

TEAC Committee ComEd Supplemental Projects

November 2, 2021

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-2021-005

Process Stage: Solution Meeting November 2, 2021

Previously Presented: Need Meeting October 5, 2021

Project Driver:

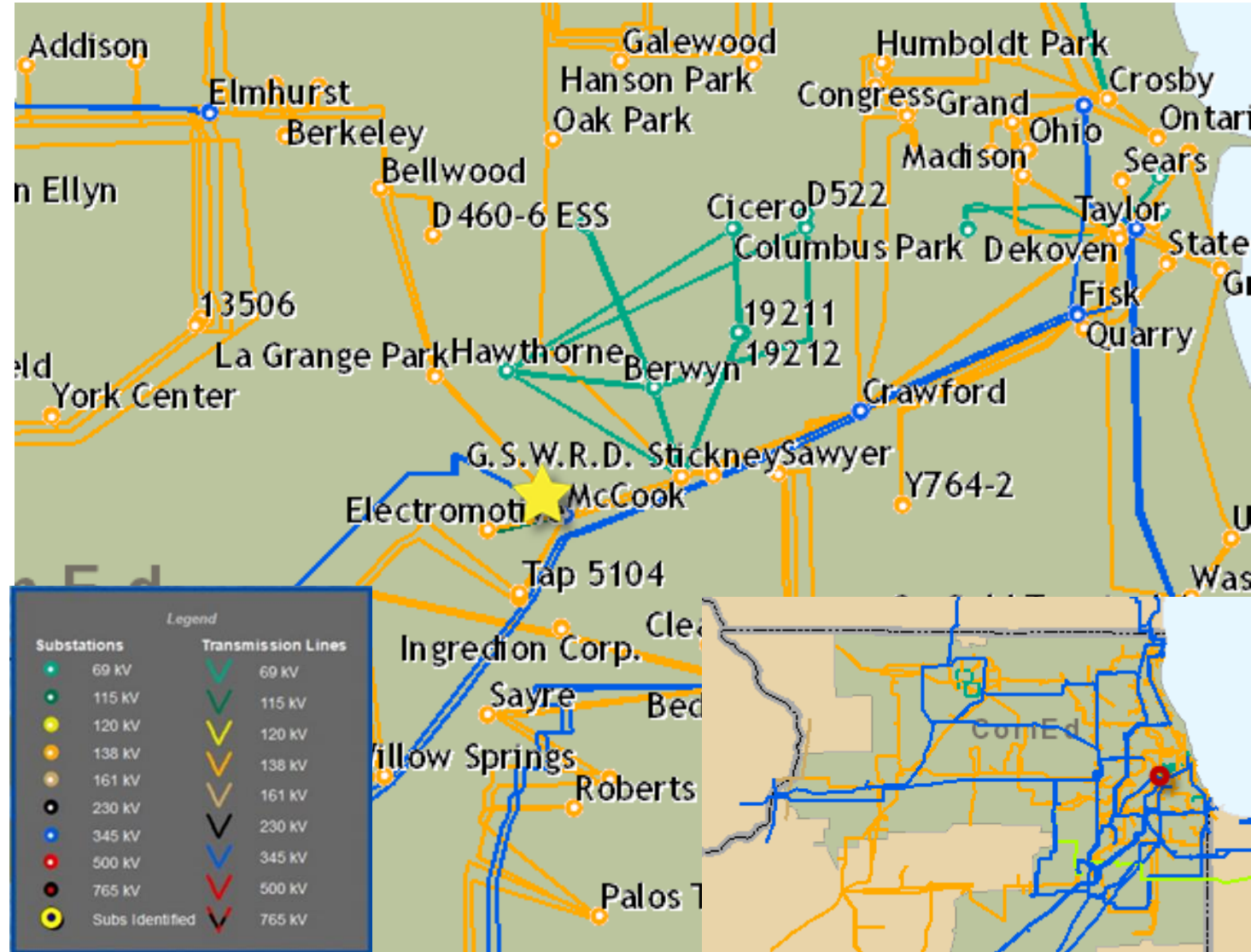
- Operational Flexibility and Efficiency
- Equipment Material Condition, Performance and Risk
- Customer Service

Specific Assumption References:

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

Problem Statement:

- The two existing autotransformers at McCook are among the most heavily loaded on the ComEd system and have been loaded above the load cycling threshold 28 times in the last 6 years which reduces the overall life expectancy of these units
- TR 84 autotransformer is 55 years old with insulation at end of expected design life. The transformer internal blocking was found loose and retightened in 2005. After reblocking, the transformer is only capable of achieving pressures of 60% of original factory requirements.
- Data Center loading has increased in the area in recent years and is expected to continue.



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Process Stage: Solutions Meeting November 2, 2021

Proposed Solution:

- Install 2 new autotransformers
- Replace reblocked TR 84
- Reconductor 2 miles out of 2.5 miles on 138 kV McCook - Ridgeland to obtain a minimum rating of 351/449/459/498 MVA (SN/SLTE/SSTE/SLD)

Estimated transmission cost: \$36M

Alternatives Considered:

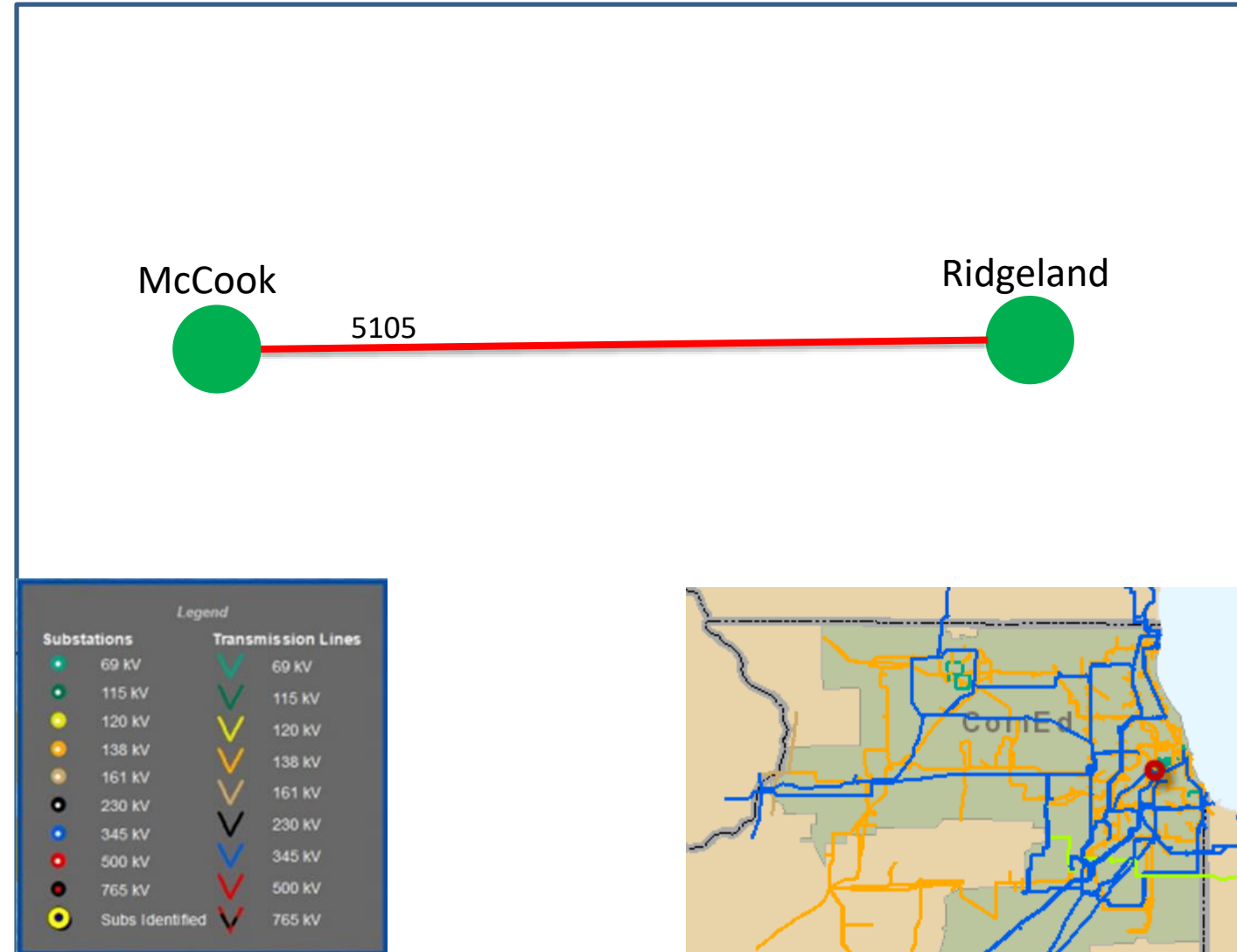
Do Nothing

- Load cycling on transformers still an issue
- Increased risk from aging equipment

Projected In-Service: 12/31/25

Project Status: Conceptual

Model: 2026 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

10/22/2021– V1 – Original version posted to pjm.com