



SRRTEP - Western Committee ComEd Supplemental Projects

September 19, 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-2025-019

Process Stage: Need Meeting 9/19/2025

Project Driver:

Operational Flexibility and Efficiency

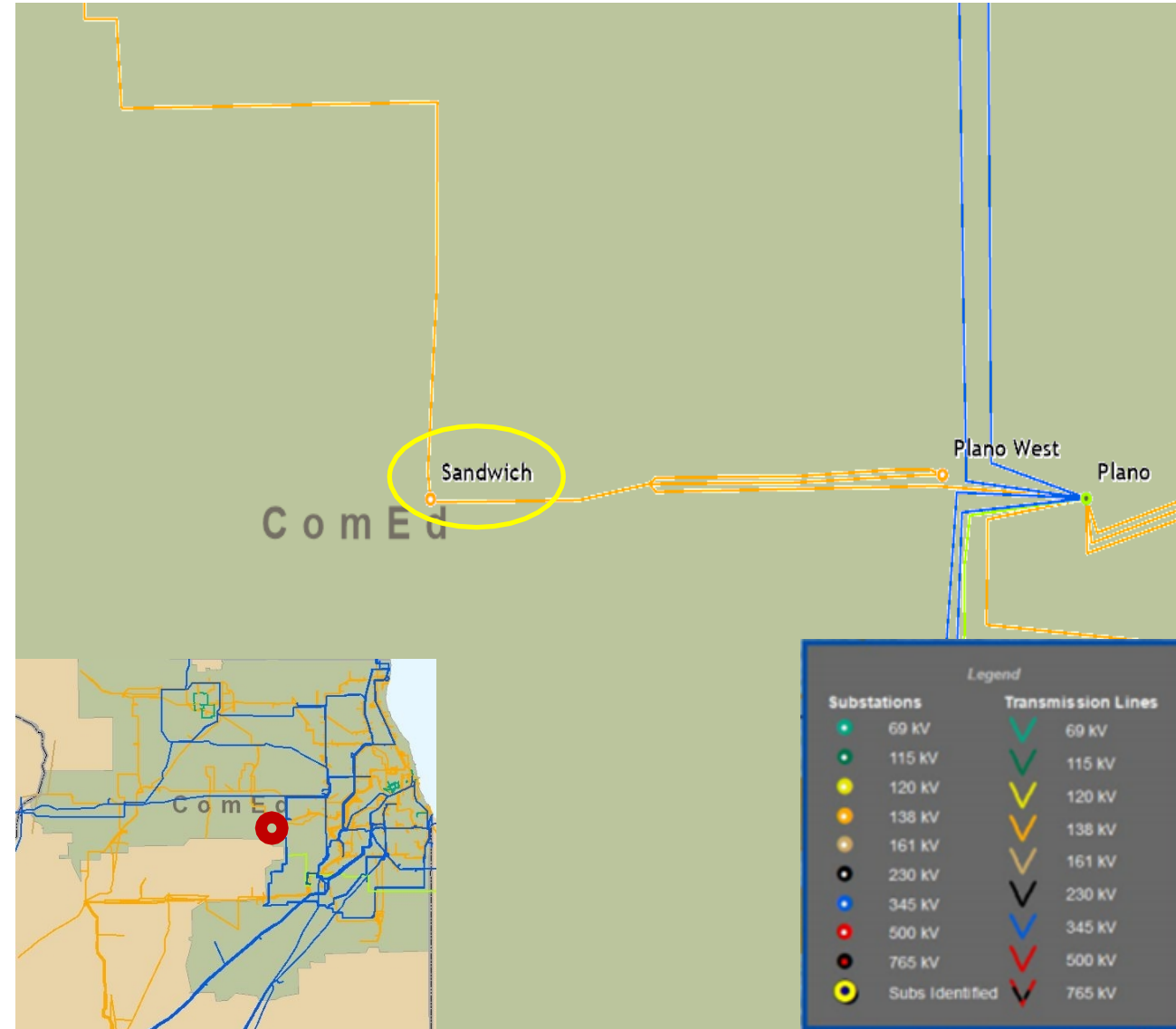
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

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

Problem Statement:

- Sandwich is currently a “Line Tie Breaker Substation” which has the two 138kV Lines feeding the station via taps on either side of the circuit breaker. The 138kV station layout includes two 138kV lines and two 138/34kV distribution TRs.
- An outage of the circuit breaker results in a complete outage of the station.



Need Number: ComEd-2025-020

Process Stage: Need Meeting 9/19/2025

Project Driver:

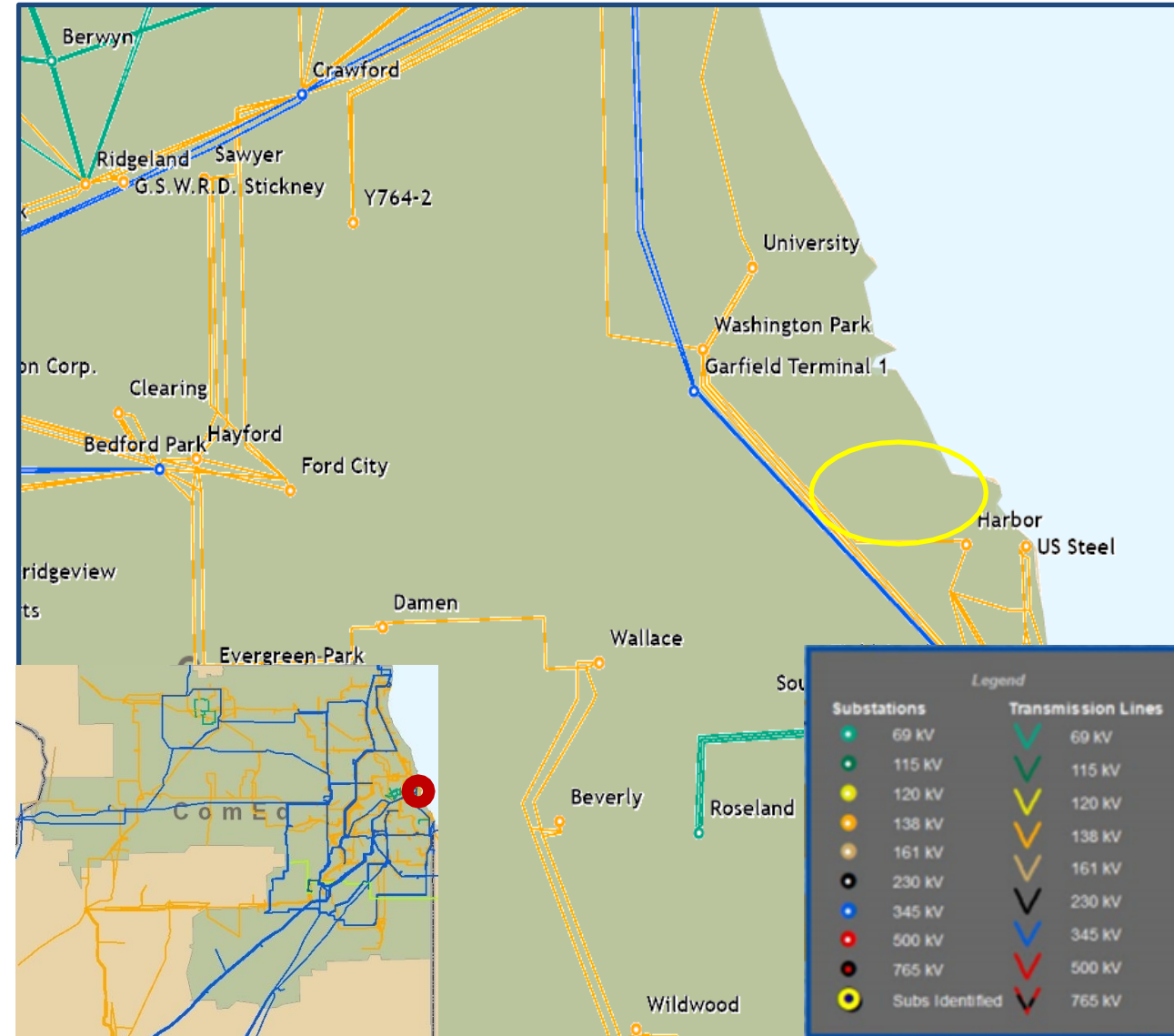
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Chicago area. Initial loading is expected to be 2.5 MW in June 2026, 179.4 MW in June 2029 with an ultimate load of 179.4 MW in 2029.



Need Number: ComEd-2025-021

Process Stage: Need Meeting 9/19/2025

Project Driver:

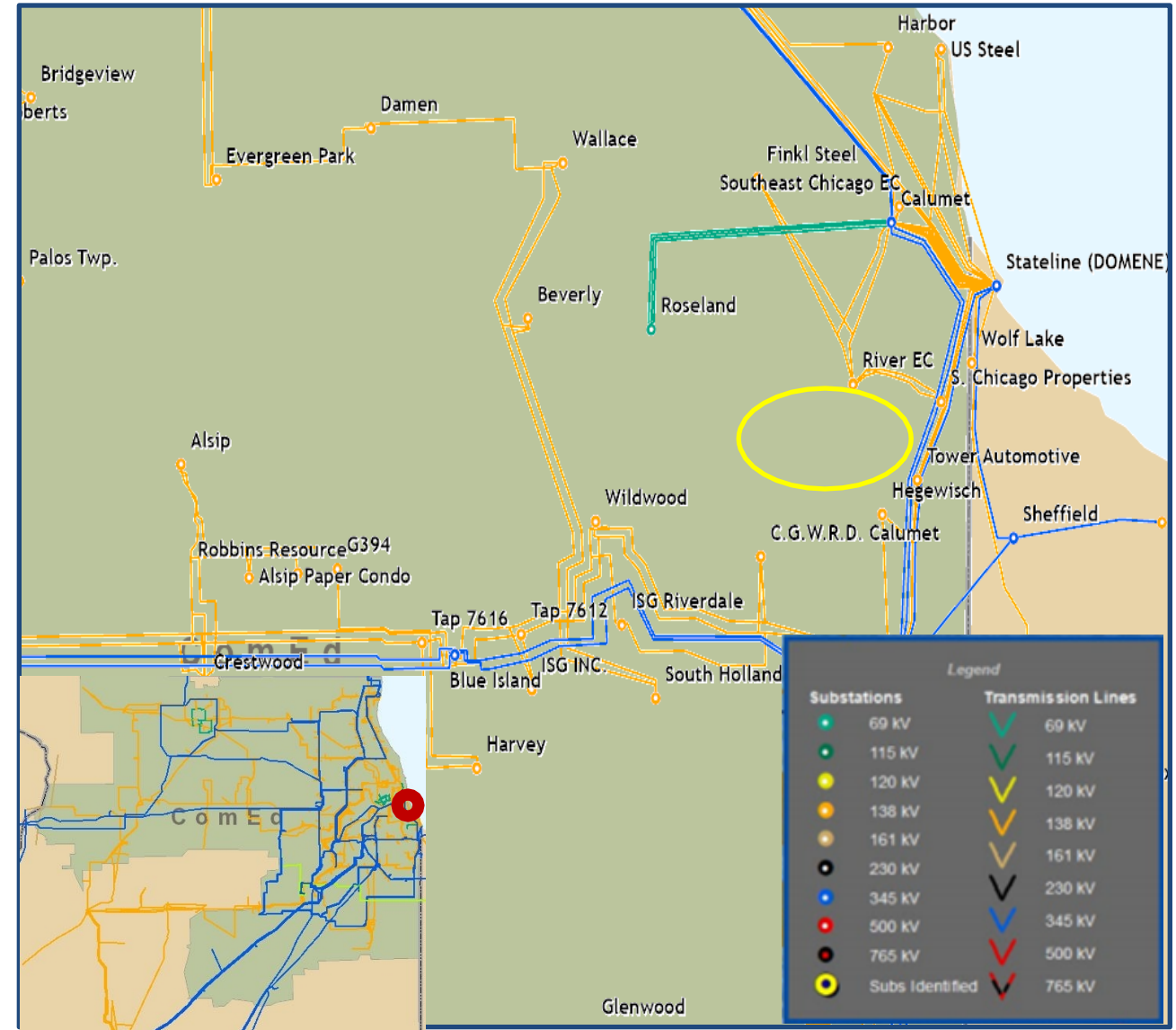
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Chicago area. Initial loading is expected to be 47.2 MW in June 2029 with an ultimate load of 300 MW in 2030.



Scope Change Update for s3584.1 and s3584.2

Supplemental Projects: s3584.1; s3584.2

Need Number: ComEd-2024-003

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, **56 MW in 2029**, with an ultimate load of 250 MW.

Project Driver: Customer Service

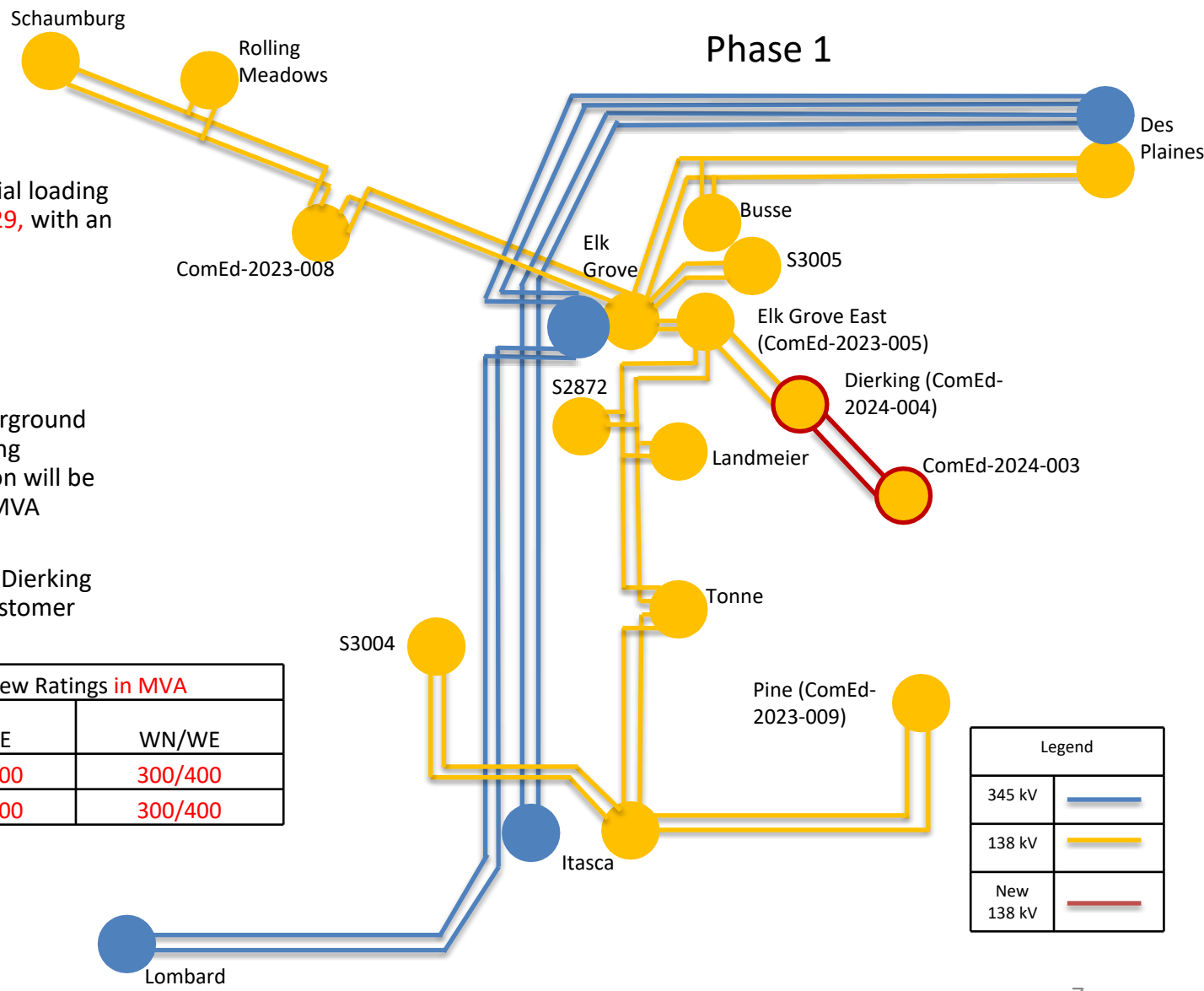
Selected Solution:

Phase 1: (s3584.1)

- New customer will be radially served by two new **1.5 mile** 138 kV underground lines **consisting of 2500mm² XLPE cables per phase** from ComEd Dierking substation (ComEd-2024-004) to the customer site. Customer substation will be a 11 CB, **138kV** 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 in MVA		New Ratings in MVA	
	SN/SE	WN/WE	SN/SE	WN/WE
Dierking – ComEd-2024-003 (Red)	-	-	300/400	300/400
Dierking – ComEd-2024-003 (Blue)	-	-	300/400	300/400

Estimated direct connect facilities transmission cost: \$ **\$125.2M**



ComEd Transmission Zone M-3 Process Customer in Elk Grove

Supplemental Projects: s3584.1; s3584.2

Need Number: ComEd-2024-003

Selected Solution:

Phase 2: (s3584.2)

- Install second **2500mm²** XLPE cable per phase on two – **1.8 mile** 138kV underground lines from ComEd Elk Grove East substation (ComEd -2023-005) to ComEd Dierking substation (ComEd-2024-004)
- Install second **2500mm²** XLPE cable per phase on two – **2.9 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 **2.7 mile** 138 kV underground lines from ComEd Pine substation (ComEd-2023-009) to the customer site

Facility	Old Ratings in MVA		New Ratings in MVA	
	SN/SE	WN/WE	SN/SE	WN/WE
Pine – ComEd-2024-003 (Red)	-	-	466/588	466/588
Pine – ComEd-2024-003 (Blue)	-	-	466/588	466/588
Elk Grove East - Dierking (Red)	280/280	280/280	466/588	466/588
Elk Grove East - Dierking (Blue)	280/280	280/280	466/588	466/588
Itasca - Pine (Red)	280/280	280/280	466/588	466/588
Itasca - Pine (Blue)	280/280	280/280	466/588	466/588

Estimated direct connect facilities transmission cost: **\$194.2M**

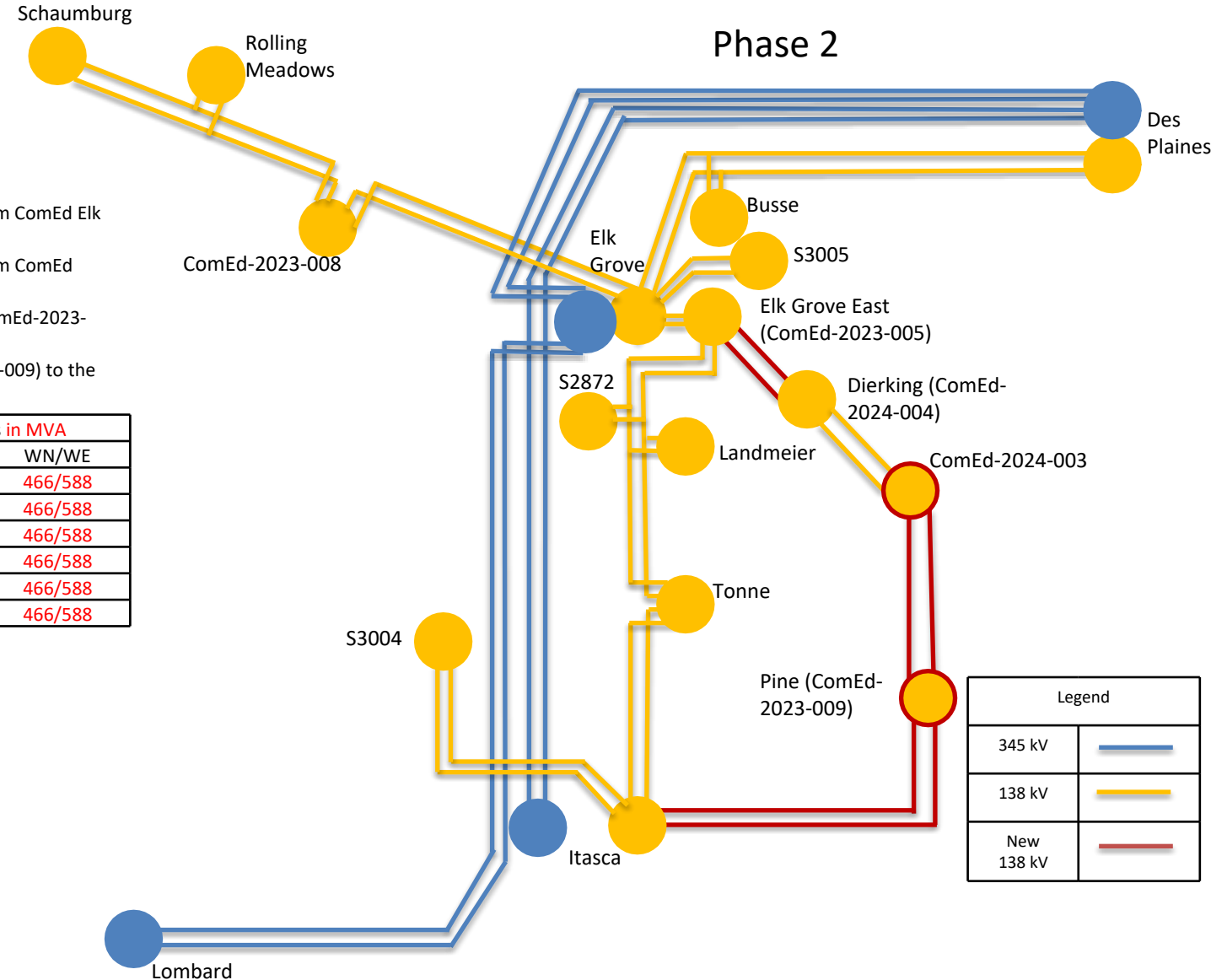
Total Estimated Transmission Cost: **\$319.4M**

Supplemental Project ID: s3584.1, s3584.2

Projected In-Service: 12/31/2027 (s3584.1), 12/31/2028 (s3584.2)

Project Status: Engineering

Model: 2029 RTEP



Scope Change Update for s3343.2

Supplemental Projects: s3343.1; s3343.2

Need Number: ComEd-2024-007

Problem Statement:

New customer is looking for transmission service in the Manteno area. Initial loading is expected to be 34 MW in 2024, 113 MW in 2028, with an ultimate load of 113 MW.

Selected Solution:

• **Phase 1**

- Tap existing 138 kV line 0901 and extend a new 1.1 mile line to a new 138/13.2 kV transformer by 12/2024.

Estimated Transmission Cost: \$0M

• **Phase 2**

- Cut into existing 138 kV 0901 line and extend a new 1.1 mile circuit to a new 138 kV breaker-and-a-half substation.
- New substation will have **twelve** 138 kV CBs and supply four 138/12.5 kV distribution transformers.

Estimated Transmission Cost: **\$62.4M**

Projected In-Service: (Phase 1) 12/31/2024 , (Phase 2) 12/31/2027

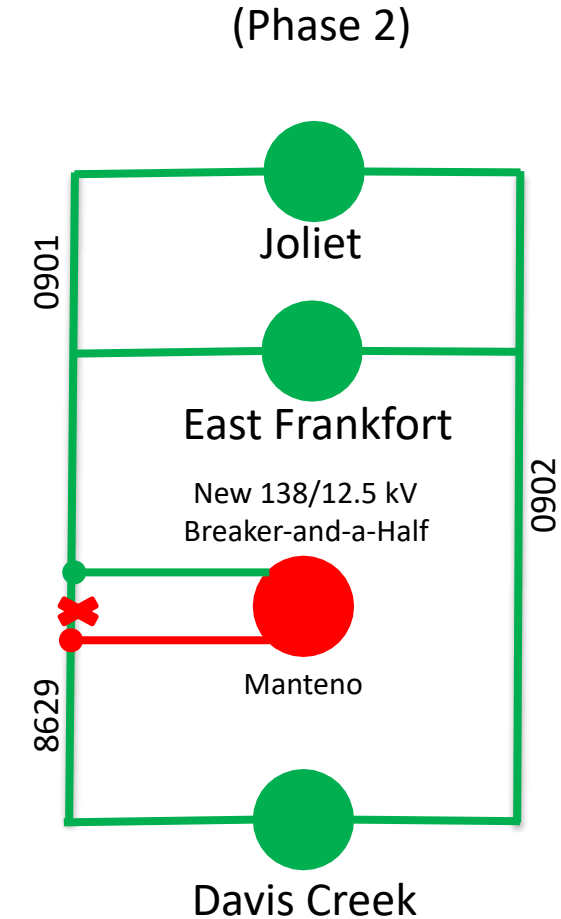
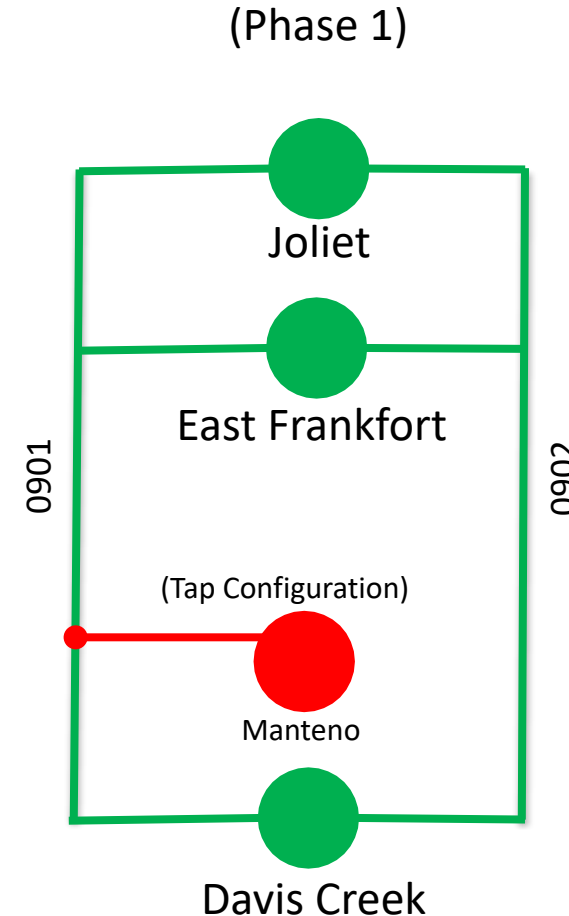
Supplemental Project ID: s3343.1, s3343.2

Project Status:

Phase 1: **In-Service**

Phase 2: **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

9/8/2025 – V1 – Original version posted to pjm.com