

TEAC - Western Committee ComEd Supplemental Projects

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



ComEd Transmission Zone M-3 Process Skokie 345/138 kV Transformer 82

Need Number: ComEd-2024-021

Process Stage: Solution Meeting 8/5/2025

Previously Presented: Need Meeting 9/13/2024

Project Driver:

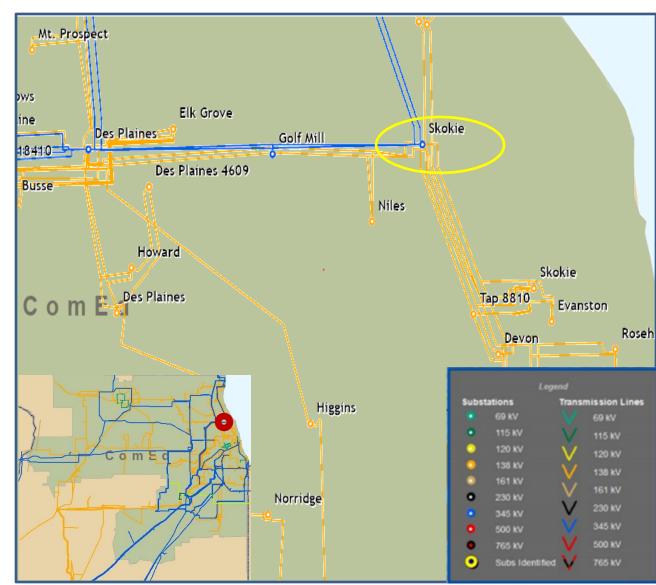
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

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

Problem Statement:

- 345/138 kV autotransformer 82 at Skokie was installed in 1975.
- Acoustics test results showed sharp increases in sonic and ultrasonic levels and increases in vibration levels associated with the looseness of the core/coil assembly
- Autotransformer cannot be re-blocked.
- 138 kV Transformer 82 oil circuit breaker was installed in 1974. It is in deteriorating condition, has a lack of replacement parts, and has elevated maintenance costs.





ComEd Transmission Zone M-3 Process Skokie 345/138 kV Transformer 82

Need Number: ComEd-2024-021

Process Stage: Need Meeting 8/5/2025

Proposed Solution:

Phase 1:

Install a new 138 kV, 115.2 MVAR capacitor bank on 138 kV bus 1 at Skokie.

Phase 2:

Remove tertiary 34 kV capacitor bank on 345/138 kV autotransformer 82. Replace 345/138 kV autotransformer 82 with a new 420 MVA 345/138 kV transformer. Replace 138 kV TR 82 oil circuit breaker with a 3000 A, 63kA SF6 circuit breaker.

| Existing ratings (MVA) | SN/SE | WN/WE |
|-------------------------|---------|---------|
| Skokie 345/138 kV TR 82 | 400/465 | 400/465 |
| New Ratings (MVA) | SN/SE | WN/WE |
| Skokie 345/138 kV TR 82 | 420/480 | 420/480 |

Estimated cost: Phase 1: \$ 9.04 M Phase 2: \$ 15.36 M

Alternatives Considered:

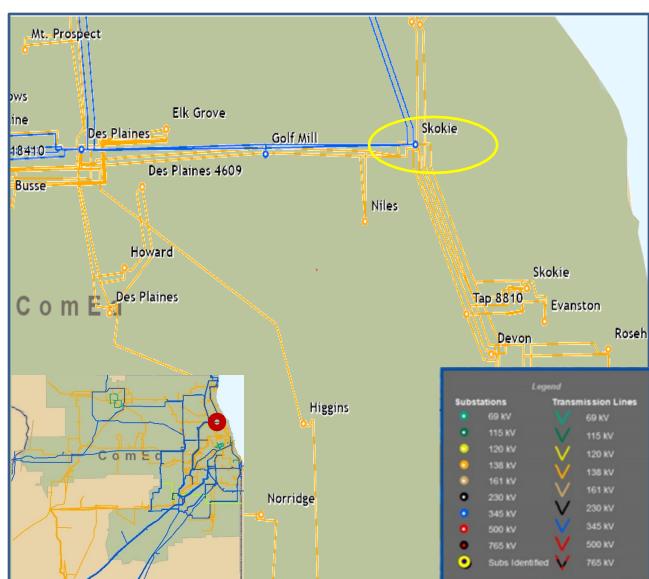
No feasible alternatives available

Projected In-Service:

Phase 1: 12/31/2026, Phase 2: 12/31/2028

Project Status: Engineering

Model: 2029 RTEP



Appendix

High Level M-3 Meeting Schedule

| 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

7/25/2024 – V1 – Original version posted to pjm.com