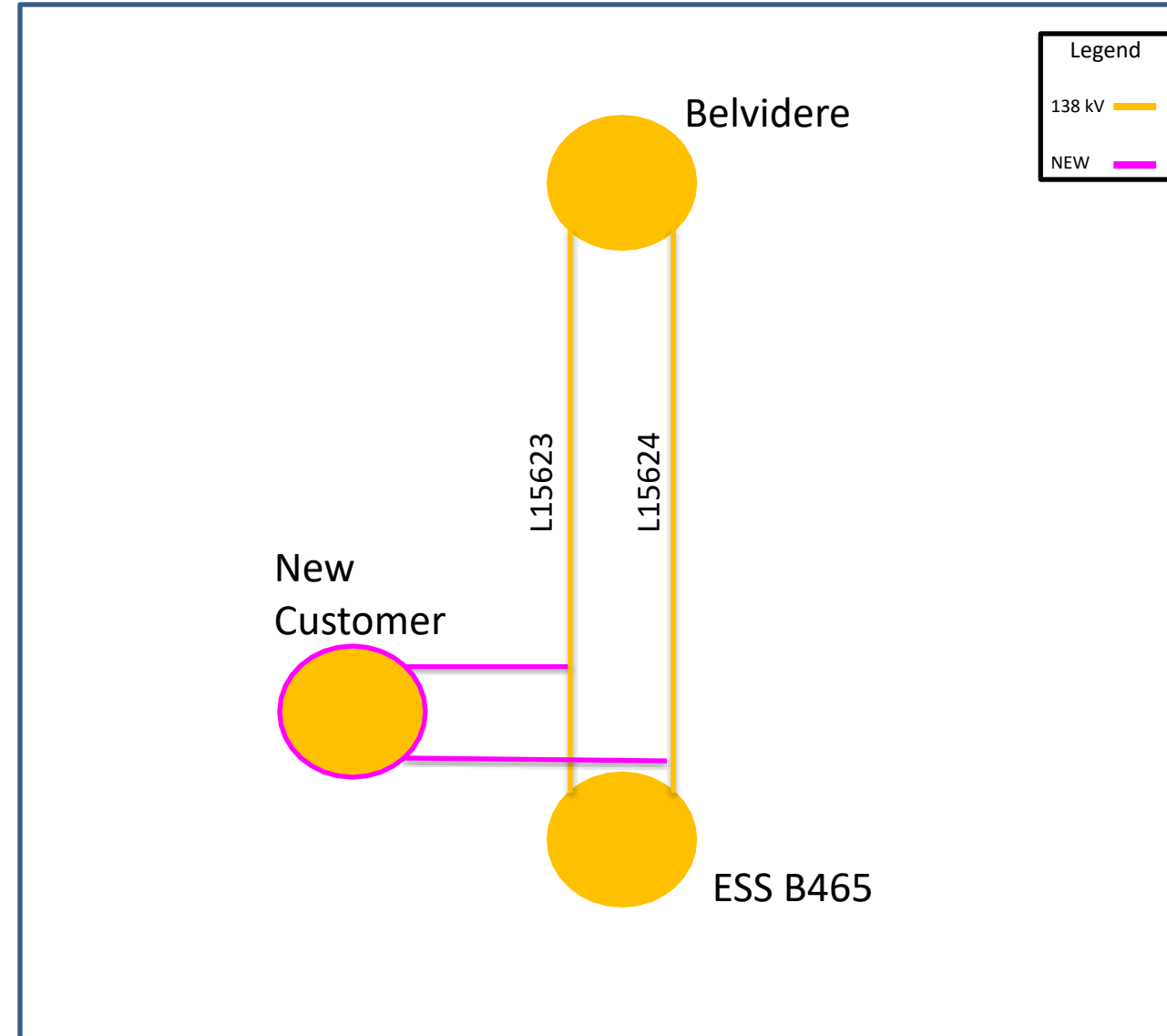
Alternatives Considered:

Feed customer from distribution lines in the area. This alternative was not selected due to inability of the existing distribution capacity in the area to serve the load.

Projected In-Service: 12/31/26

Project Status: Engineering

Model: 2028 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

6/4/2023 – V1 – Original version posted to pjm.com