

TEAC Committee ComEd Supplemental Projects

July 7, 2026

Need Number	TO	Area	Needs Meeting	Solutions Meeting	Project Name	Project Description	TO Notes
ComEd-2024-016	ComEd	PJM West	08/06/2024	09/09/2025	Customer in Hoffman Estates	A new customer is looking for transmission service in the Hoffman Estates area. Initial loading is expected to be 225 MW in September 2028, 306 MW in June 2029 with an ultimate load of 612 MW in 2031.	Withdraw Need
ComEd-2025-010	ComEd	PJM West	09/09/2025	02/03/2026	Customer in DeKalb	New customer is looking for transmission service in the DeKalb area. Initial loading is expected to be 50 MW in June 2029 with an ultimate load of 860 MW in 2030.	Withdraw Need

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-2026-011

Process Stage: Need Meeting 7/7/2026

Project Driver:

Operational Flexibility and Efficiency

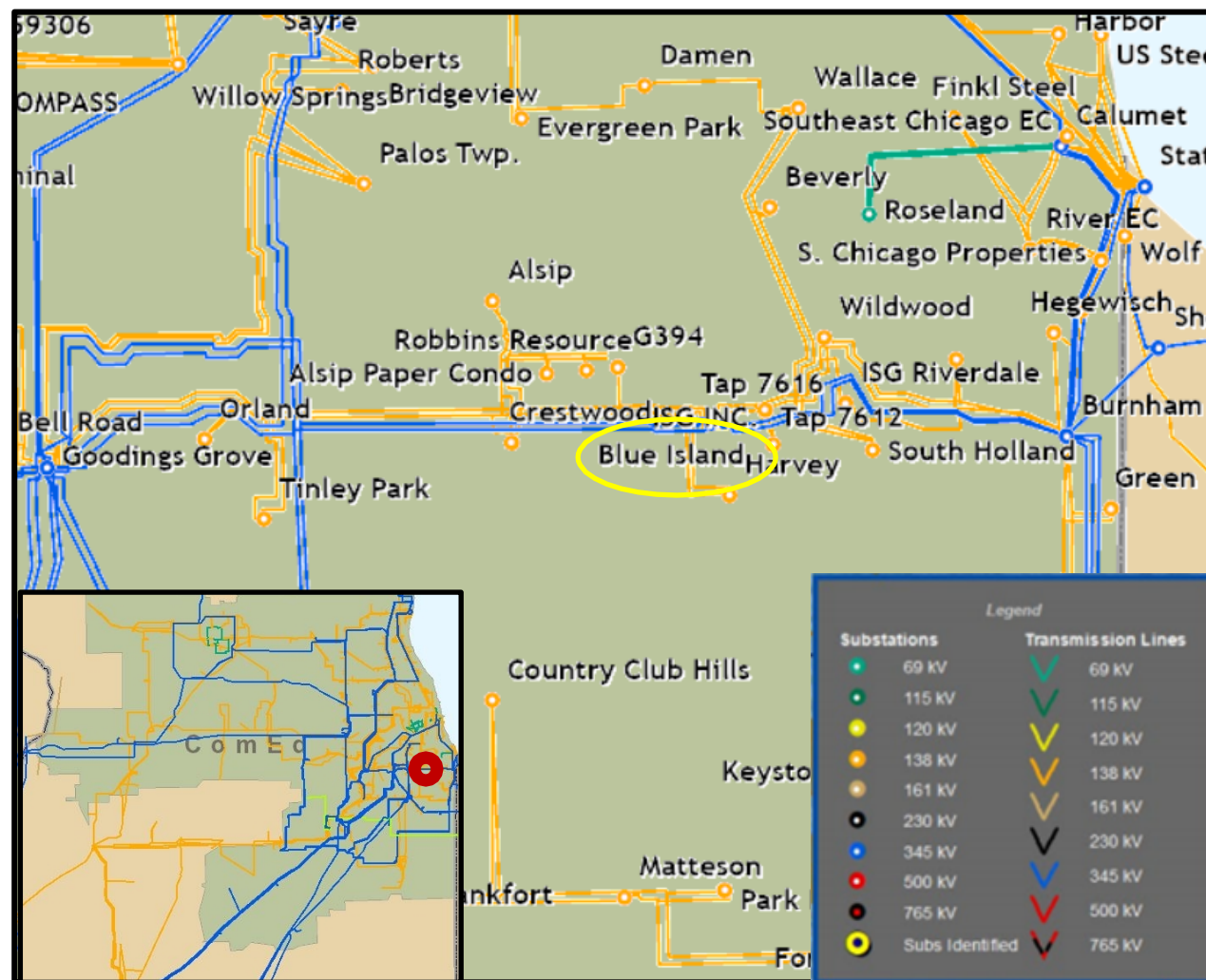
Equipment Material Condition, Performance and Risk

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:

- Blue Island 345KV is currently two individual straight buses with two oil circuit breakers and two gas circuit breakers connecting four lines and four 345/138 kV transformers.
- Multiple transmission facilities are disconnected for various single, failed CB, bus, or tower contingencies.
- The two 345 kV oil CBs were installed in 1971. they are in deteriorating condition, have a lack of replacement parts, and have elevated maintenance costs.
- Two of the four transformers do not have high side CBs



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

Burnham 345KV/138KV TR

Need Number: ComEd-2026-009

Process Stage: Solution Meeting 7/7/2026

Previously Presented: Need Meeting 6/2/2026

Project Driver:

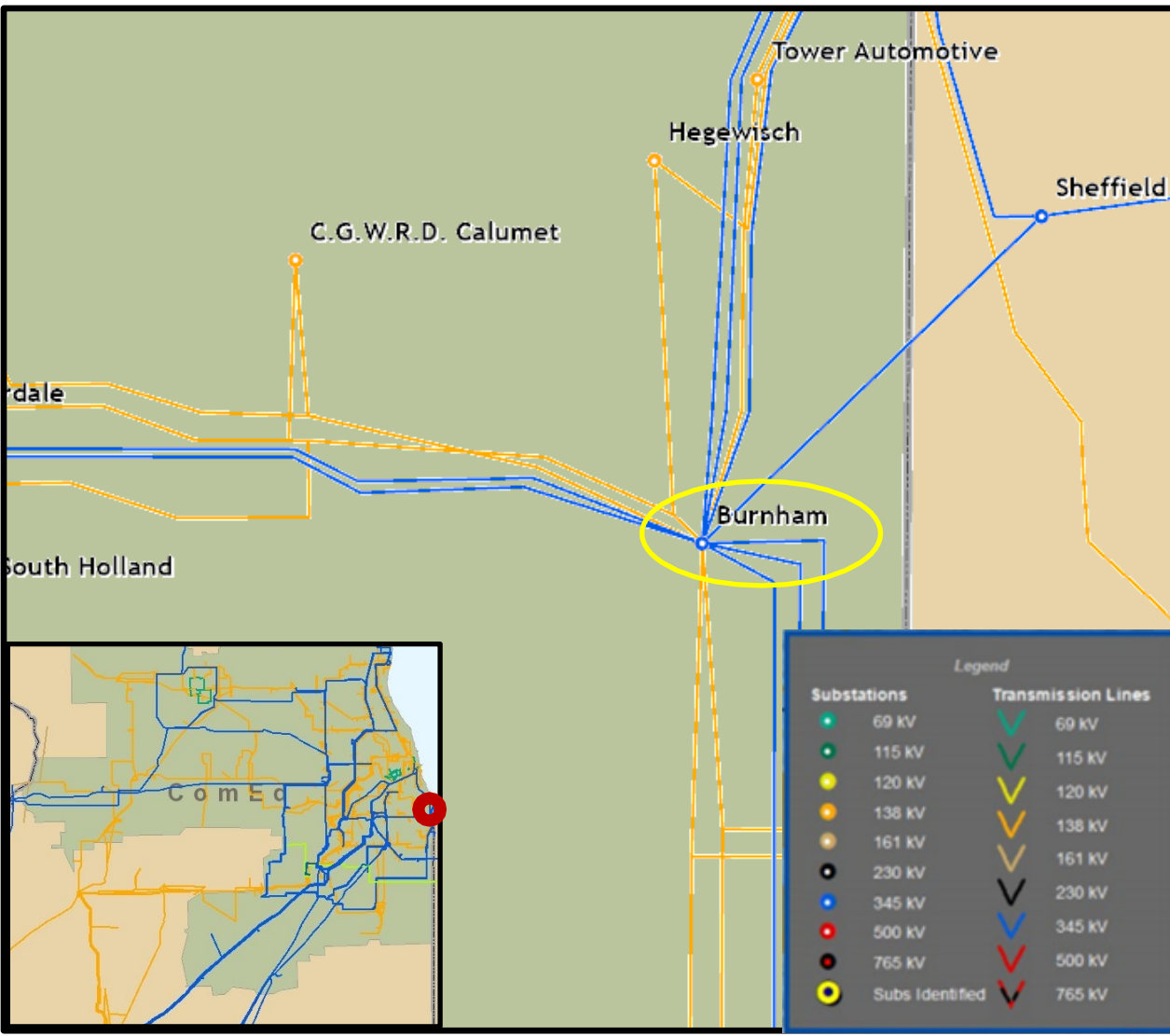
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

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

Problem Statement:

- Burnham autotransformer 345KV/138KV TR84 300MVA was installed in 1974. It is deteriorating condition, has a lack of replacement parts, and has elevated maintenance costs.
- 138 kV TR84 oil circuit breaker was installed in 1968. It is in deteriorating condition, has a lack of replacement parts and has elevated maintenance costs.
- Tertiary capacitor bank failures stress the 345/138kV transformers and have caused transformer failures in the past.



ComEd Transmission Zone M-3 Process Burnham 345KV/138KV TR

Need Number: ComEd-2026-009

Process Stage: Solution Meeting 7/7/2026

Previously Presented: Need Meeting 6/2/2026

Proposed Solution:

Phase 1:

Install a new 138 kV, 115.2 MVAR capacitor bank on 138 kV bus 4 at Burnham.

Phase 2:

Remove tertiary 34 kV capacitor bank on 345/138 kV autotransformer 84. Replace 345/138 kV autotransformer 84 with a new 420 MVA 345/138 kV transformer. Replace 138 kV TR 84 oil circuit breaker with a 3000 A, 63kA SF6 circuit breaker. Install new 345KV TR84 3000A, 63kA SF6 circuit breaker.

BURNHAM 345/138 KV TR 84

MVA Ratings	SN/SLTE/SSTE/SLD	LN/LLTE/LSTE/LLD	WN/WLTE/WSTE/WLD
Existing	392/442/493/520	400/465/520/530	400/465/520/530
New	420/480/520/536	439/488/526/542	449/491/528/544

Estimated cost: Phase 1: \$ 5.0 M Phase 2: \$ 18.7 M

Alternatives Considered:

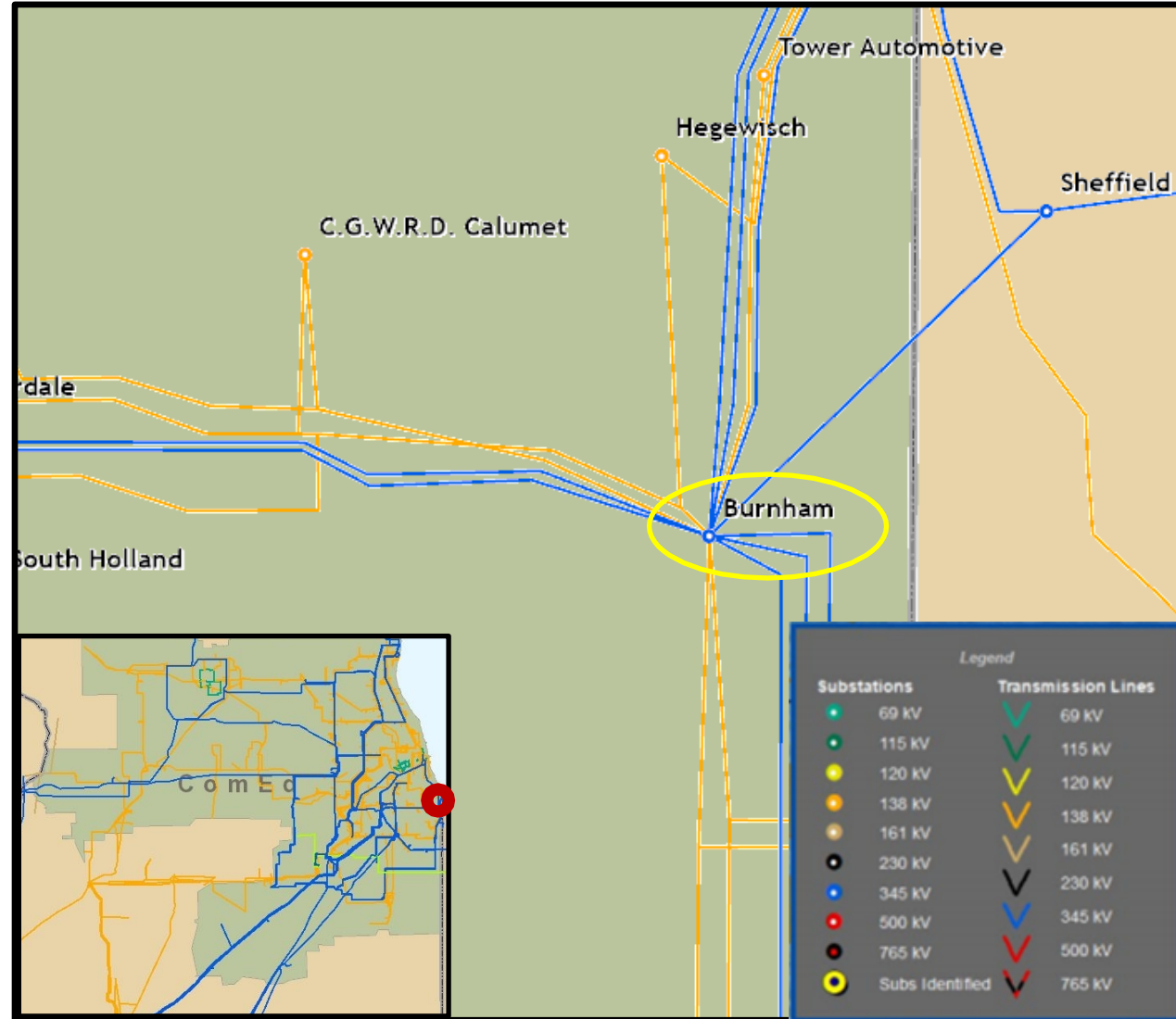
No feasible alternatives available

Projected In-Service:

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

Project Status: Engineering

Model: 2029 RTEP



Need Number: ComEd-2025-005

Process Stage: Solutions Meeting 7/7/2026

Previously Presented: Solutions Meeting 3/10/2026 , Needs Meeting 4/1/2025

Project Driver:

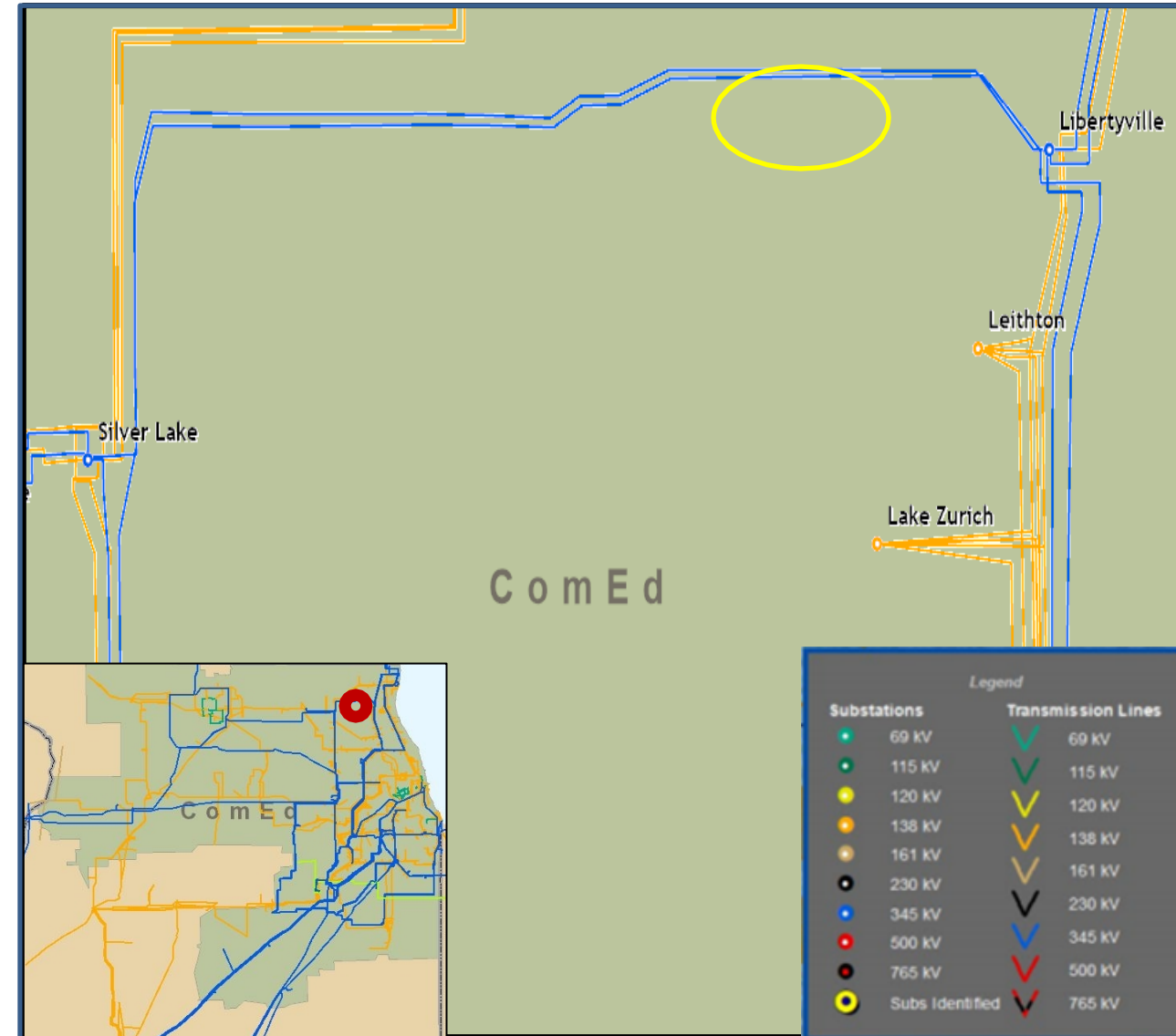
Customer Service

Specific Assumption Reference:

- New transmission customer interconnections or modification to an existing customer

Problem Statement:

New customer is looking for transmission service in the Grayslake area. Initial loading is expected to be 320 MW in June 2028, 600 MW in 2029, with an ultimate load of 1,550 MW in 2031.



ComEd Transmission Zone M-3 Process Customer in Grayslake

Need Number: ComEd-2025-005

Process Stage: Solutions Meeting 7/7/26

Proposed Solution:

Phase 1:

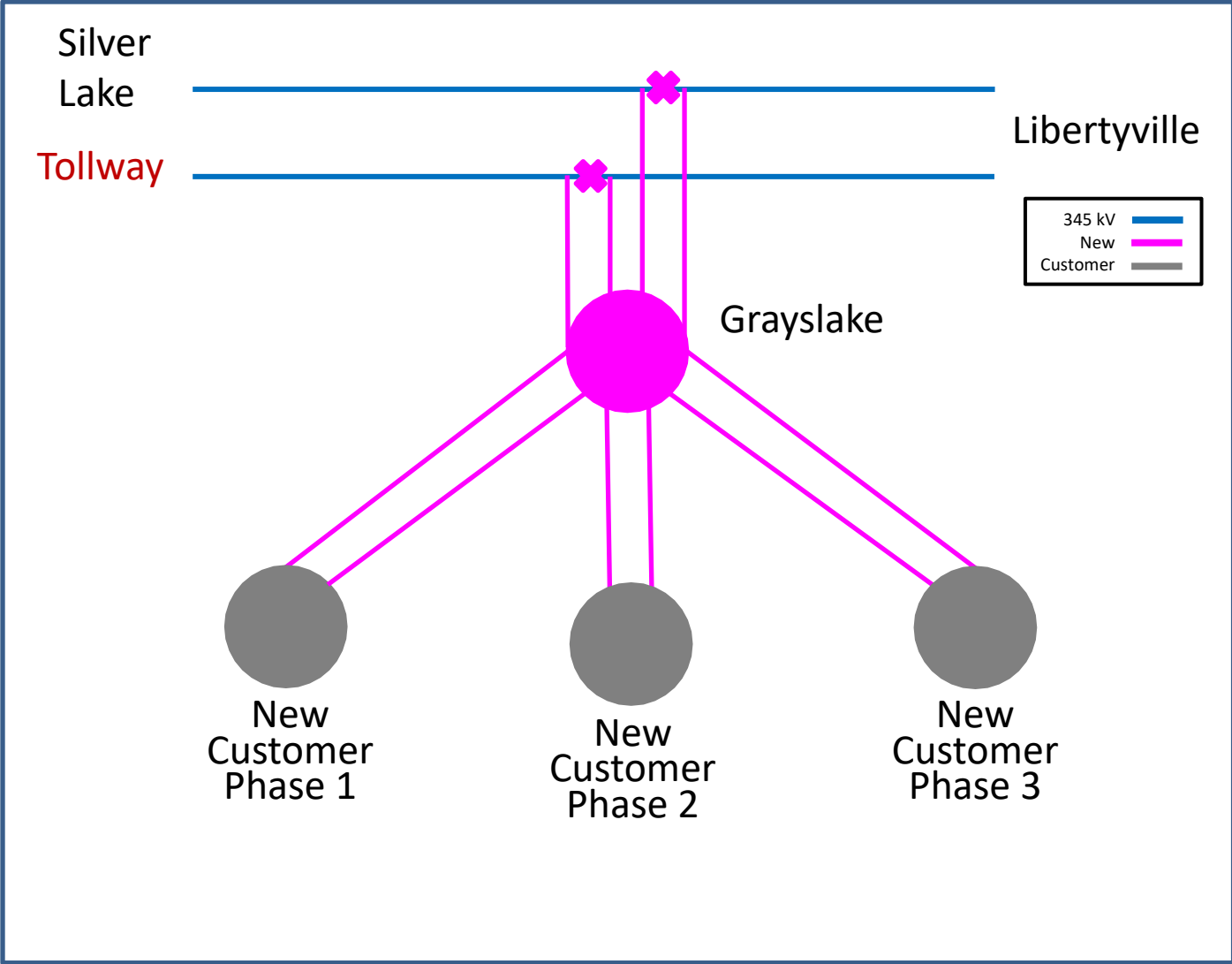
- Cut into existing 345kV Silver Lake – Libertyville line. Extend 2 lines 0.1 miles each to a new Grayslake substation.
- Grayslake substation will be initially installed as a 7-345 kV CBs in a breaker and a half configuration.
- Install 1-150 MVAR, 345kV capacitor banks at new Grayslake substation.
- **Estimated Transmission cost:** \$113M

Phase 2:

- Install 5 new 345 kV CBs to the breaker-and-a-half configuration at Grayslake.
- **Estimated Transmission cost:** \$15M

Phase 3:

- Cut into existing 345kV **Tollway** - Libertyville line. Extend 2 lines 0.1 miles each to a Grayslake substation.
- Install 7 new 345 kV CBs to the breaker-and-a-half configuration at Grayslake.
- Install 1-150 MVAR, 345kV capacitor banks at Grayslake substation.
- **Estimated Transmission cost:** \$44M



Need Number: ComEd-2025-005

Process Stage: Solutions Meeting 7/7/26

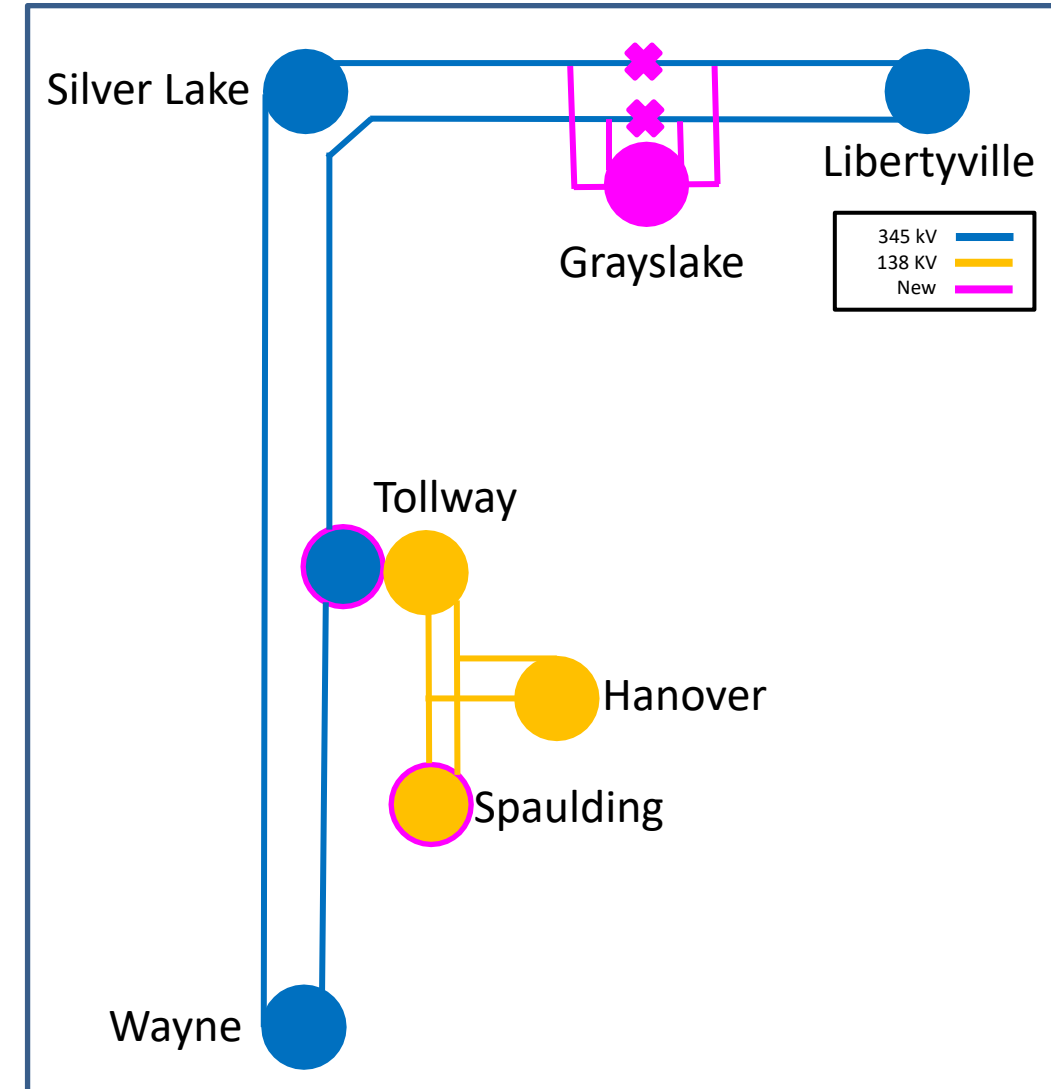
Proposed Solution (continued):

System reinforcements required to serve the load and meet applicable transmission planning criteria:

- Reconductor 14.4 miles of 345KV Line from Silver Lake to Grayslake with 2-1113 Twisted Bluejay (\$28.8M)
- Reconductor 5.5 miles of 345KV Line and with 2156 ACSR Bluebird and add one 345kv SF6 Breaker at Tollway from Wayne to Tollway, (\$15.0M)
 - Proposed rating 4000A, 63kA
- Resag/raise 6 towers from Tollway to Grayslake (\$8.0M)
- Install one new 420MVA 345KV/138KV transformer TR84 at Tollway, with one associated 345kv breakers and one associated 138kv breaker (\$21.0M)

Silver Lake to Grayslake 345KV			
MVA Ratings	SN/SLTE/SSTE/SLD	LN/LLTE/LSTE/LLD	WN/WLTE/WSTE/WLD
Existing	1202/1479/1568/1768	1438/1662/1768/1990	1498/1711/1821/2052
New	1449/1864/1976/2232	1680/2029/2158/2439	1741/2073/2207/2495
Wayne to Tollway 345KV			
Existing	1202/1202/1252/1367	1438/1438/1506/1655	1498/1498/1572/1730
New	1334/1726/1837/2084	1547/1879/2005/2273	1603/1921/2051/2325
Tollway to Grayslake 345KV			
Existing	1201/1201/1252/1367	1427/1438/1506/1655	1475/1498/1572/1730
New	1202/1387/1568/1768	1427/1555/1768/1990	1475/1601/1821/2052
Tollway 345/138 KV TR 84			
New	420/480/520/536	439/488/526/542	449/491/526/544

- **Estimated system reinforcement transmission cost:** \$72.8M



Need Number: ComEd-2025-005

Process Stage: Solutions Meeting 7/7/26

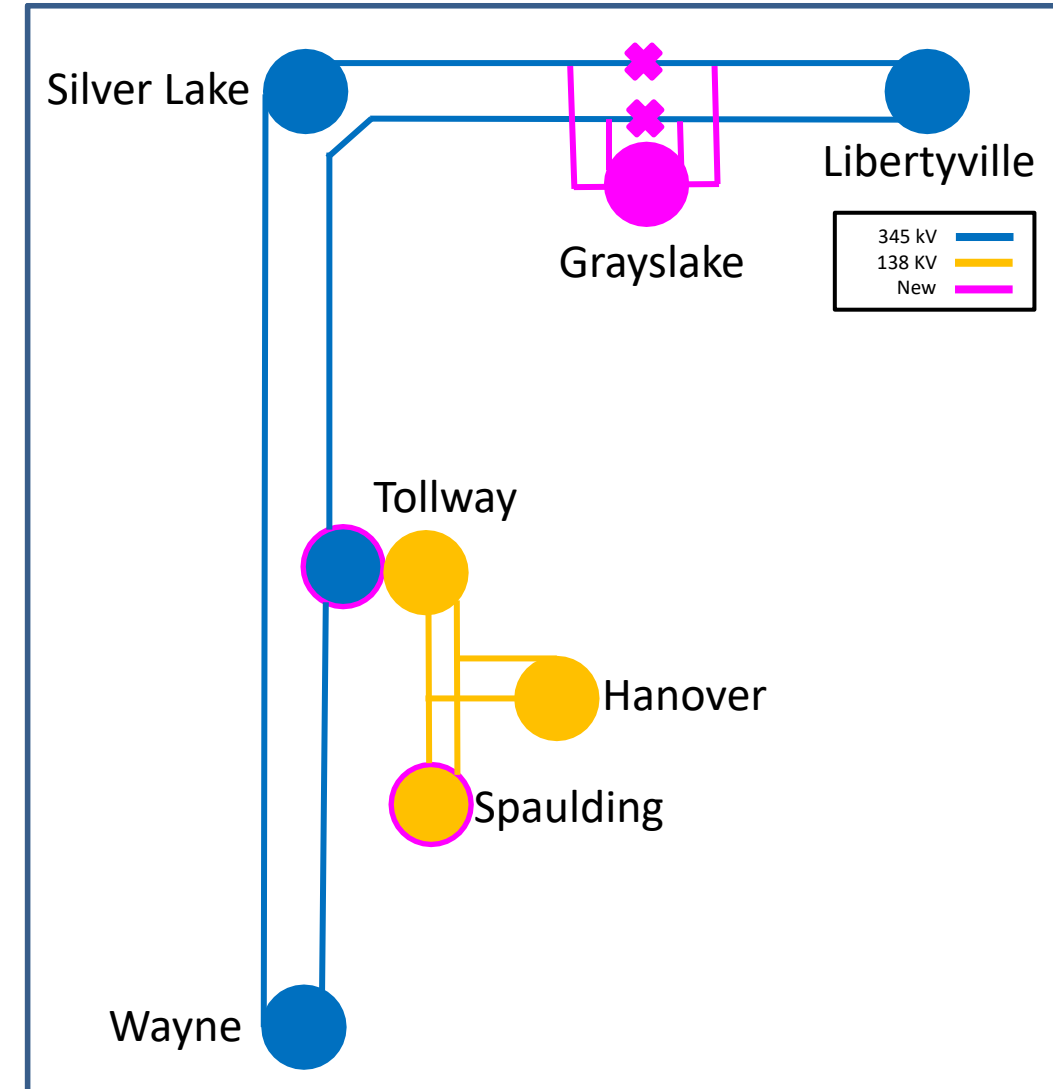
Proposed Solution (continued):

System reinforcements required to serve the load and meet applicable transmission planning criteria:

- Replace one 138kV Oil Circuit Breaker for 138kV Spaulding-Hanover-Tollway **Blue** at Spaulding.
 - Existing rating 2000A, 63kA
 - Proposed rating 3000A, 63kA
- **Reconductor** 0.1 mile of 138kV Spaulding to Hanover Tap **Blue** with **2156 ACSR Bluebird**
- Reconductor 0.2 mile of 138kV Tollway to Hanover Tap **Blue** with 2156 ACSR Bluebird

Spaulding to Hanover Tap Blue			
MVA Ratings	SN/SLTE/SSTE/SLD	LN/LLTE/LSTE/LLD	WN/WLTE/WSTE/WLD
Existing	351/449/459/498	408/490/503/545	421/500/513/557
New	533/690/735/834	621/754/804/911	641/768/820/930
Tollway to Hanover Tap Blue			
MVA Ratings	SN/SLTE/SSTE/SLD	LN/LLTE/LSTE/LLD	WN/WLTE/WSTE/WLD
Existing	351/449/459/498	408/490/503/545	421/500/513/557
New	534/691/735/834	621/754/804/911	641/768/820/930

Estimated system reinforcement transmission cost: \$**3.0**M





Need Number: ComEd-2025-005

Process Stage: Solutions Meeting 7/7/26

Proposed Solution (continued):

System reinforcements required to serve the load and meet applicable transmission planning criteria:

- Reconductor 0.2 mile of 138kV Spaulding to Hanover Tap Red with 2156 ACSR Bluebird
- Reconductor 0.2 mile of 138kV Tollway to Hanover Tap Red with 2156 ACSR Bluebird

Spaulding to Hanover Tap Red			
MVA Ratings	SN/SLTE/SSTE/SLD	LN/LLTE/LSTE/LLD	WN/WLTE/WSTE/WLD
Existing	351/449/459/498	408/490/503/545	421/500/513/557
New	504/576/670/804	596/660/762/909	621/683/787/930
Tollway to Hanover Tap Red			
Existing	351/449/459/498	408/490/503/545	421/500/513/557
New	534/623/693/796	619/687/783/909	640/704/807/930

Estimated system reinforcement transmission cost: \$1.0M

Alternatives Considered:

No feasible alternatives available

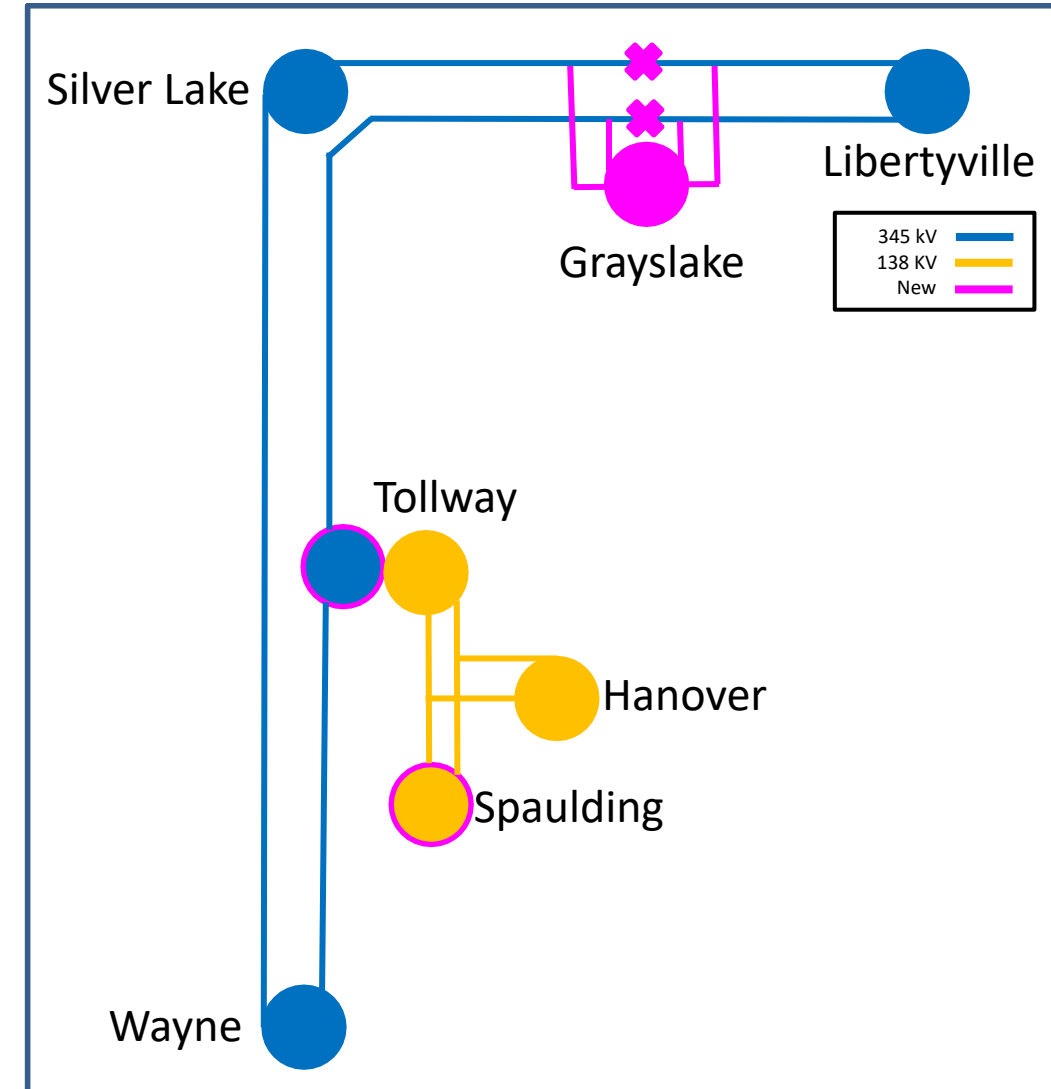
Total Estimated Transmission cost: \$248.8M

Projected In-Service: 6/1/2027 (Phase 1), 6/1/2029 (Phase 2),
6/1/2030 (Phase 3), 6/1/2029 (138KV System Reinforcement),
6/1/2030 (345KV Auto, 345KV Silverlake-Grayslake, 345KV Wayne-Tollway),
6/1/2031 (345KV Tollway-Grayslake)

Project Status: Conceptual

Model: 2029 RTEP

ComEd Transmission Zone M-3 Process Customer in Grayslake



Need Number: ComEd-2024-014, ComEd-2024-022, ComEd-2025-005, ComEd-2025-011, ComEd-2025-013, ComEd-2025-015, ComEd-2025-016, ComEd-2025-020

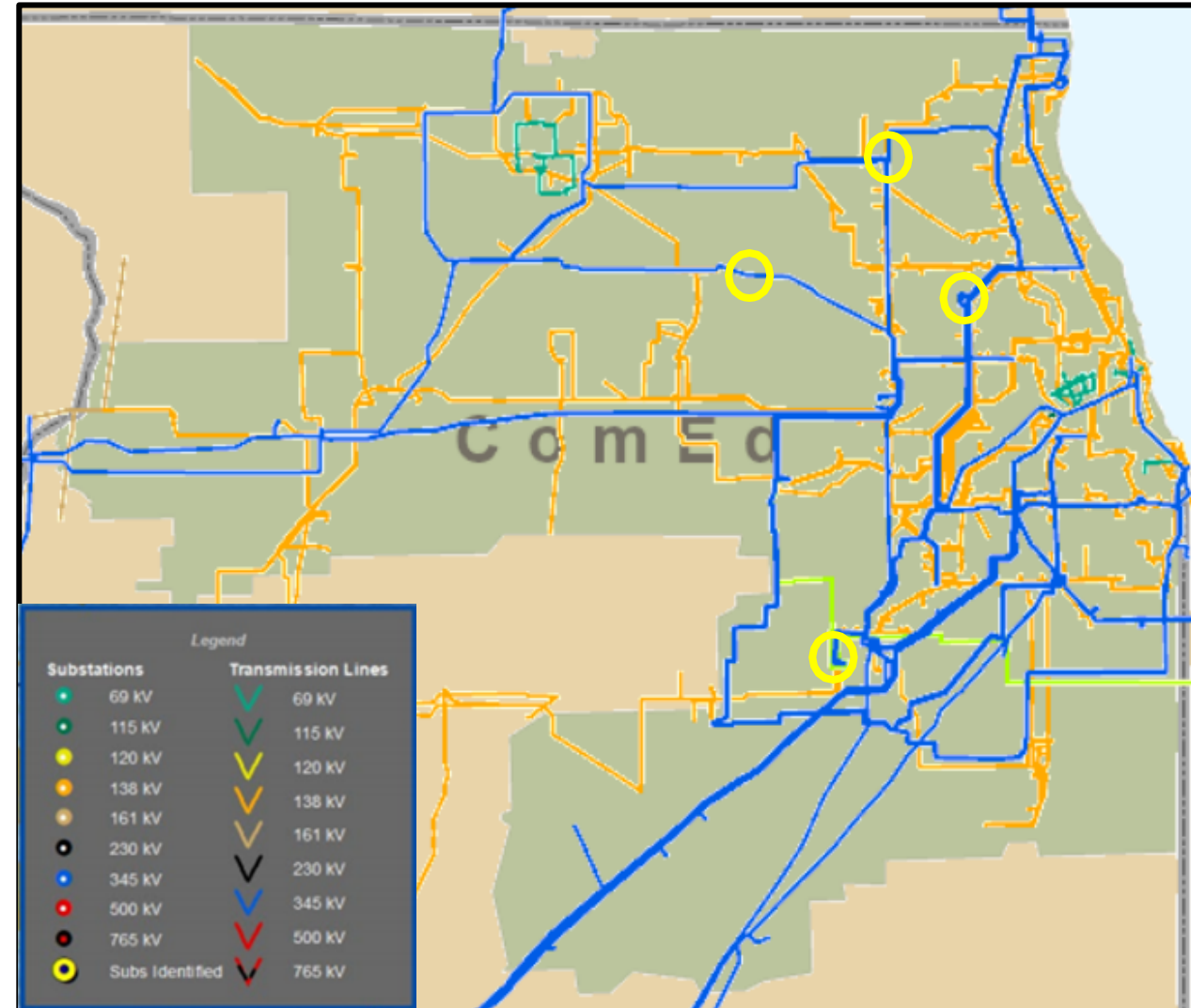
Process Stage: Solution Meeting 7/7/2026

Previously Presented: Need Meeting 8/6/2024, 4/1/2025, 9/9/2025, 9/19/2025, 3/10/2026

Proposed Solution:

System reinforcements required to serve the load and meet applicable transmission planning criteria:

- Install +/-350 MVAR 345KV STATCOM and two associated 345KV Circuit Breakers at Hiawatha Substation (ComEd-2025-011) (\$88.0M)
- Install +/-350 MVAR 345KV STATCOM, 1-150 MVAR 345KV Capacitor Banks and three associated 345KV Circuit Breakers at Itasca Substation (\$108.0M)
- Install +/-350 MVAR 345KV STATCOM, 1-150 MVAR 345KV Capacitor Banks and four associated 345KV Circuit Breakers at Silver Lake Substation (\$112.0M)



Need Number: ComEd-2024-014, ComEd-2024-022 ComEd-2025-005, ComEd-2025-011, ComEd-2025-013, ComEd-2025-015, ComEd-2025-016, ComEd-2025-020

Process Stage: Solutions Meeting 7/7/2026

Proposed Solution continued:

System reinforcements required to serve the load and meet applicable transmission planning criteria:

- Cut into existing 345kV Bryon to Wayne line to a new Charter Grove substation. (\$164.0M)
 - Charter Grove substation will be initially installed as a four-345kV CB ring bus configuration, ultimately expandable to a breaker and a half configuration.
 - Install +/-350 MVAR 345KV STATCOM, 1-150 MVAR 345KV Capacitor Banks and three associated 345KV Circuit Breakers at Charter Grove Substation.

Estimated Transmission cost: \$472.0M

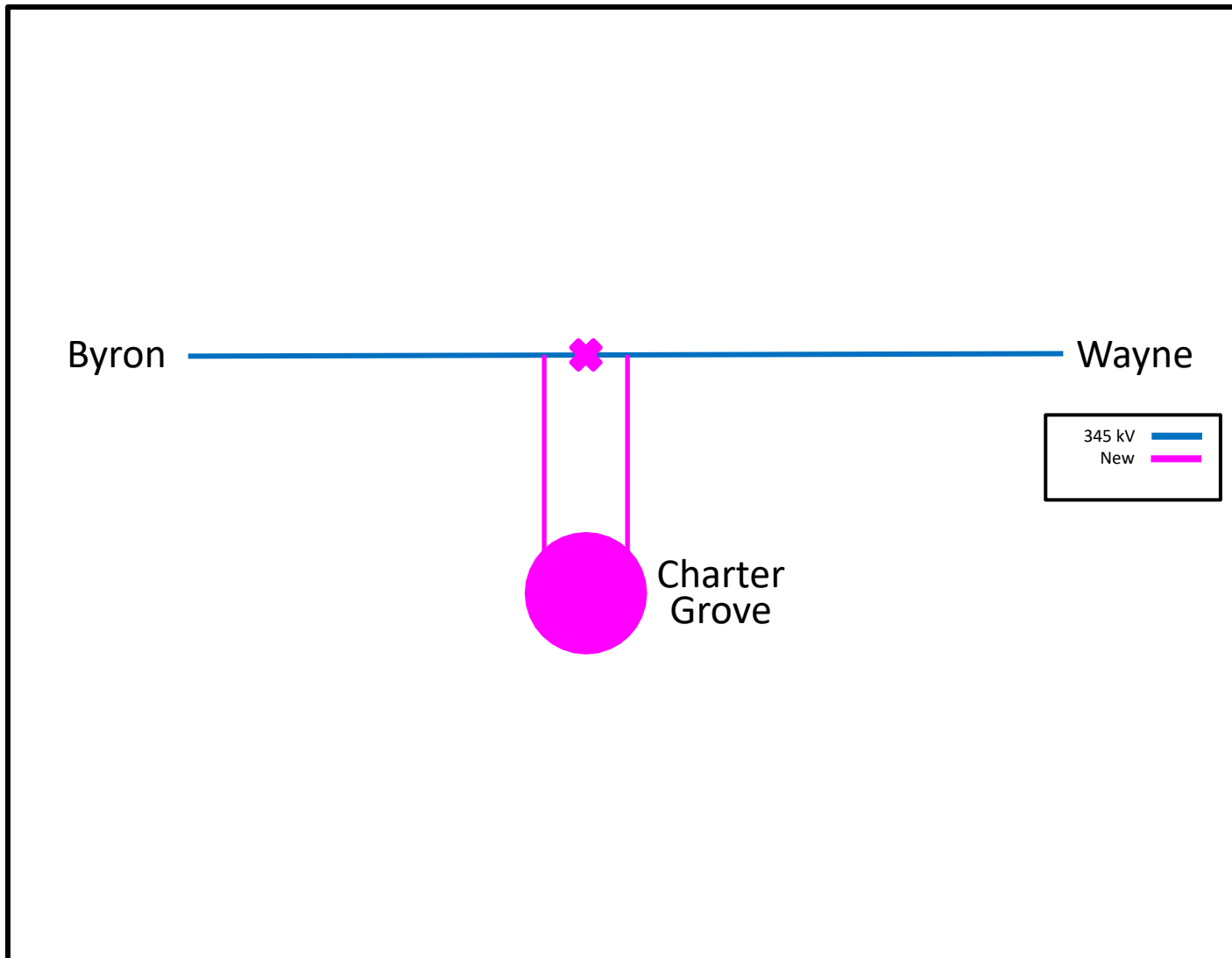
Alternatives Considered:

No feasible alternatives available

Projected In-Service: 06/01/2031

Project Status: Conceptual

Model: 2029 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

6/26/2026 – V1 – Original version posted to pjm.com

7/1/2026 – V2 – Update to ratings.