



SRRTEP - Western Committee ComEd Supplemental Projects

March 15, 2024

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-2024-008

Process Stage:

Need Meeting 3/15/2024

Project Driver:

Operational Flexibility and Efficiency

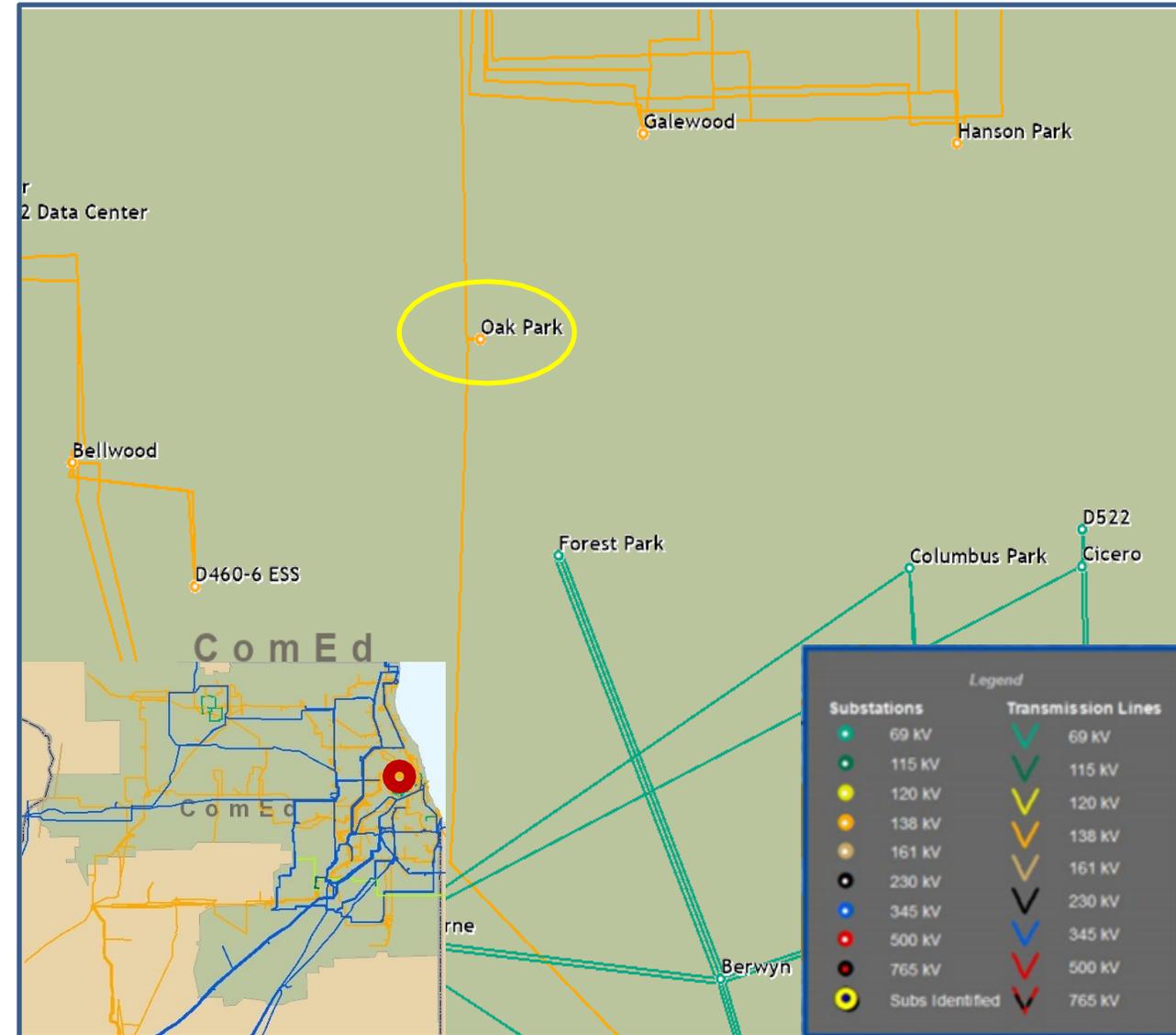
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

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

Problem Statement:

- Oak Park substation is currently a straight bus with a single 138 kV CB connecting two 138 kV lines and three 138/12 kV distribution transformers feeding 80 MW of load. A failure of the 138 kV CB would outage the entire station.
- The 138 kV CB is 53 years old, is in deteriorating condition, and has a lack of replacement parts.



Need Number: ComEd-2024-009

Process Stage:

Need Meeting 3/15/2024

Project Driver:

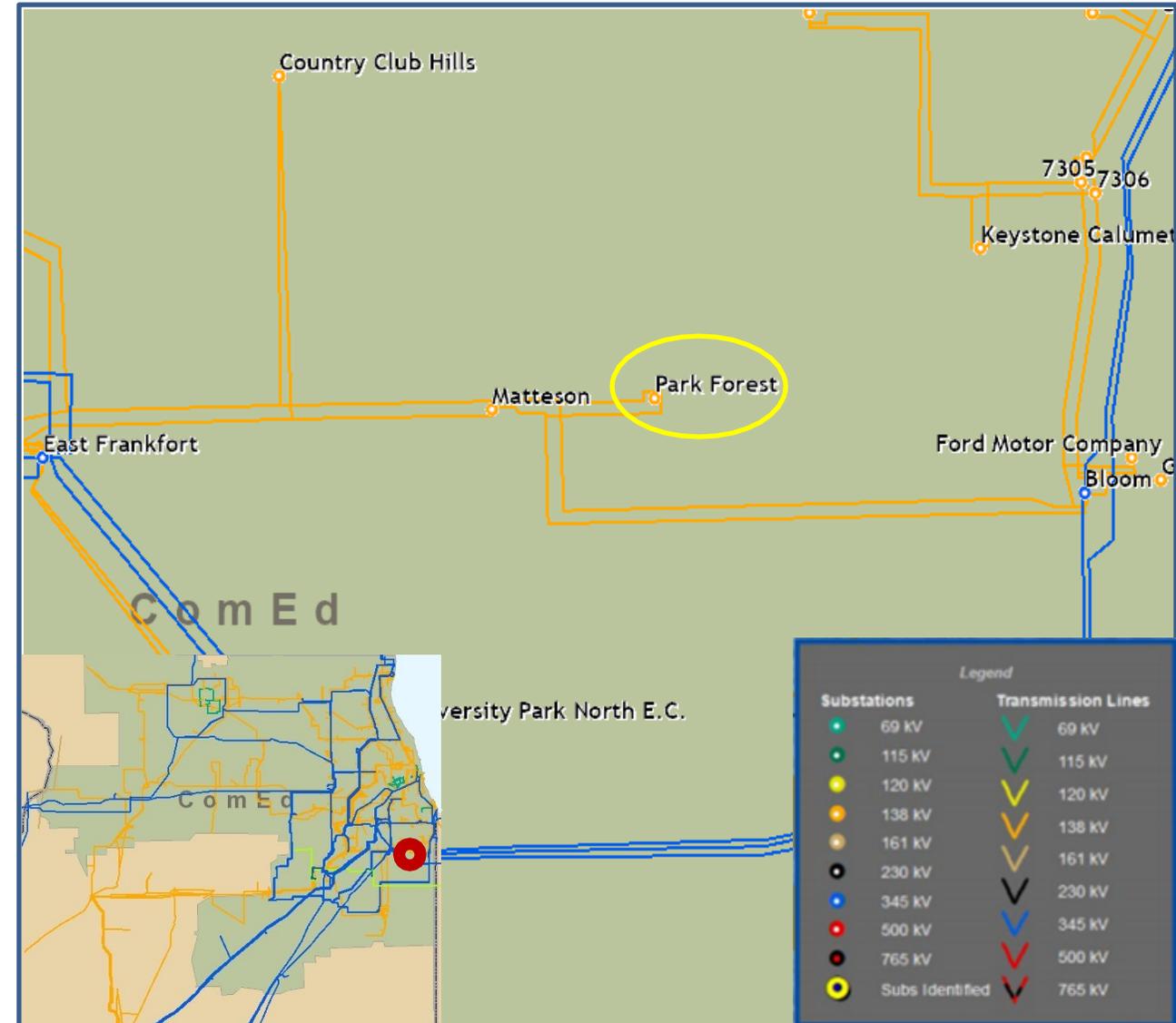
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions

Problem Statement:

- 138 kV line 17904 disconnect at TDC 457 Park Forest is 54 years old and is in deteriorating condition with lack of replacement parts.
- This switch has had a history of hot spots, and repairs are no longer possible.



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-2024-005

Process Stage:

Solution Meeting 3/15/2024

Previously Presented:

Need Meeting 1/19/2024

Project Driver:

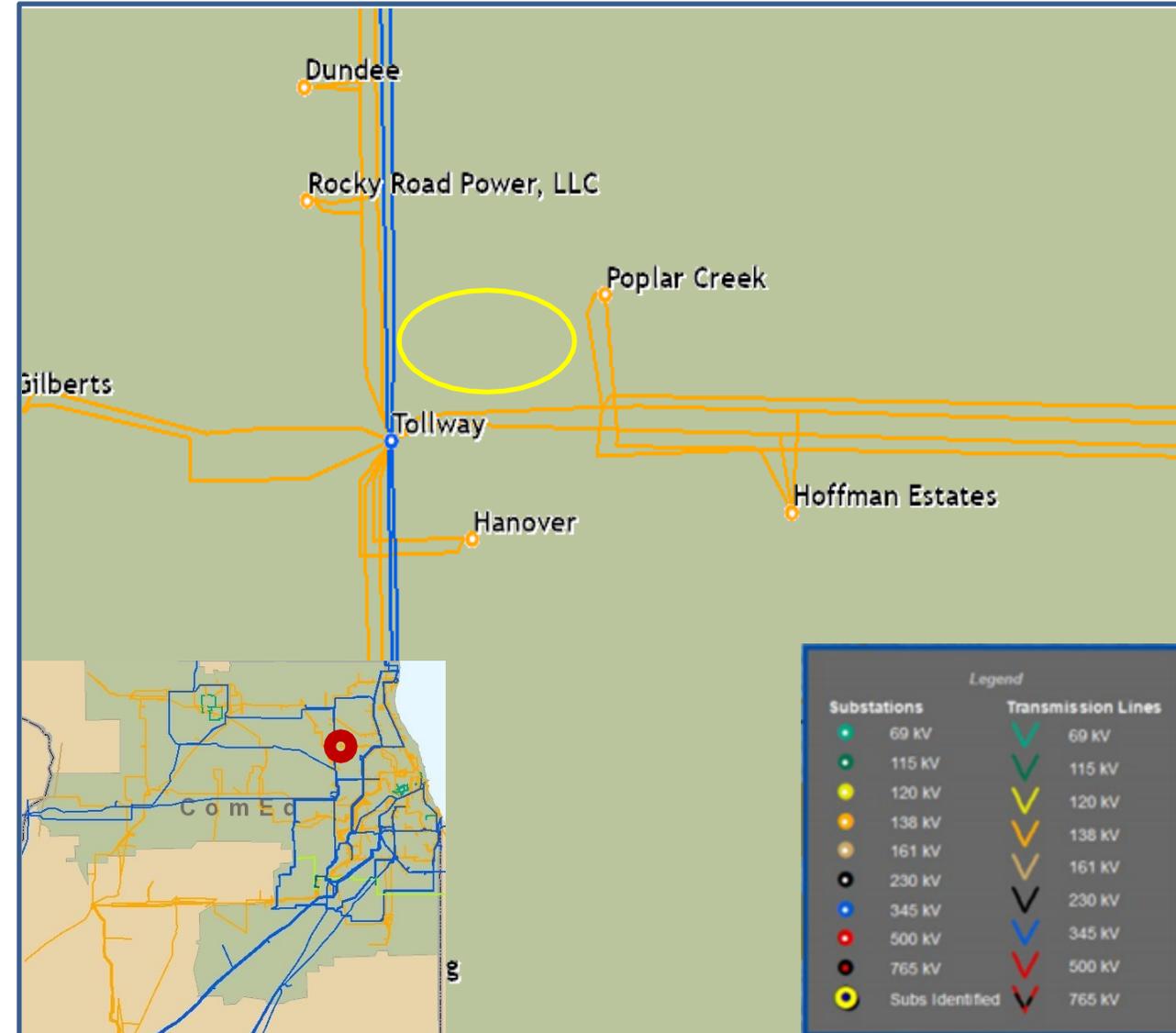
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Hoffman Estates area. Initial loading is expected to be 17 MW in June 2026, 222 MW in 2028, with an ultimate load of 324 MW.



Need Number: ComEd-2024-005

Process Stage: Solution Meeting 3/15/2024

Proposed Solution:

- New customer will be radially served by two new 2.5 mile 138 kV lines from Tollway substation to the customer site. Customer substation will be double ring bus configuration with 4 – 138 kV to 34 kV transformers. At Tollway, replace 138 kV BT 2-3 CB with two 138kV BT CBs.

Estimated transmission cost: \$3M

Alternatives Considered:

- Cut into 138 kV lines Tollway – Dundee. Extend four 138 kV lines 1 mile to customer location to connect to new double ring bus substation. This alternative was not selected due to higher cost.

Estimated transmission cost: \$50M

Projected In-Service: 12/31/26

Project Status: Conceptual

Model: 2028 RTEP



Need Number: ComEd-2024-007

Process Stage:

Solution Meeting 3/15/2024

Previously Presented:

Need Meeting 2/16/2024

Project Driver:

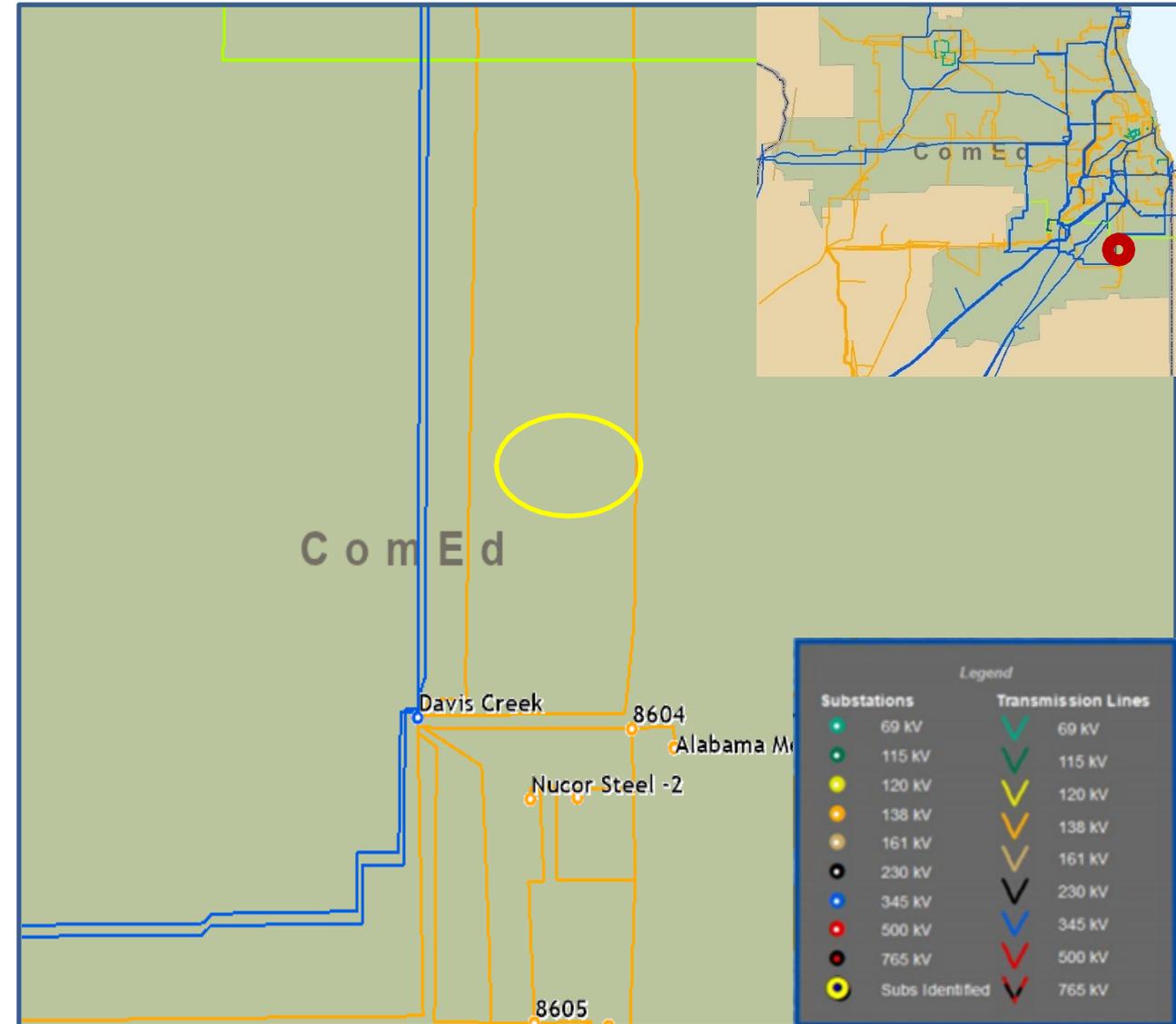
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

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



Need Number: ComEd-2024-007

Process Stage: Solution Meeting 3/15/2024

Proposed 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 and 0902 lines and extend two 1.1 mile circuits and two 0.7 mile circuits to a new 138 kV breaker-and-a-half substation.
- New substation will have eleven 138 kV CBs and supply four 138/12.5 kV distribution transformers.

Estimated Transmission Cost: \$64M

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

Alternatives Considered:

- No feasible alternatives

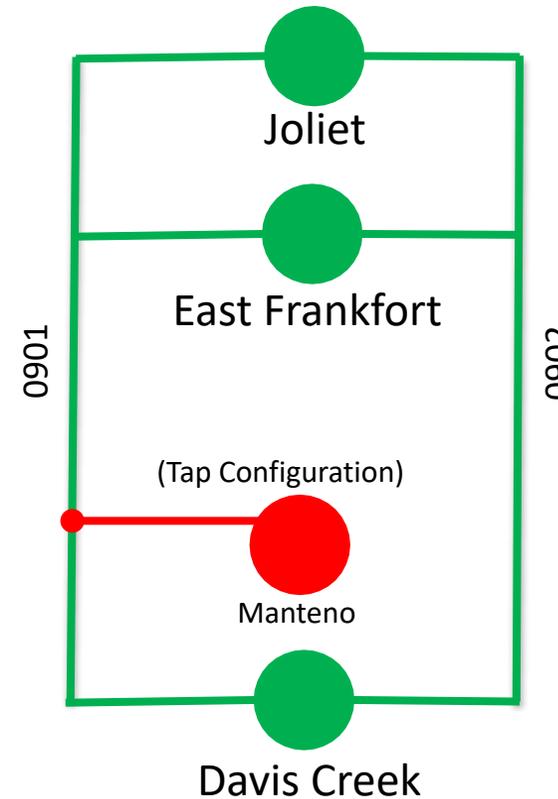
Project Status:

Phase 1: Engineering

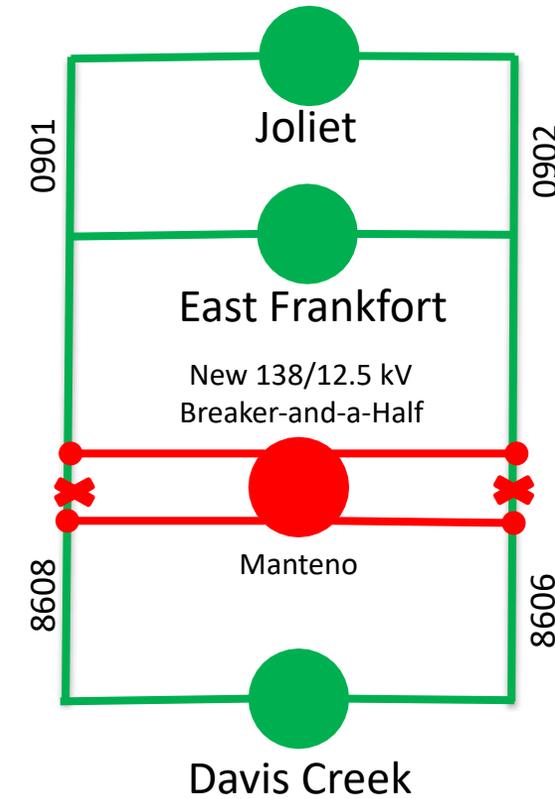
Phase 2: Conceptual

Model: 2028 RTEP

(Phase 1)



(Phase 2)



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

3/1/2023 – V1 – Original version posted to pjm.com