

SRRTEP - Western Committee ComEd Supplemental Projects

April 16, 2021

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-2021-003

Process Stage: Need Meeting April 16, 2021

Project Driver:

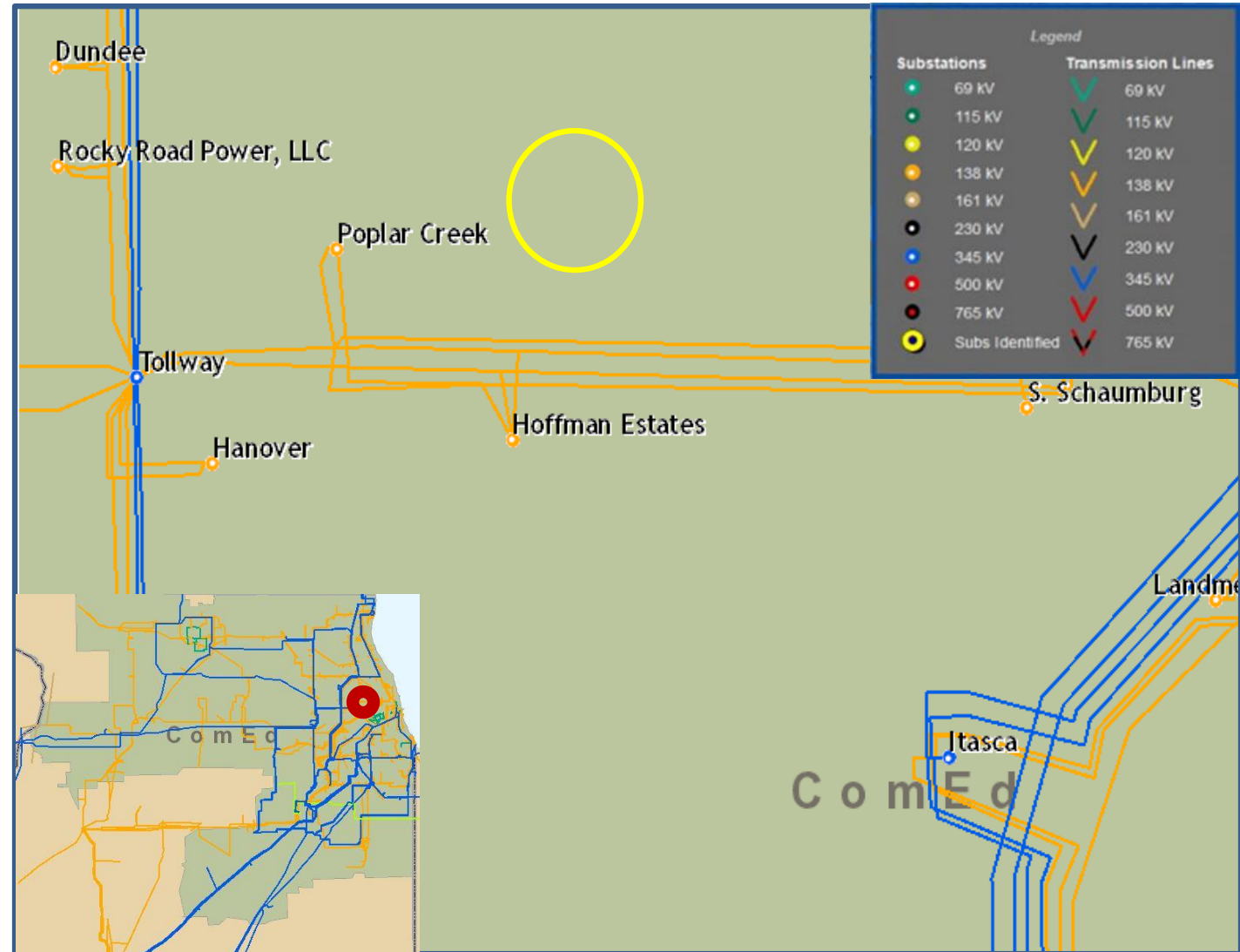
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in Hoffman Estates. Initial loading is expected to be 24 MW in June 2023 with an ultimate load of 96 MW by the end of 2027.



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-2021-001

Process Stage: Solutions Meeting April 16, 2021

Previously Presented: March 19, 2021

Project Driver:

Operational Flexibility and Efficiency

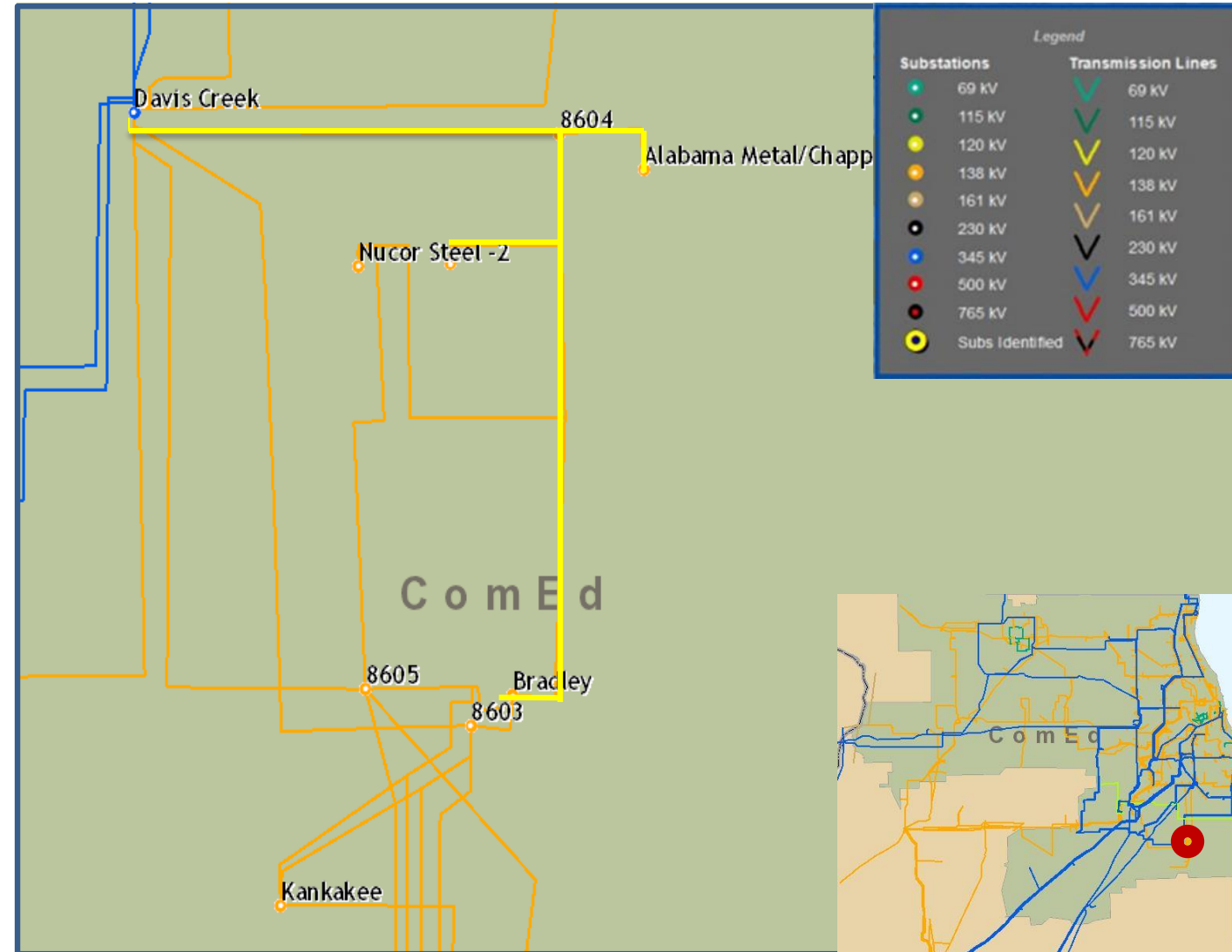
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

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

Problem Statement:

- 138 kV line 8604 is currently normally open at Bradley
- The Bradley / Kankakee area serves 335 MW of load from two lines
- Line 8604 has 3.5 miles of 40 year old 636 kCMIL ACSR conductor on 80 year old wood H-frames.
 - Wood poles, crossarms, braces, and insulators are nearing the end of their useful life



Need Number: ComEd-2021-001

Process Stage: Solutions Meeting March 19, 2021

Proposed Solution:

- Rebuild 3.5 miles of line 8604 on steel poles with 1113 kcmil ACSR conductor
- Normally close 138 kV line 8604 CB at Bradley
- Replace two over dutied 138 kV CBs at Bradley
 - CBs are 64 years old and obsolete

Ratings:

- Old: 249/317 New: 351/449 MVA SN/SLTE
- Old: 21 kA New: 63 kA

Estimated cost: \$20M

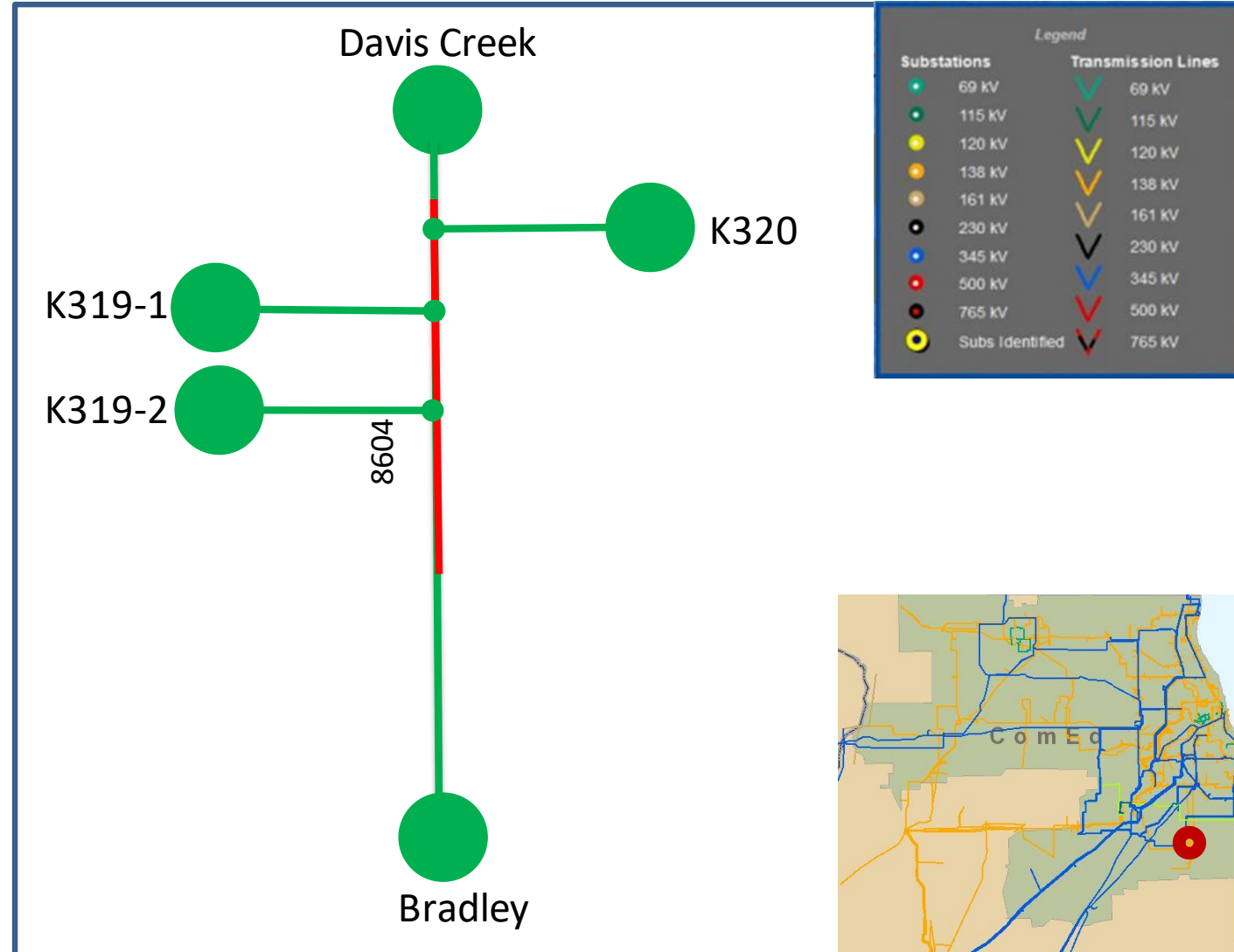
Alternatives Considered:

1. Do nothing – Operational and material condition concerns remain

Projected In-Service: 12/31/23

Project Status: Conceptual

Model: 2025 RTEP



Need Number: ComEd-2021-002

Process Stage: Solutions Meeting April 16, 2021

Previously Presented: March 19, 2021

Project Driver:

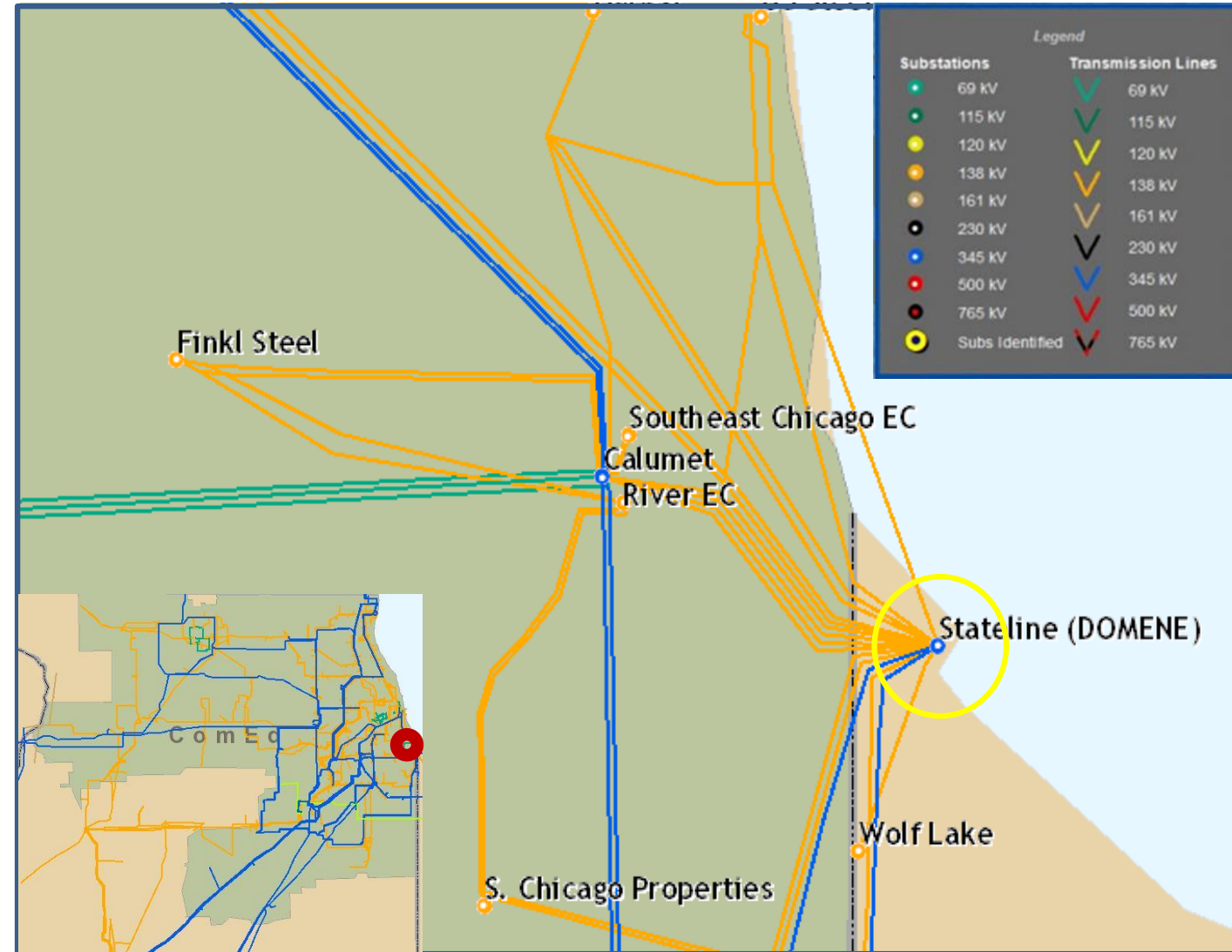
Operational Flexibility and Efficiency

Specific Assumption Reference:

- Enhancing system functionality, flexibility, visibility, or operability
- Internal and/or regulatory recommended design guidelines or standards

Problem Statement:

- 138 kV line 0708 is directly connected to center bus at State Line substation without a circuit breaker.
- A fault on line 0708 separates the 2 other 138 kV buses.



Need Number: ComEd-2021-002

Process Stage: Solutions Meeting April 16, 2021

Proposed Solution:

- Install 138 kV CB on line 0708

Estimated cost: \$2.6M

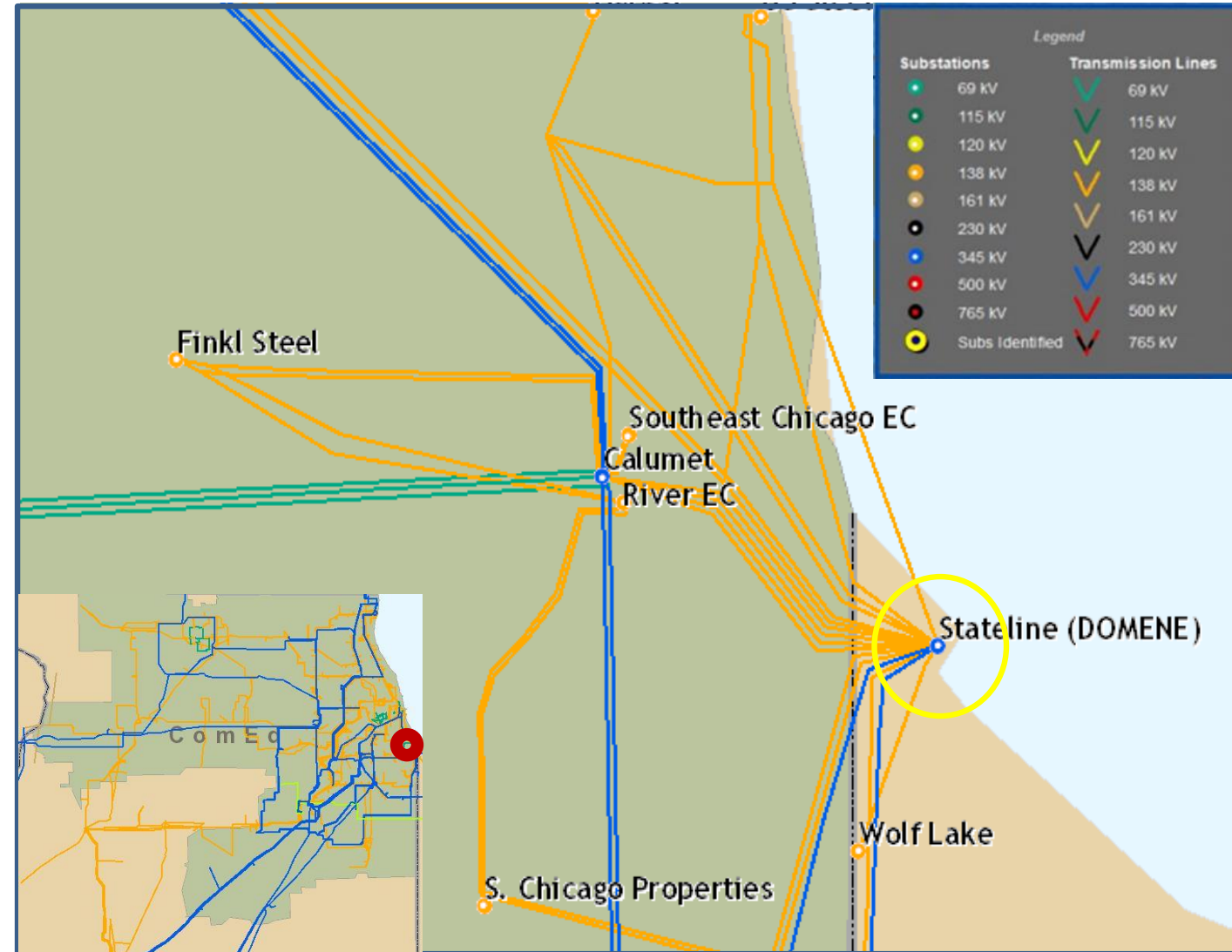
Alternatives Considered:

1. Do nothing – operational issue remains

Projected In-Service: 12/31/22

Project Status: Conceptual

Model: 2025 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

4/06/2021 – V1 – Original version posted to pjm.com