



SRRTEP - Western Committee ComEd Supplemental Projects

September 20, 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-2024-003

Process Stage:

Solutions Meeting 9/20/2024

Previously Presented:

Need Meeting 1/19/2024

Project Driver:

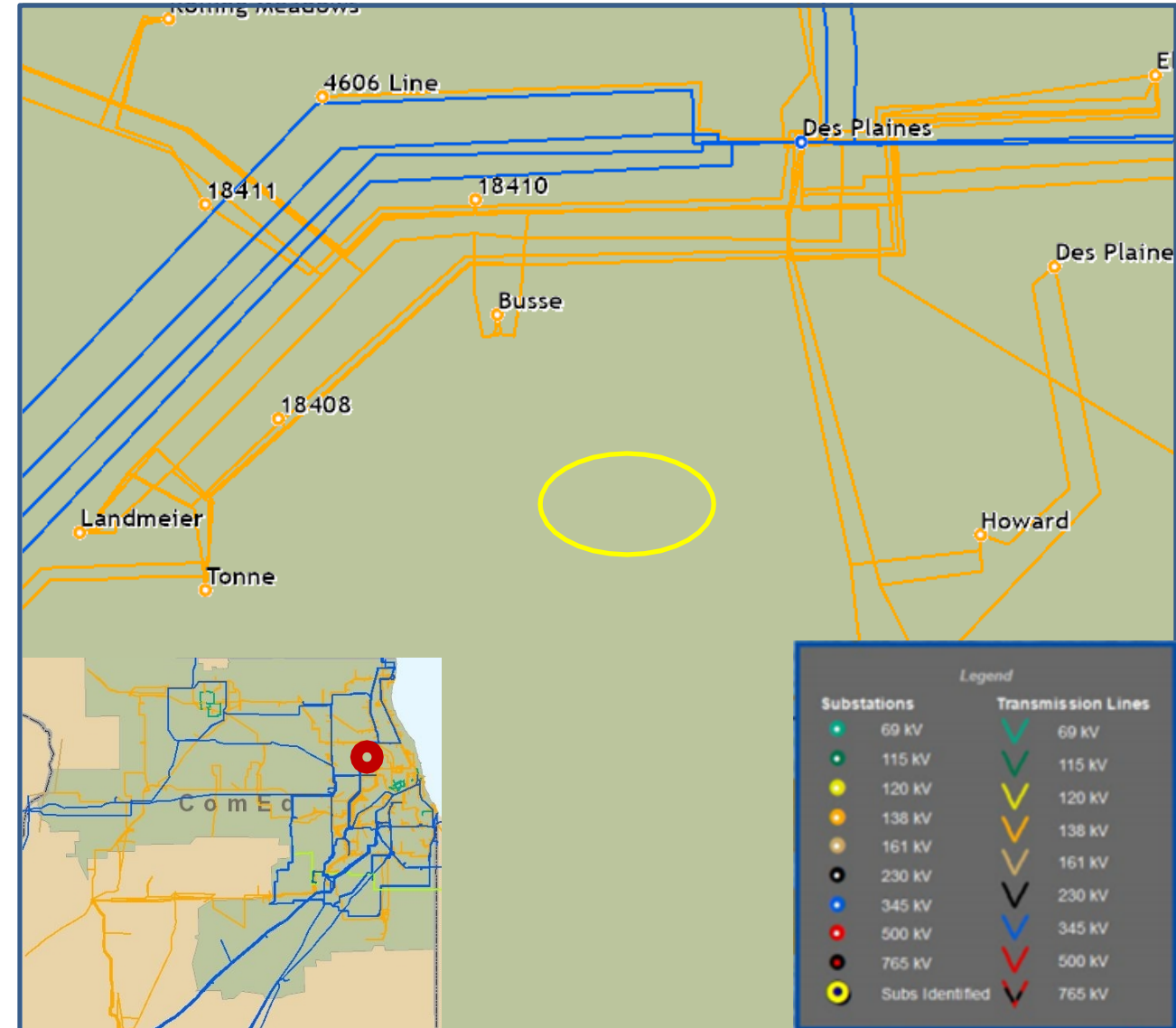
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Elk Grove area. Initial loading is expected to be 16 MW in **December** 2027, 21 MW in 2028, with an ultimate load of 250 MW.



Need Number: ComEd-2024-003

Process Stage: Solutions Meeting 9/20/2024

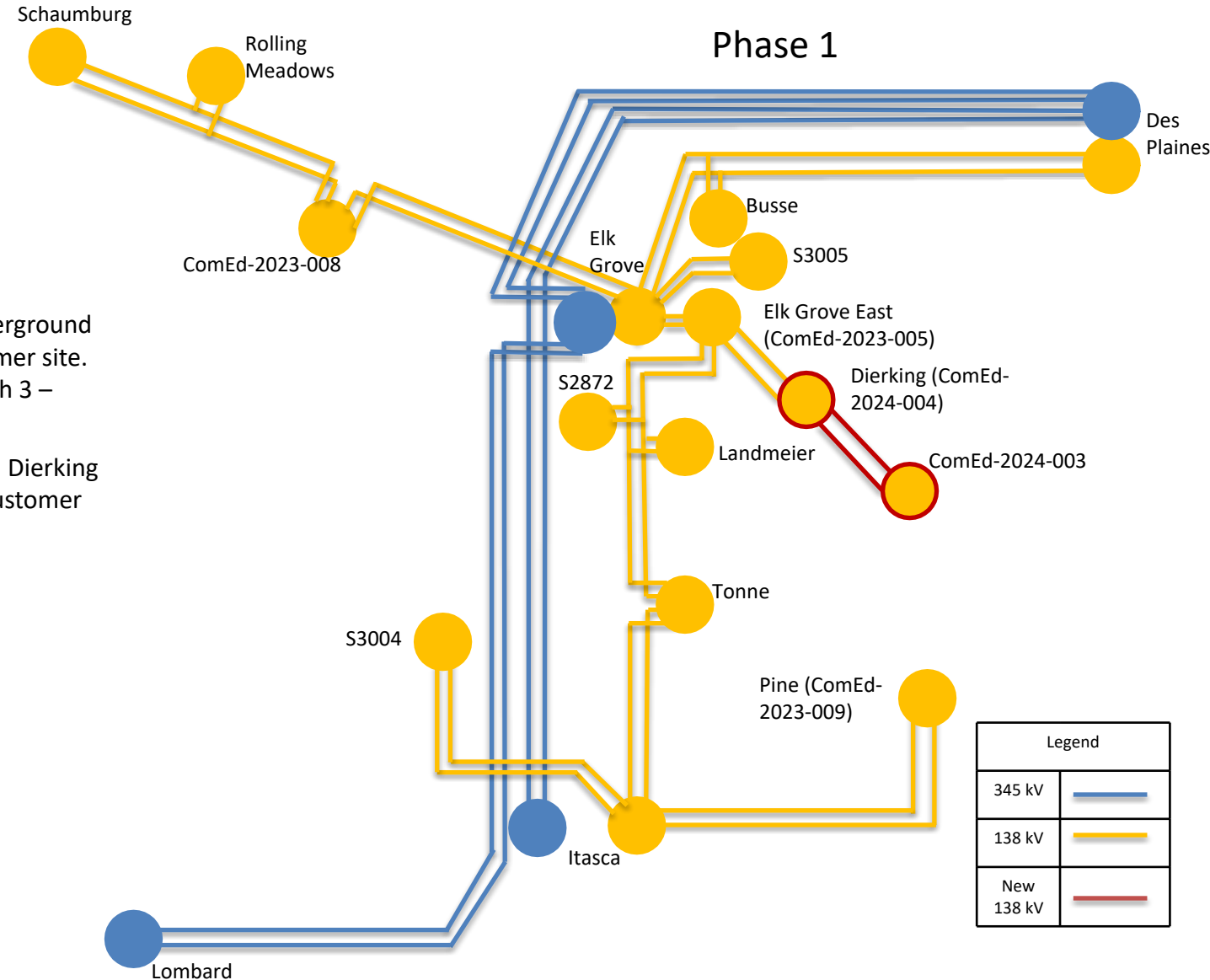
Proposed Solution:

Phase 1:

- New customer will be radially served by two new 1.7 mile 138 kV underground lines from ComEd Dierking substation (ComEd-2024-004) to the customer site. Customer substation will be a 11 CB, double ring bus configuration with 3 – 138/34 kV, 112 MVA transformers.
- Install 2 new 138kV CBs to the double ring bus configuration at ComEd Dierking substation (ComEd-2024-004) to connect the new radial lines to the customer substation

Facility	Old Ratings		New Ratings	
	SN/SE	WN/WE	SN/SE	WN/WE
Dierking – ComEd-2024-003 (Red)	-	-	280/280	280/280
Dierking – ComEd-2024-003 (Blue)	-	-	280/280	280/280

Estimated direct connect facilities transmission cost: \$121.4M



ComEd Transmission Zone M-3 Process Customer in Elk Grove

Need Number: ComEd-2024-003

Process Stage: Solutions Meeting 9/20/2024

Proposed Solution:

Phase 2:

- Install second 1600 XLPE cable per phase on two – 1.5 mile 138kV underground lines from ComEd Elk Grove East substation (ComEd -2023-005) to ComEd Dierking substation (ComEd-2024-004)
- Install second 1600 XLPE cable per phase on two – 3 mile 138kV underground lines from ComEd Itasca substation to ComEd Pine substation (ComEd-2023-009)
- Install two new 138kV CBs to the double ring bus configuration at ComEd Pine substation (ComEd-2023-009) to connect the new lines to the customer substation
- Install two new 3 mile 138 kV underground lines from ComEd Pine substation (ComEd-2023-009) to the customer site

Facility	Old Ratings		New Ratings	
	SN/SE	WN/WE	SN/SE	WN/WE
Pine – ComEd-2024-003 (Red)	-	-	280/280	280/280
Pine – ComEd-2024-003 (Blue)	-	-	280/280	280/280
Elk Grove East - Dierking (Red)	280/280	280/280	351/449	351/449
Elk Grove East - Dierking (Blue)	280/280	280/280	351/449	351/449
Itasca - Pine (Red)	280/280	280/280	351/449	351/449
Itasca - Pine (Blue)	280/280	280/280	351/449	351/449

Estimated direct connect facilities transmission cost: \$168.0M

Alternatives Considered:

- Install the direct customer facilities listed above and install new Elk Grove area substation with two autotransformers and new 345 kV lines from TSS 101 Itasca.

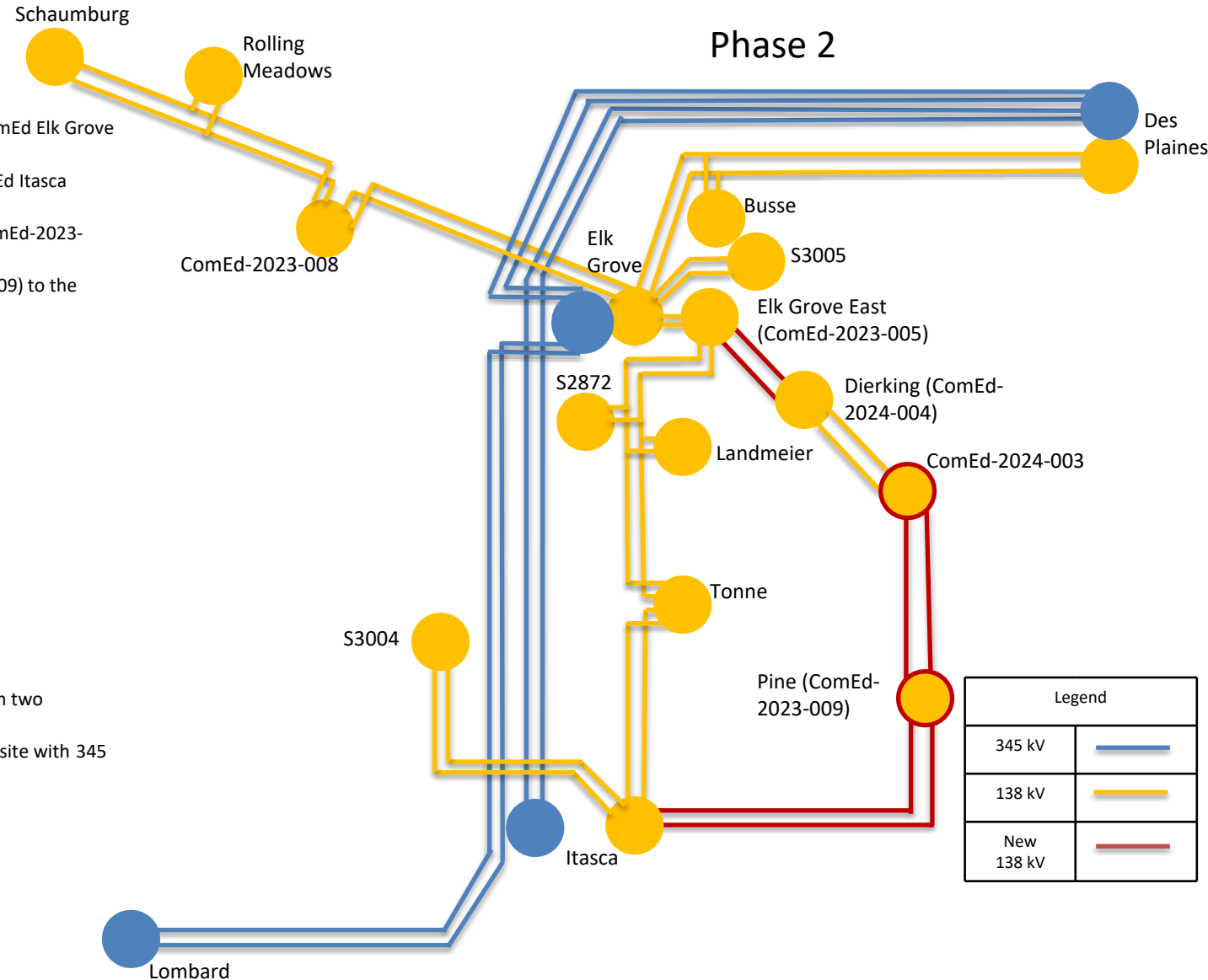
This alternative is not recommended since it is more disruptive to customers, requiring a greenfield site with 345 kV and 138 kV expansion. It would also be more time intensive and would not meet the need date.

Total Estimated Transmission Cost: \$289.4M

Projected In-Service: 12/31/2027 (Phase 1), 12/31/2028 (Phase 2)

Project Status: Conceptual

Model: 2028 RTEP



Legend	
345 kV	
138 kV	
New 138 kV	

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

9/10/2024 – V1 – Original version posted to pjm.com

9/18/2024 – V2 – Slides 4 and 5 updated to include additional rating information for the new lines.