



SRRTEP - Western Committee ComEd Supplemental Projects

October 14, 2022

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-2022-004

Process Stage: Solutions Meeting 10/14/2022

Previously Presented: Need Meeting 8/19/2022

Project Driver:

Equipment Material Condition, Performance and Risk

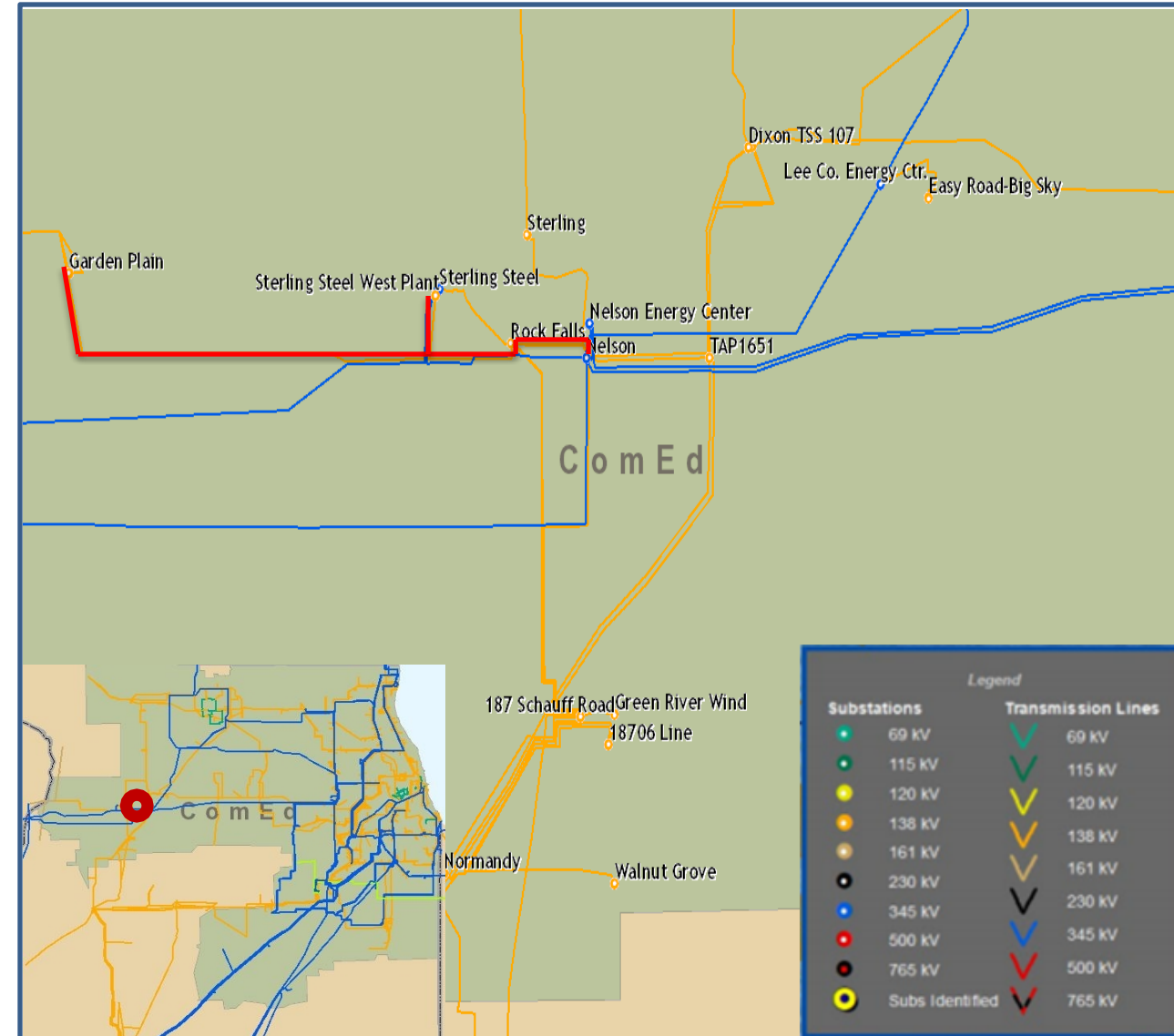
Operational Flexibility and Efficiency

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, etc.
- Enhancing system functionality, flexibility, visibility, or operability

Problem Statement: 138 kV L15518 is a three-terminal line between Rock Falls, Nelson, and Garden Plain.

- 202 structures built in 1965 with single wood poles are undersized by today's standards
- 104 structures built in 1951 are wood H-frame construction and are reaching end-of-life.
- In 2020 two different wind events caused failure of 11 wood pole structures. Another wood pole failed in the spring of 2022.
- An area of loose peat is causing existing structures to lean which require costly repairs.



Need Number: ComEd-2022-004

Process Stage: Solutions Meeting 10/14/2022

Proposed Solution:

Rebuild 23 miles of wood poles with 1113 kCMIL conductor on steel towers. Eliminate three terminal line by extending 1113 kCMIL conductor from Rock Falls to the structure going to Garden Plain.

Line Rating capability:

Description	Summer Normal	Summer Emergency	Winter Normal	Winter Emergency
Existing	114	182	172	202
Proposed	351	449	421	500

Estimated Cost: \$ 94M

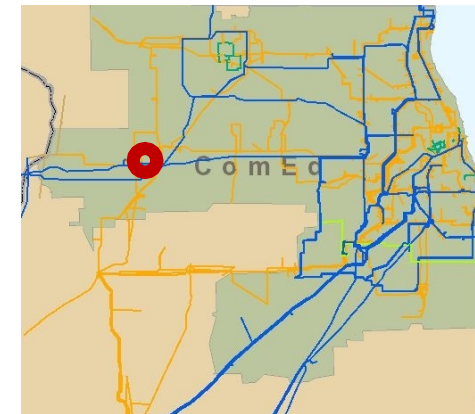
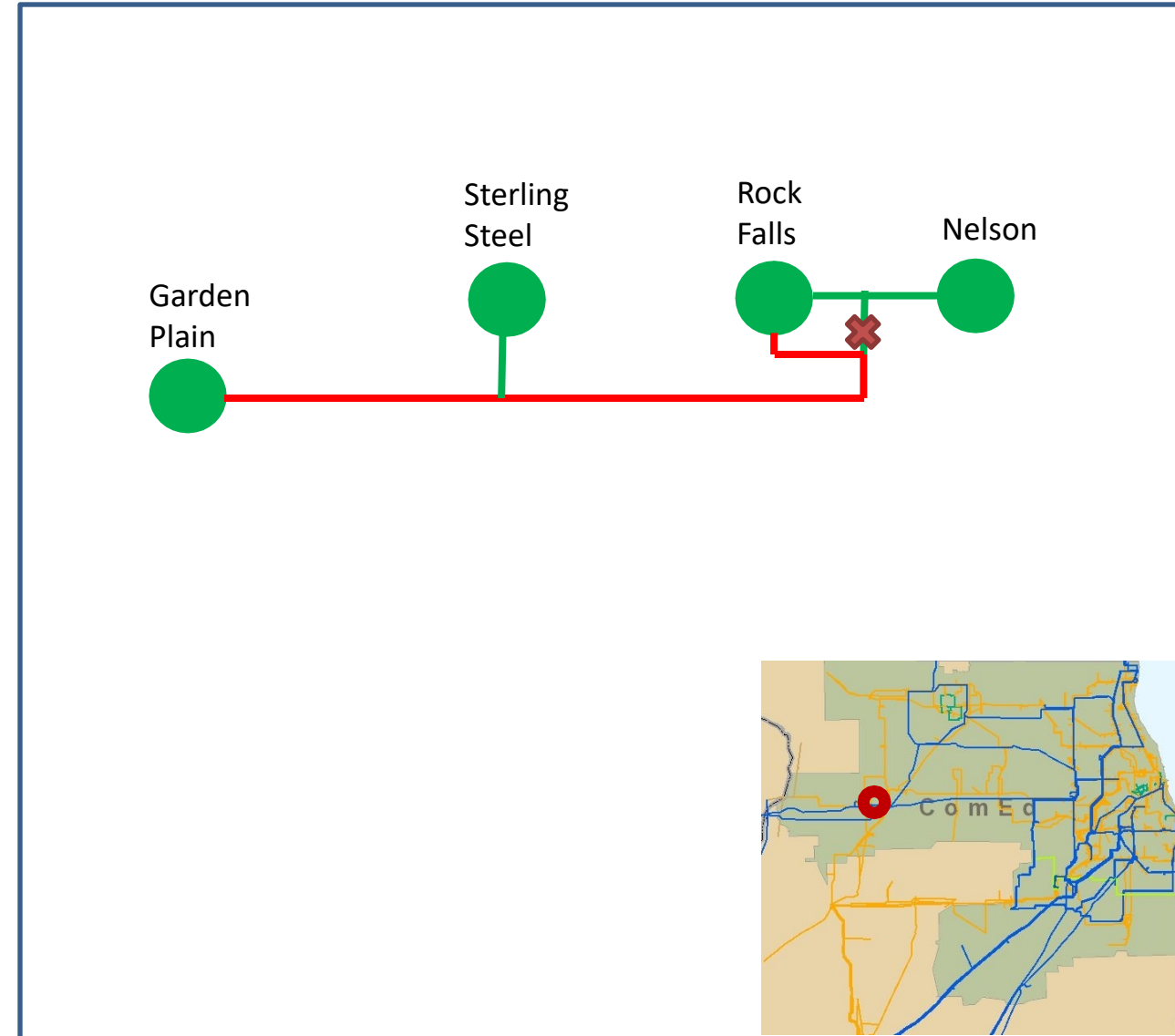
Alternatives Considered:

None

Projected In-Service: 12/31/2026

Project Status: Conceptual

Model: RTEP 2027



Need Number: ComEd-2022-005

Process Stage: Solutions Meeting 10/14/2022

Previously Presented: Need Meeting 8/19/2022

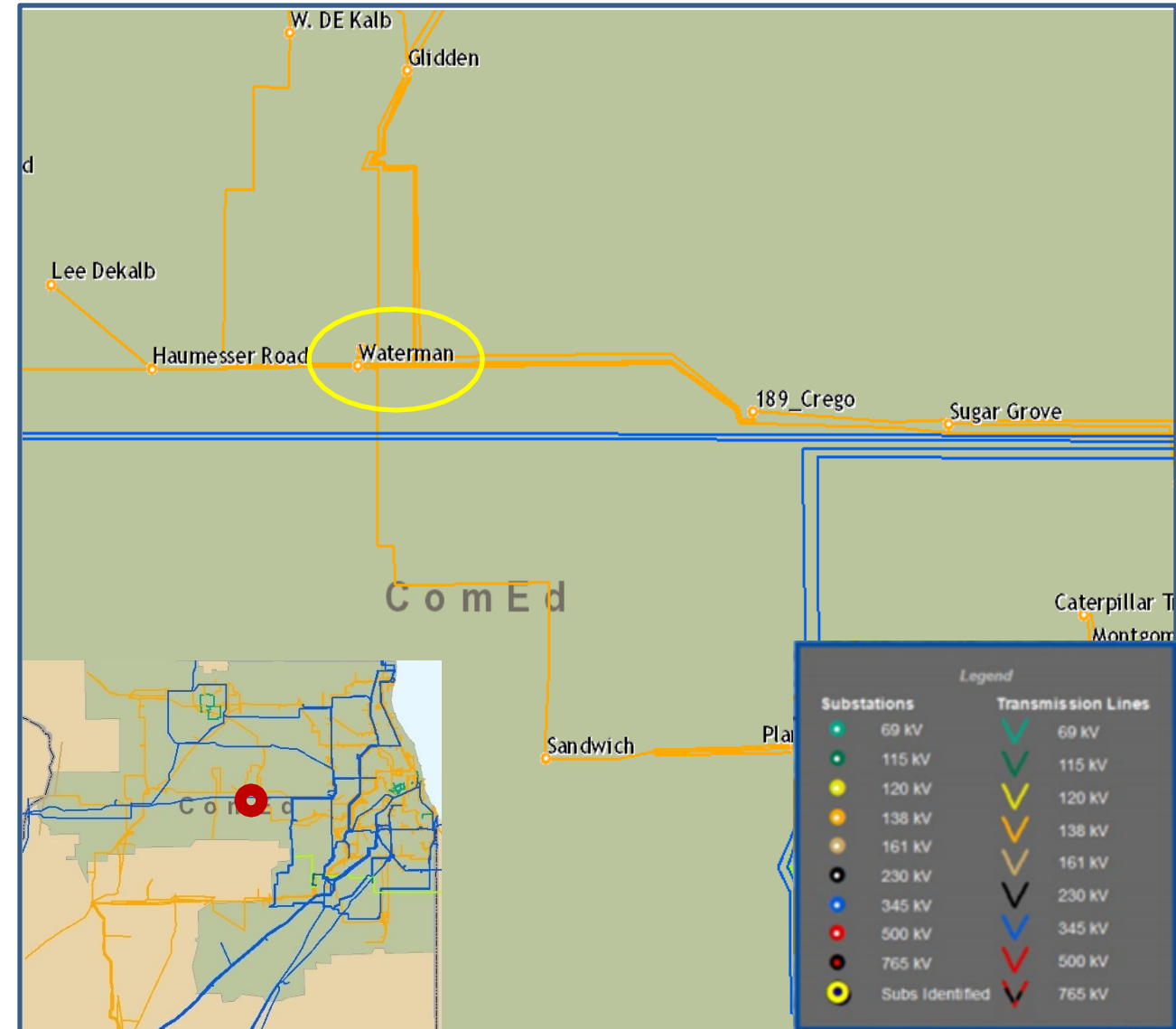
Project Driver:

Customer Service

Specific Assumption Reference:

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

Problem Statement: Distribution load is increasing by 18 MVA at Waterman by 12/31/2023.



Need Number: ComEd-2022-005

Process Stage: Solutions Meeting 10/14/2022

Proposed Solution:

Expand 138 kV bus at Waterman and install 138-34 kV 60 MVA transformer. Reconfigure 138 kV bus at Waterman and install 138 kV line CBs on Waterman to Crego 138 kV line and Waterman to Haumesser Road 138 kV line.

Estimated Transmission Cost: \$ 11.4 M

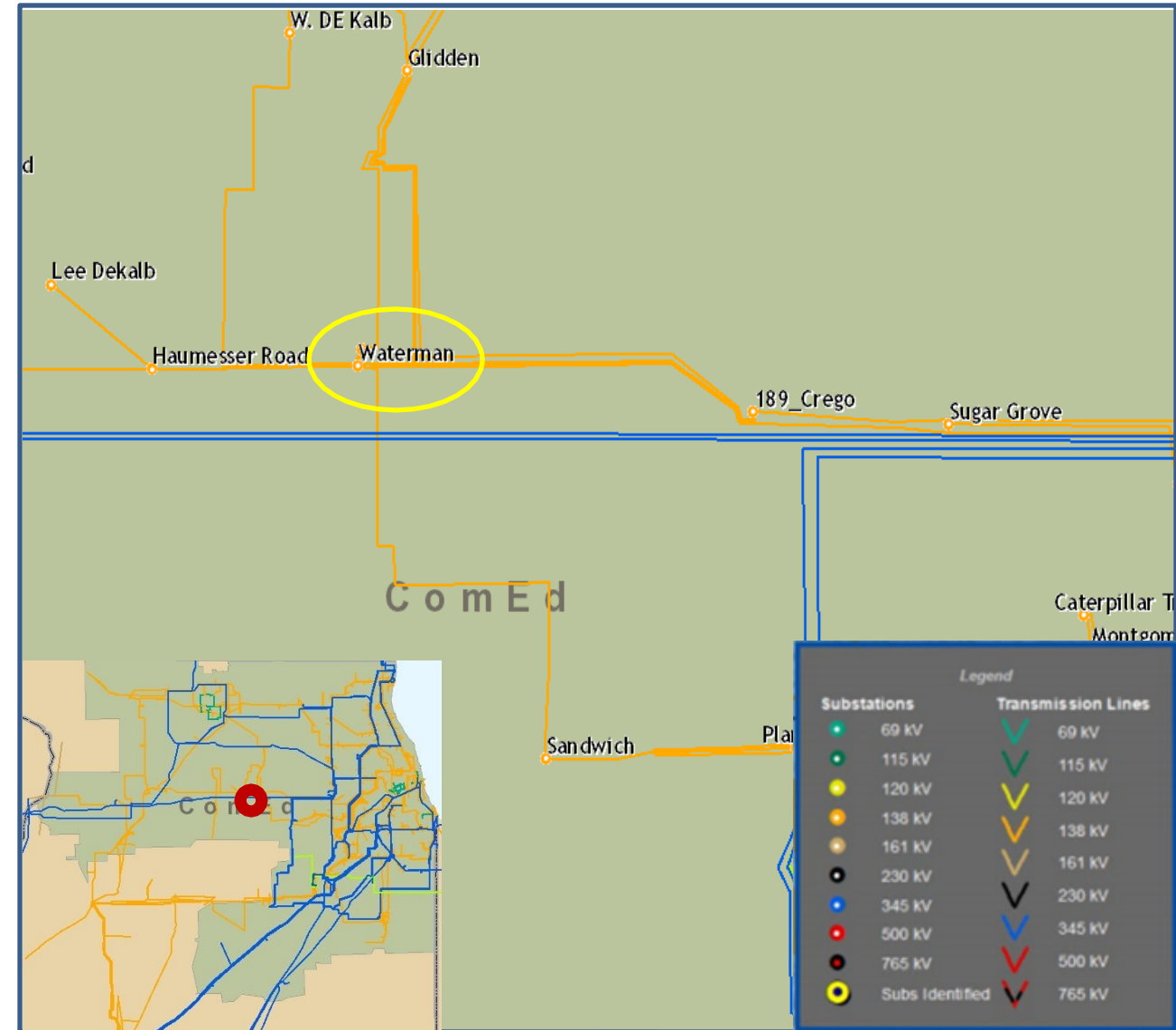
Alternatives Considered:

None

Projected In-Service: 12/31/2023

Project Status: Engineering

Model: RTEP 2027



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

10/4/2022 – V1 – Original version posted to pjm.com