

FirstEnergy – MetEd – 2026
Submission of Supplemental Projects for
Inclusion in the Local Plan

Need Number: ME-2023-020

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – 8/14/2025
Needs Meeting – 11/16/2023

Project Driver:

Operational Flexibility and Efficiency

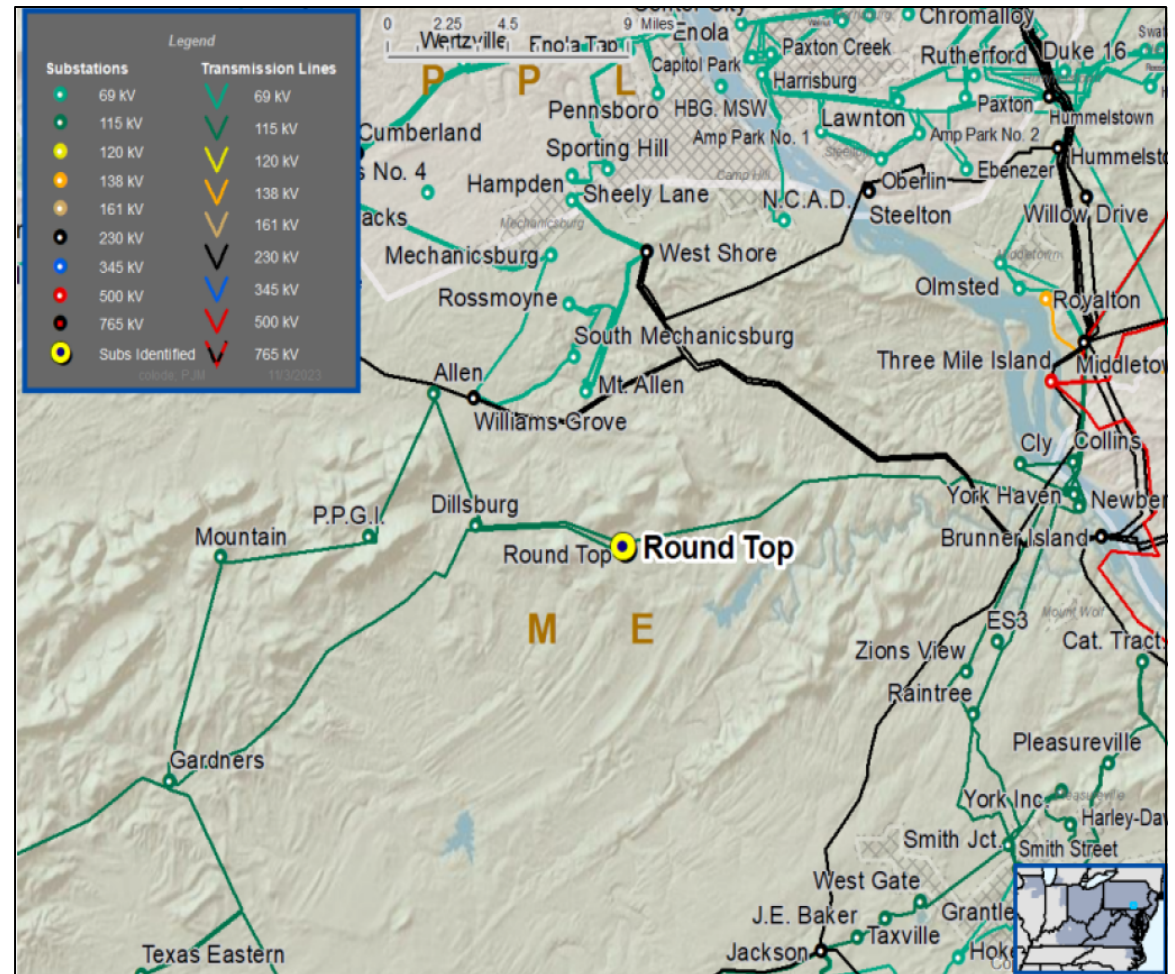
Specific Assumption Reference:

System Performance Projects

- Add/Expand Bus Configuration
- Load at risk in planning and operational scenarios
- Reduce the amount of exposed potential local load loss during contingency conditions
- Eliminate simultaneous outages to multiple networked elements

Problem Statement:

Round Top Substation can be outaged from a fault on the 115 kV bus, a fault on the No. 1 or No. 2 115-13.2 kV transformers, or a stuck breaker on the Allen, Newberry, or Dillsburg 115 kV line exits. Round Top Substation serves 2,540 customers and approximately 18.8 MW.



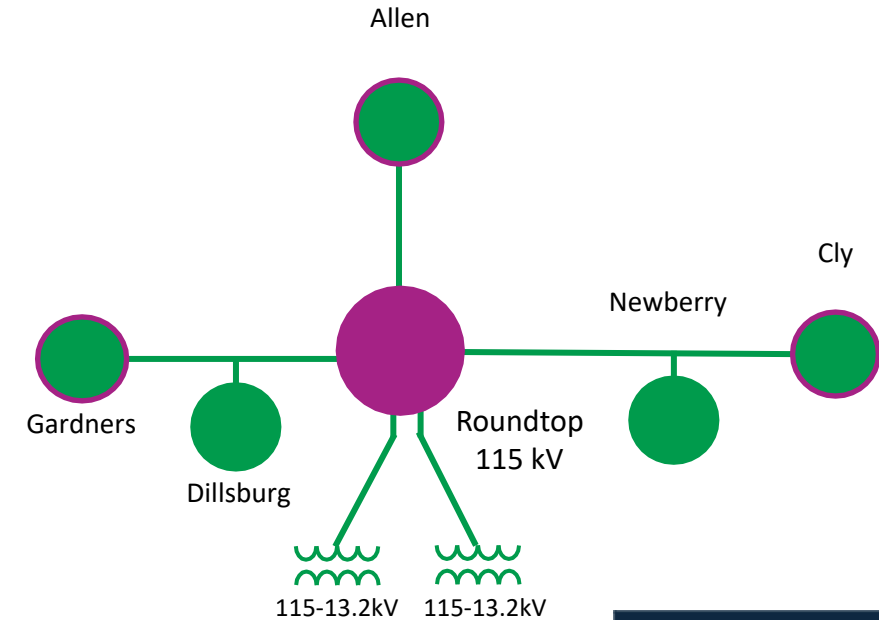
Need Number: ME-2023-020

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

- Construct an eight-breaker breaker-and-a-half switchyard for the 115 kV bus at Roundtop Substation.
 - Install new 115 kV circuit breakers, associated disconnect switches and relaying at Roundtop Substation.
 - Replace one 115 kV capacitor bank and associated circuit breaker at Roundtop Substation.
 - Revise relay settings at Gardners, Cly, and Allen substations.

Estimated Project Cost: \$22.1M
Projected In-Service: 6/2/2028
Supplemental Project ID: s3733.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2023-025

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – 08/05/2025
Need Meeting – 12/05/2023

Project Driver:

Operational Flexibility and Efficiency

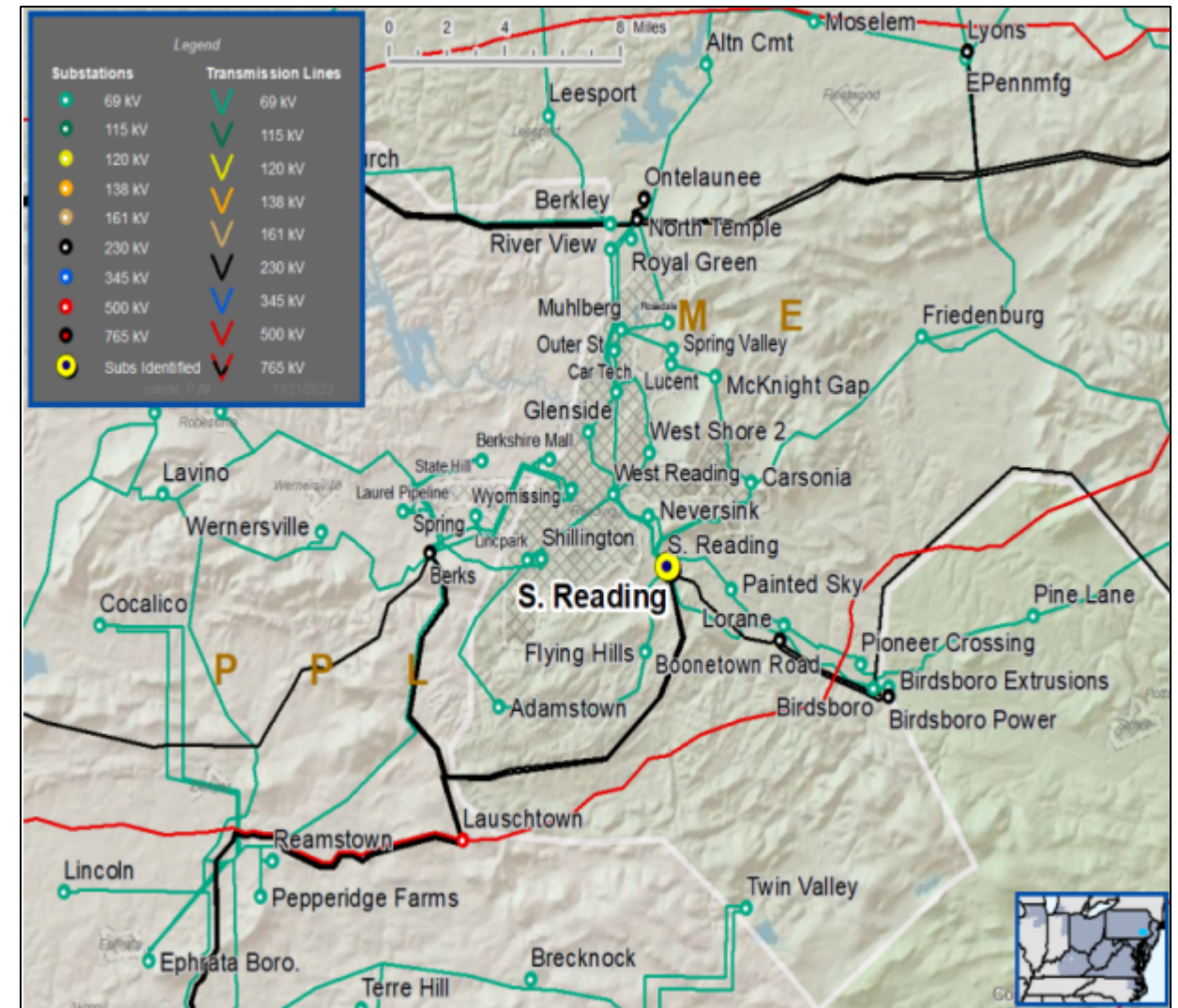
Specific Assumption Reference:

System Performance Projects

- Add/Expand Bus Configuration
- Load at risk in planning and operational scenarios
- Reduce the amount of exposed potential local load loss during contingency conditions
- Eliminate simultaneous outages to multiple networked elements

Problem Statement:

South Reading Substation contains two 230 – 69 kV transformers. Upon the N-1-1 loss of both transformers, there is low voltage seen on the surrounding 69 kV network.



Need Number: ME-2023-025

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

At South Reading Substation:

- Install a new No. 9 230-69 kV 224 MVA transformer
- Install a new 69 kV grounding transformer
- Install two new 230 kV circuit breakers and associated switches
- Install one new 69 kV circuit breaker and associated switches
- Install new relaying

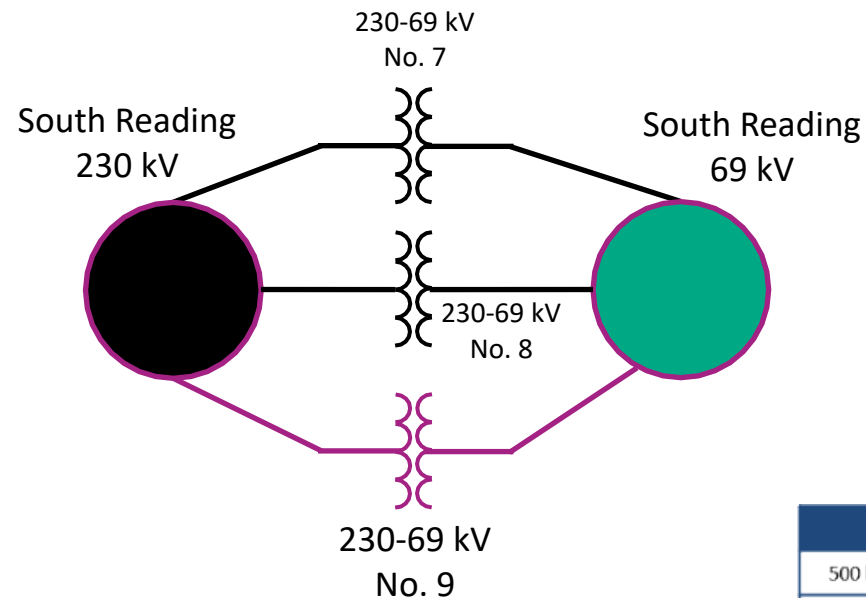
Transformer Ratings:

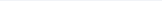
- Before Proposed Solution: N/A
- After Proposed Solution: 328 / 400 / 371 / 474 MVA (SN/SSTE/WN/WSTE)

Estimated Project Cost: \$20.4M

Projected In-Service: 11/15/2027

Supplemental Project ID: s3742.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2024-008

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting - 8/14/2025
Need Meeting - 5/16/2024

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

System Performance Global Factors

- System reliability/performance
- Substation/Line equipment limits

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures

Problem Statement:

The Carlisle Pike – Gardners 115 kV 976 Line was constructed approximately 69 years ago. The original poles were replaced in 1970. The conductor is original to the 1955 construction. The Met-Ed portion of this line is approximately 13.03 miles long with 96 wood H-frame transmission line structures.

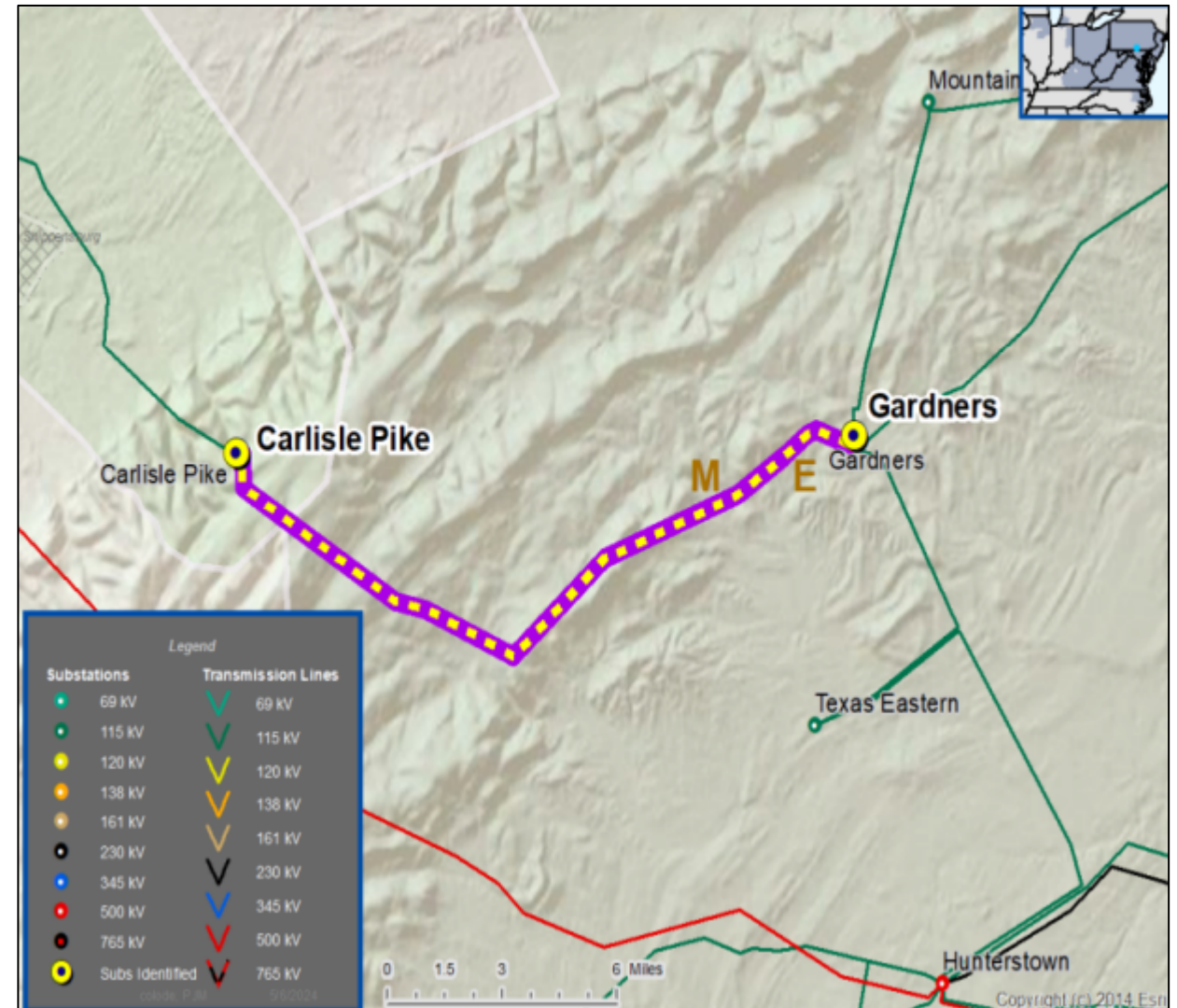
The Met-Ed portion of this line is exhibiting deterioration. Inspection findings include:

- Six structures are Phase-Raised.
- 26 structures failed sound test.
- 39 structures are 54 years old.

There have been three unscheduled sustained outages in the last five years, two attributed to line equipment.

The line is limited by terminal equipment.

- Existing Transmission Line Ratings:
 - 86 / 110 / 122 / 137 MVA (SN/SE/WN/WE)





MetEd Transmission Zone M-3 Process Carlisle Pike – Gardners 115 kV 976 Line

Need Number: ME-2024-008

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

Carlisle Pike-Gardners 115 kV 976 Line Rebuild

- Rebuild 13.0 miles of transmission line with new conductor
- At Gardners Substation, replace circuit breaker, disconnect switches, and wave trap

Transmission Line Ratings:

Carlisle Pike – Gardners 115 kV 976 Line

- Before Proposed Solution: 86 / 110 / 122 / 137 MVA (SN/SE/WN/WE)
- After Proposed Solution: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$32.35M

Projected In-Service: 12/21/2029

Supplemental Project ID: s3743.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2023-002

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 09/14/2023
Need Meeting – SRRTEP-MA – 03/16/2023

Project Driver:
Operational Flexibility and Efficiency

Specific Assumption Reference:

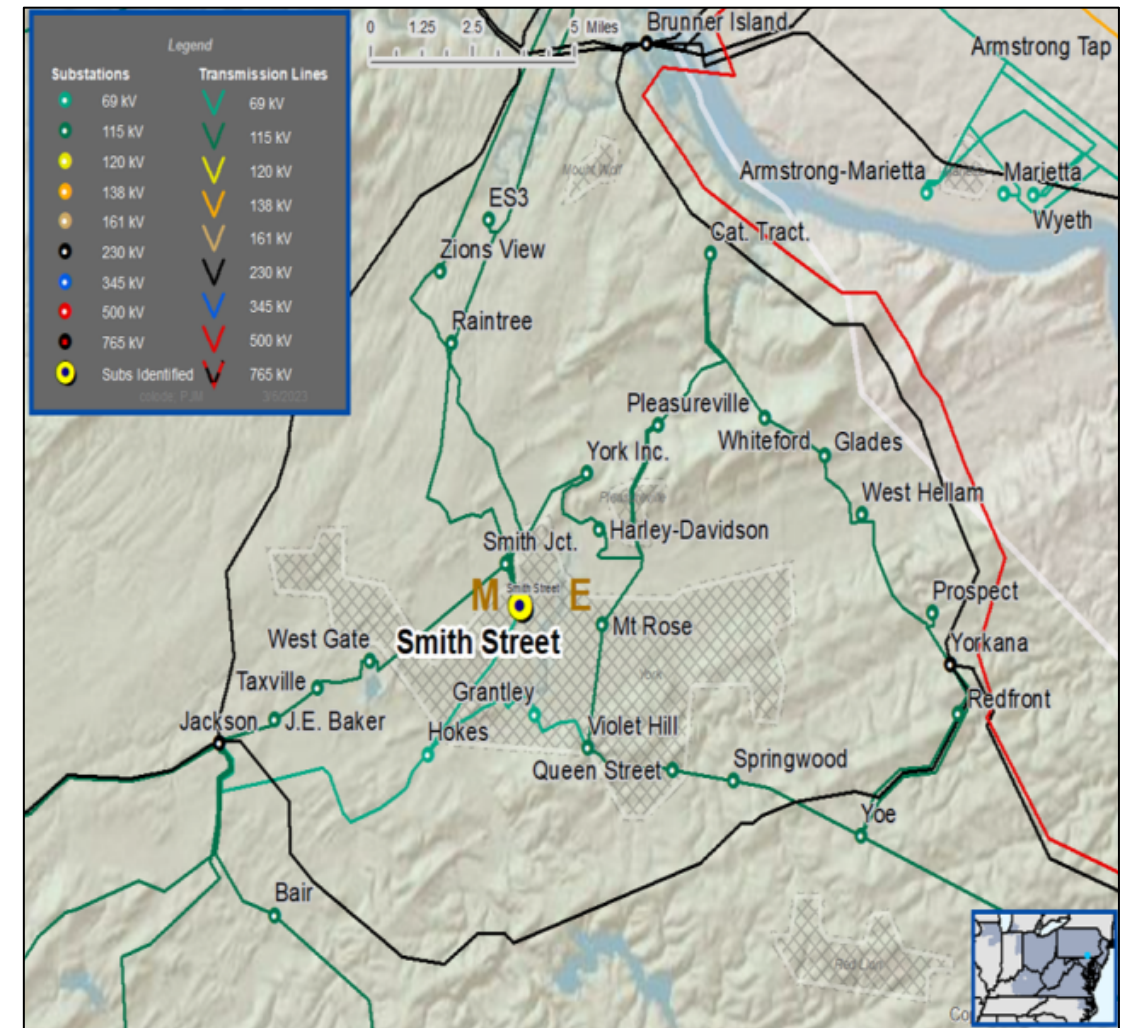
- System Performance Projects
 - Add/Expand Bus Configuration
 - Load at risk in planning and operational scenarios
 - Reduce the amount of exposed potential local load loss during contingency conditions
 - Eliminate simultaneous outages to multiple networked elements

Problem Statement:

The loss of 115 kV Smith Street substation results in loss of approximately 60 MW of load and approximately 9,533 customers.

Substation consists of:

- Three 115 kV transmission lines
- One 115-69 kV transformers
- Two 115-13.2 kV distribution transformers



MetEd Transmission Zone M-3 Process Willis Road 115 kV Substation

Need Number: ME-2023-002
Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

Smith Street could not expand to accommodate breaker and a half substation, therefore a separate substation on adjoining property to be built. New name is Willis Road Substation.

Willis Road 115 kV Substation:

- Construct a four string (ten breaker) breaker and a half bus
- 115-69 kV Bank #3A to be retired upon upgrading the 115-69 kV #1 bank
- Upgrade terminal equipment to transmission line ratings and adjust relay settings

Ratings:

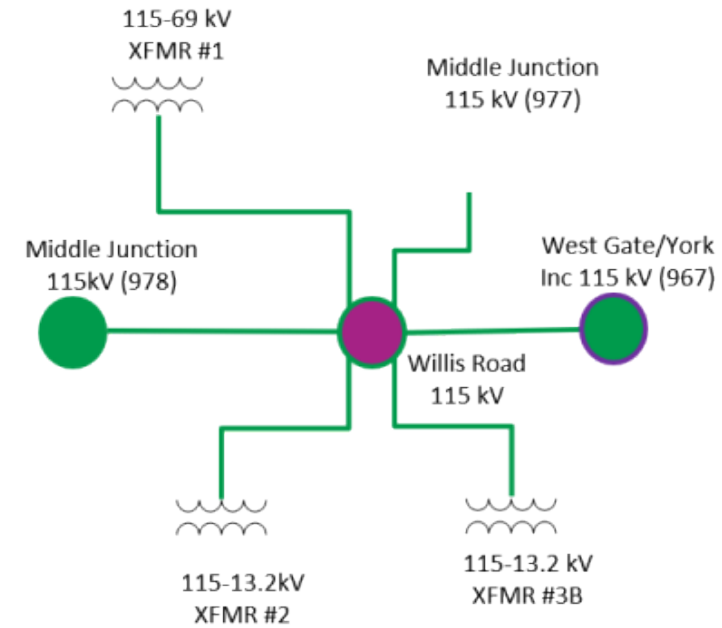
Smith Street– Westgate 115 kV Line (967)

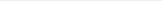
- Before Proposed Solution 221 / 267 MVA (SN/SE)
- After Proposed Solution 232 / 282 MVA (SN/SE)

Smith Street- Zionview 115 kV Line (Middle Junction 977)

- Before Proposed Solution 118 / 120 MVA (SN/SE)
- After Proposed Solution 129 / 156 MVA (SN/SE)

Estimated Project Cost: \$25.00 M
Projected In-Service: 12/31/2027
Supplemental Project ID: s3817.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2023-009

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 12/11/2025
Need Meeting – SRRTEP-MA – 07/20/2023

Project Driver:

Equipment Condition/Performance/Risk

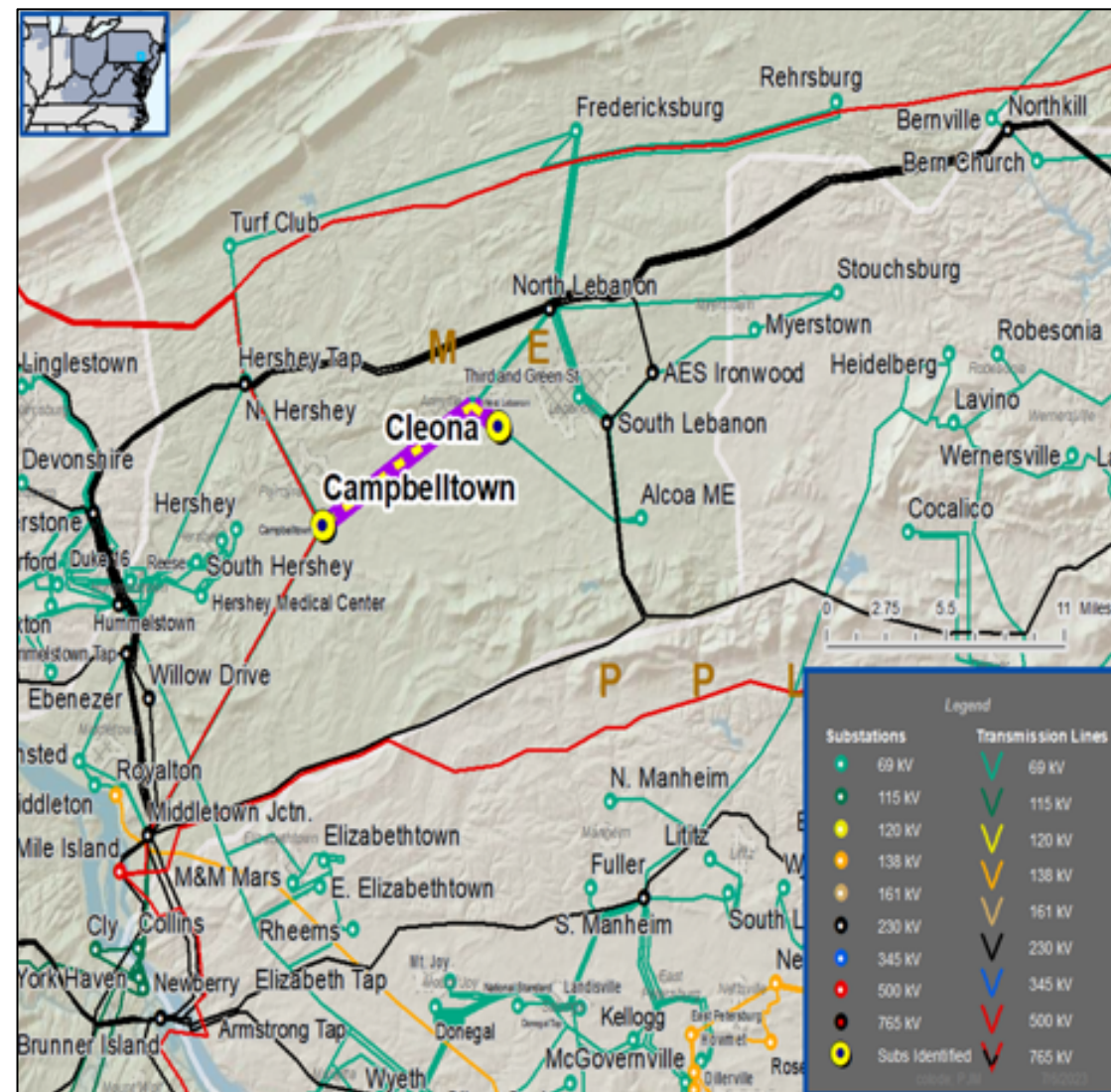
Operational Flexibility and Efficiency

Specific Assumption Reference:

- System Performance Projects Global Factors
 - System reliability and performance
 - Reliability of Non-Bulk Electric System (Non-BES) Facilities Upgrade Relay Schemes

Problem Statement:

An N-1-1 outage of the N. Hershey – Mill St. - Campbelltown 69 kV Line & Middletown Jct. 230-69 kV Transformer #3 can cause the North Lebanon - Annville 69 kV line to overload to 131% of its Summer Emergency rating.



Need Number: ME-2023-009

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

Rebuild and convert Campbelltown - Cleona 69 kV Line from six-wired to double circuit (approximately 7.4 miles).

At Campbelltown Substation: Install one 69 kV circuit breaker, associated disconnect switches and line relaying.

Ratings:

Campbelltown - Hershey Beta Tap 69 kV Line

- Before Proposed Solution: 71 / 72 / 72 / 72 MVA (SN/SE/WN/WE)
- After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)

Hershey Beta Tap - Millards Quarry 69 kV Line:

- Before Proposed Solution: 107 / 128 / 120 / 152 MVA (SN/SE/WN/WE)
- After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)

Annville - Millards Quarry 69 kV Line:

- Before Proposed Solution: 82 / 103 / 108 / 124 MVA (SN/SE/WN/WE)
- After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)

Annville - North Lebanon 69 kV Line:

- Before Proposed Solution: 71 / 89 / 101 / 108 MVA (SN/SE/WN/WE)
- After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)

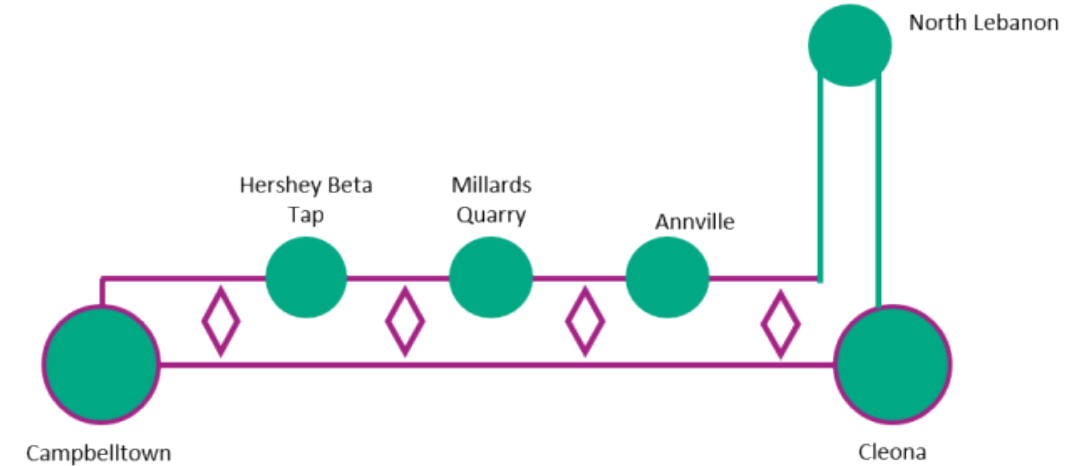
Campbelltown - Cleona 69 kV Line:

- Before Proposed Solution: NA
- After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$32.33 M

Projected In-Service: 06/01/2028

Supplemental Project ID: s3973.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2024-021

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 12/11/2025
Need Meeting – SRRTEP-MA – 10/17/2024

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption Reference:

- System Performance Projects Global Factors
 - System reliability/performance
 - Substation/line equipment limits
- Substation Condition Rebuild/Replacement
 - Age/condition of substation equipment
 - Circuit breakers and other fault interrupting devices

Problem Statement:

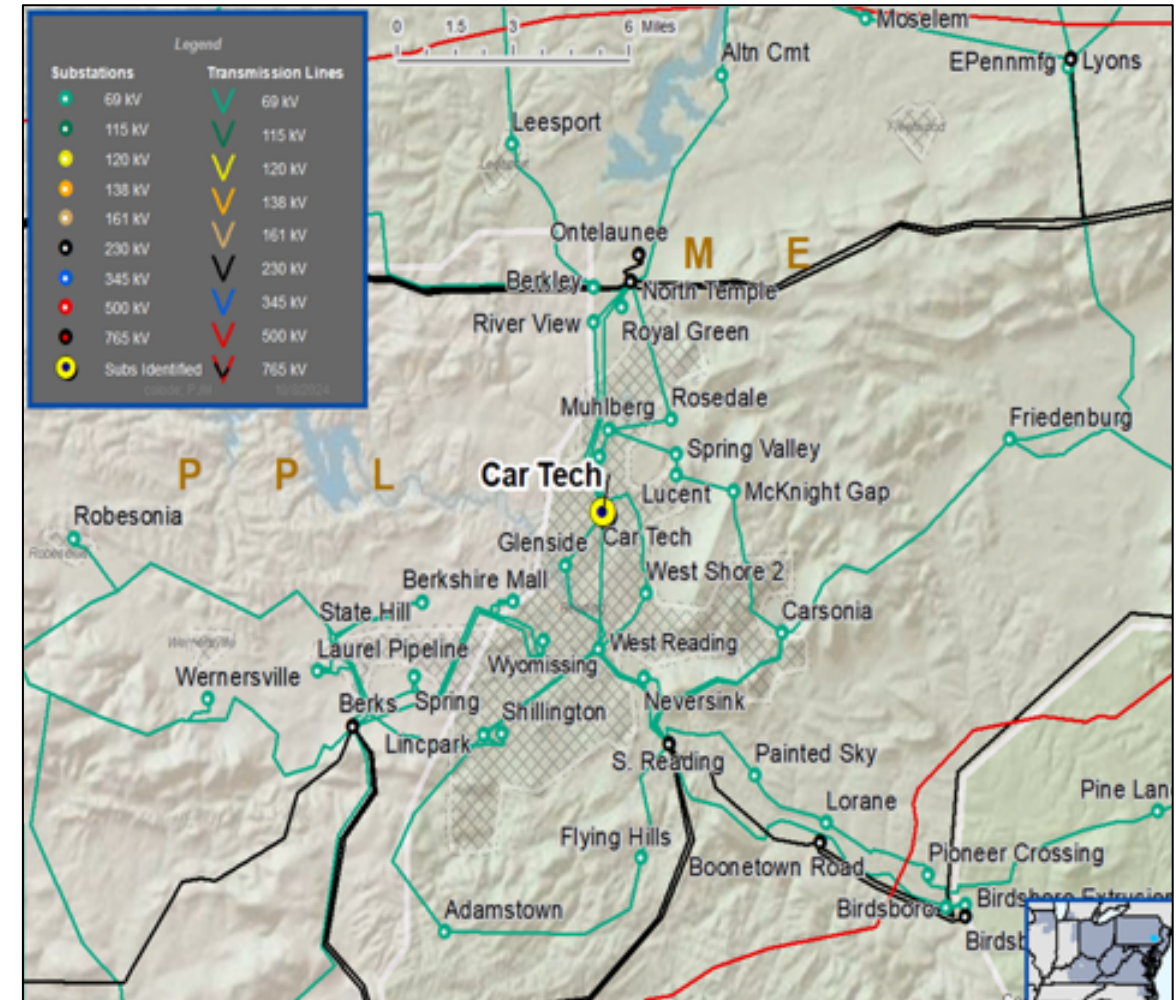
The existing 69 kV breaker 83692 at Carpenter Technology Substation is over 50 years old and approaching end of life.

Replacement components are difficult to source in quantity leading to non-standard repairs.

The circuit breaker requires frequent maintenance to preserve the integrity of the oil and to replace parts on pneumatic systems.

The line is currently limited by terminal equipment.

- Carpenter Technology – Riverview 69 kV Line
 - Existing Line Rating: 147 / 180 / 187 / 211 MVA (SN/SE/WN/WE)
 - Existing Conductor Rating: 218 / 250 / 218 / 263 MVA (SN/SE/WN/WE)





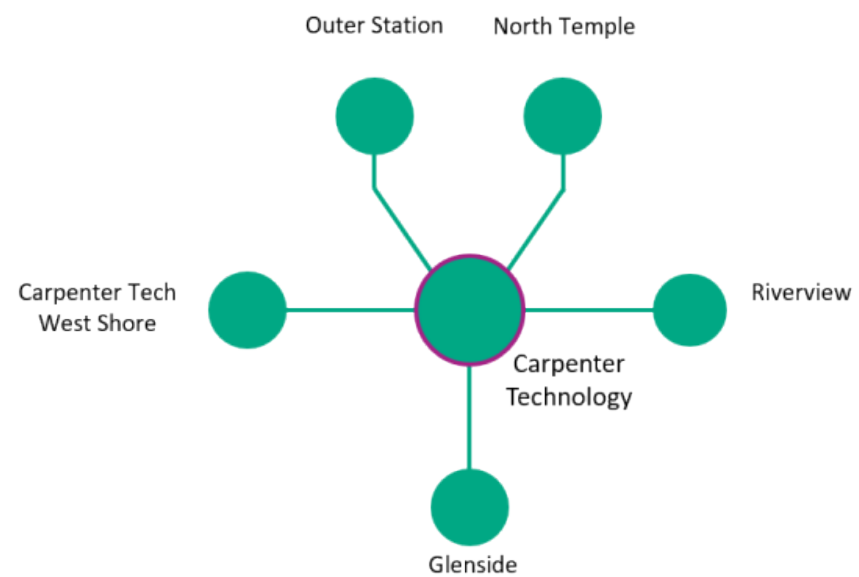
Need Number: ME-2024-021
Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:
Replace Carpenter Technology 69 kV breaker 83692 and associated disconnect switches.

Ratings:
Carpenter Technology - Riverview 69 kV 836 Line:
▪ Before Proposed Solution: 147 / 180 / 187 / 211 MVA (SN/SE/WN/WE)
▪ After Proposed Solution: 147 / 188 / 193 / 211 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$1.01 M
Projected In-Service: 06/15/2027
Supplemental Project ID: s3974.1

MetEd Transmission Zone M-3 Process Carpenter Technology Substation 69kV Circuit Breaker



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2024-002

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 03/18/2026
Need Meeting – SRRTEP-MA – 03/14/2024

Project Driver:

Equipment Material Condition, Performance, and Risk
Operational Flexibility and Efficiency

Specific Assumption Reference:

System Performance Global Factors

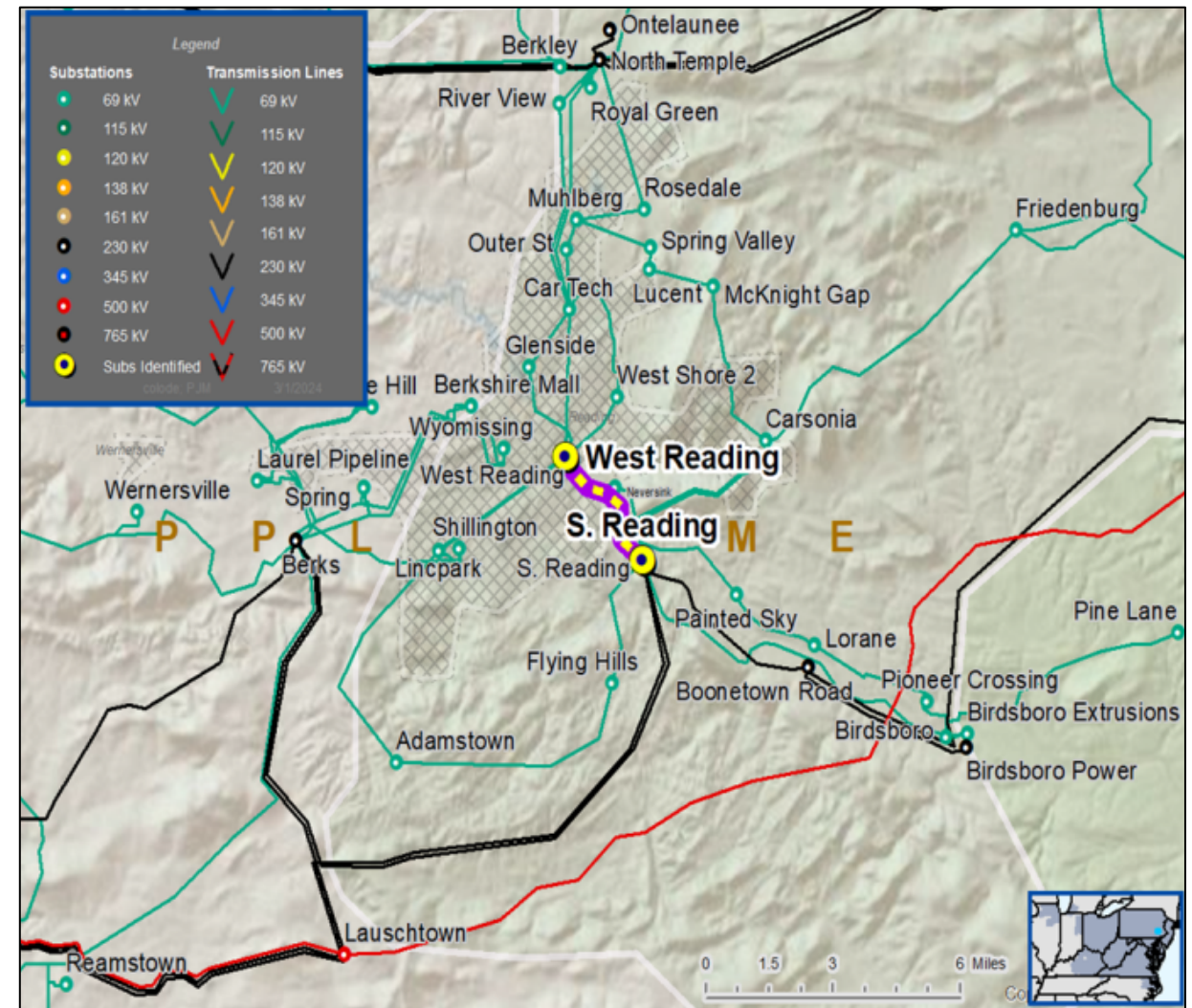
- Past system reliability/performance
- Substation/Line equipment limits

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures

Problem Statement:

- The South Reading – West Reading 69 kV Line was constructed 65 years ago. The line is approximately 2.8 miles long with 55 wooden H-frame structures.
- Recent inspections have indicated that the line is exhibiting deterioration. Inspection findings include woodpecker damage, top rot, groundline decay and cracking. These findings have resulted in increased maintenance costs.
- There have been five unscheduled outages due to broken crossarms and braces in the last ten years, two of the outages occurred in 2023.
- The South Reading and West Reading 69 kV breaker relays are vintage electromechanical equipment.
- The line is currently limited by terminal equipment.
- Existing Transmission Line Ratings:
 - 132 / 158 / 158 / 180 MVA (SN/SE/WN/WE)



MetEd Transmission Zone M-3 Process South Reading - West Reading 69 kV Line

Need number: ME-2024-002

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

- South Reading - West Reading 69 kV Line: Rebuild approximately 2.75 line miles of wood pole construction.
- South Reading: Replace relaying for 69 kV Circuit Breaker 2642.
- West Reading: Replace 69 kV Circuit Breaker 2602, Switches 2604 & 2605, and Relaying.

Ratings:

South Reading - West Reading 69 kV Line:

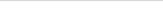
- Existing Line ratings: 132 / 158 / 158 / 180 MVA (SN/SE/WN/WE)
- New Line Ratings: 139 / 189 / 158 / 201 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$17.10M

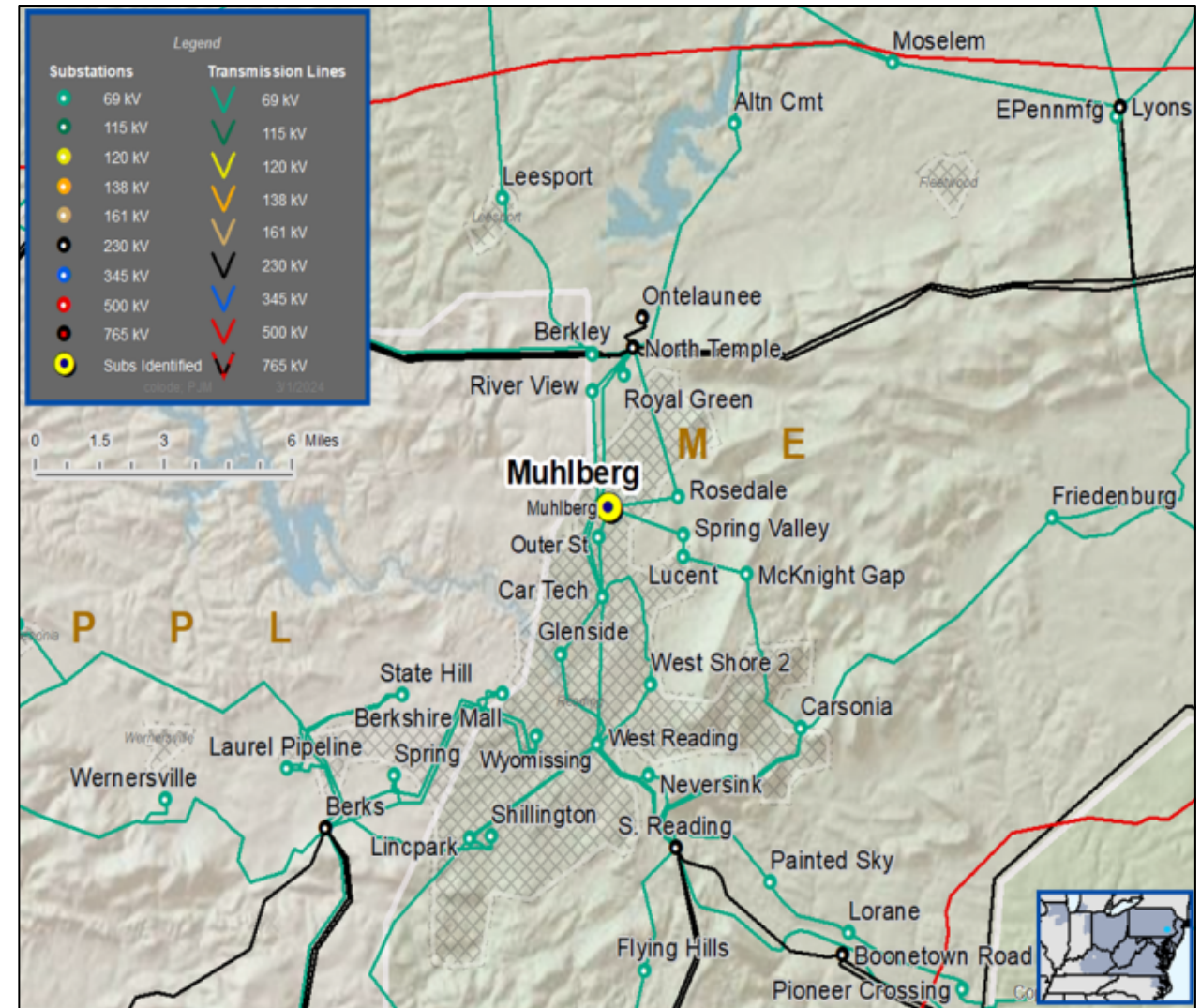
Projected In-Service: 12/29/2028

Supplemental Project ID: s3975.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

- Need Number:** ME-2024-005
- Process Stage:** Submission of Supplemental Projects for Inclusion in the Local Plan
- Previously Presented:** Solution Meeting – SRRTEP-MA – 03/18/2026
Need Meeting – SRRTEP-MA – 03/14/2024
- Project Driver:**
Operational Flexibility and Efficiency
- Specific Assumption Reference:**
- System Performance Projects
- Add/Expand Bus Configuration
 - Load at risk in planning and operational scenarios
 - Reduce the amount of exposed potential local load loss during contingency conditions
 - Eliminate simultaneous outages to multiple networked elements
- Problem Statement:**
- The loss of the Muhlenberg Substation interrupts service to approximately 3,000 customers with an estimated load of 33 MW. A stuck bus tie breaker can result in a total loss of supply at the Muhlenberg Substation.
 - Muhlenberg Substation consists of:
 - Three networked 69 kV transmission lines
 - Three distribution transformers connected to the bus with switches
 - Bus tie breaker



Need number: ME-2024-005

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

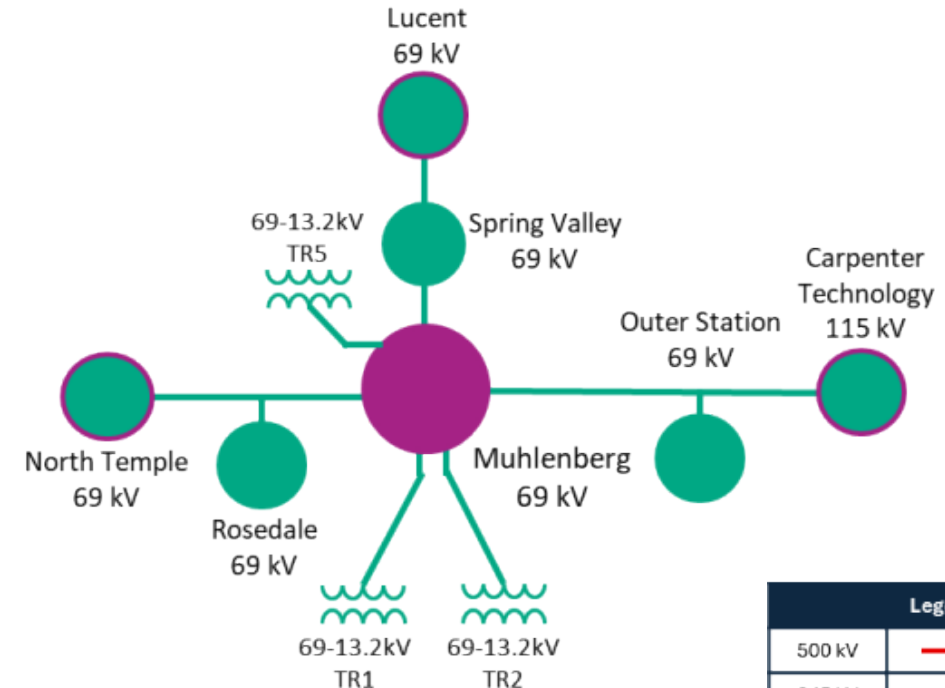
Convert Muhlenberg Substation into a nine-breaker 69 kV Breaker-and-a-Half substation.

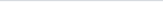
- Install nine (9) new 69 kV circuit breakers, associated disconnect switches and relaying at Muhlenberg Substation.
- Replace three (3) existing transformer high-side breakers with new 69 kV circuit breakers
- Install one (1) new package control enclosure (PCE) within the new substation fence.
- Revise relay settings at North Temple, Carpenter Technology, and Lucent substations.
- Re-terminate the existing Carpenter Technology - Muhlenberg, Lucent - Muhlenberg, and Muhlenberg - North Temple 69 kV Lines into substation.

Estimated Project Cost: \$29.29M

Projected In-Service: 10/22/2027

Supplemental Project ID: s3976.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2024-022

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 05/14/2026
Need Meeting – SRRTEP-MA – 11/14/2024

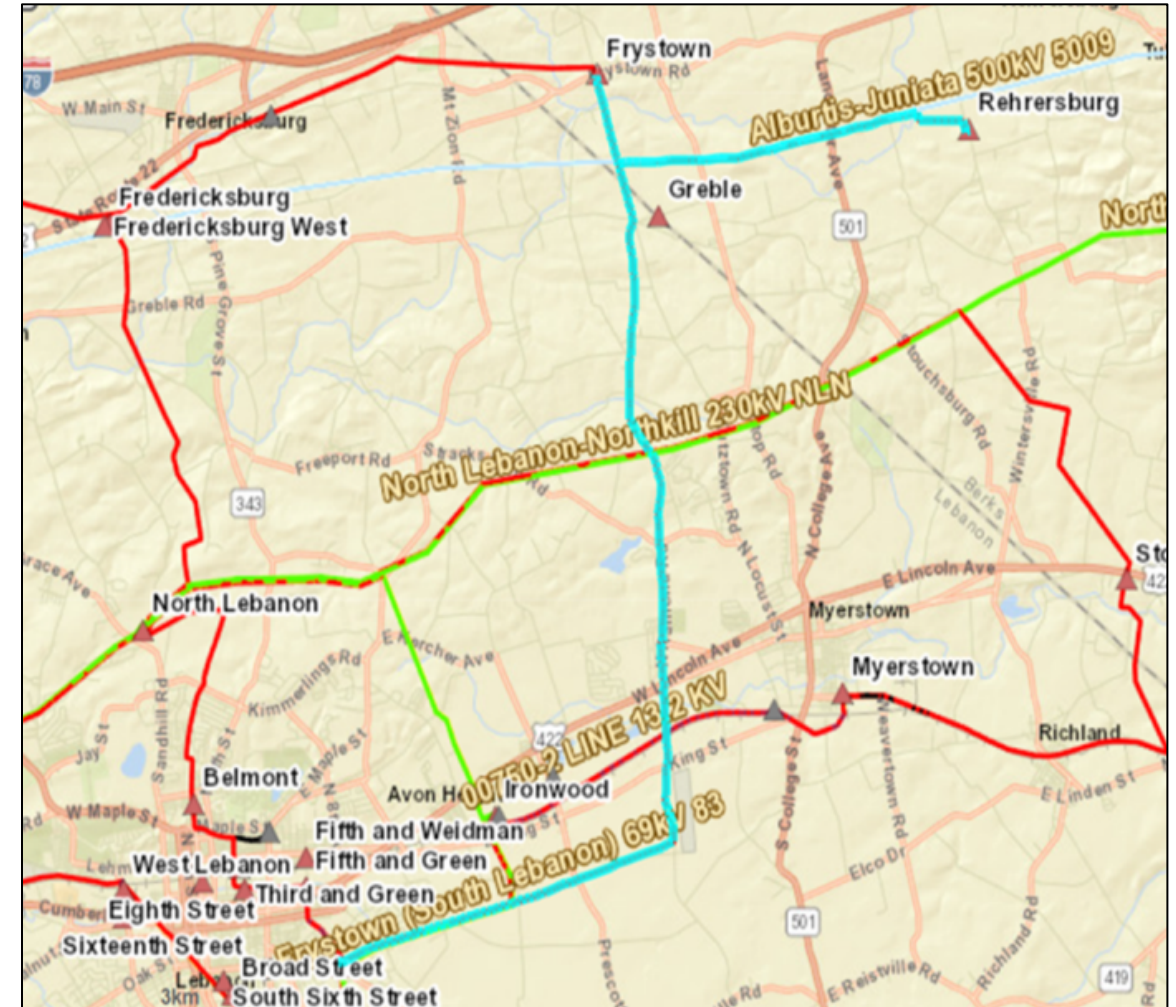
Project Driver:
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

- System Performance Global Factors
 - Past system reliability/performance
- Line Condition Rebuild/Replacement
 - Age/condition of wood pole transmission line structures

Problem Statement:

- The Frystown – South Lebanon 69 kV Line was constructed approximately 52 years ago and is approaching end of life. The line is approximately 15 miles long with a total of 311 structures; 295 wood pole structures, two steel structures, and 13 are laminate transmission line structures.
- Large sections (approximately six miles) of the Frystown – South Lebanon 69 kV Line have copper conductor.
- Since 2019, the line has had 16 unscheduled, sustained outages. Most of the outages were due to conductors contacting.
- Existing Transmission Line Ratings:
 - Overall Facility: 55 / 56 / 62 / 62 MVA (SN/SE/WN/WE)
 - Conductor: 55 / 56 / 62 / 62 MVA (SN/SE/WN/WE)



MetEd Transmission Zone M-3 Process Frystown – South Lebanon 69 kV Line

Need number: ME-2024-022

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

Frystown – South Lebanon 69 kV Line Rebuild

- Rebuild 10.85 miles of the Frystown - South Lebanon 69 kV 83 Line and install new conductor

At South Lebanon Substation:

- Retermine new line conductor into substation

At Frystown Substation:

- Retermine new line conductor into substation

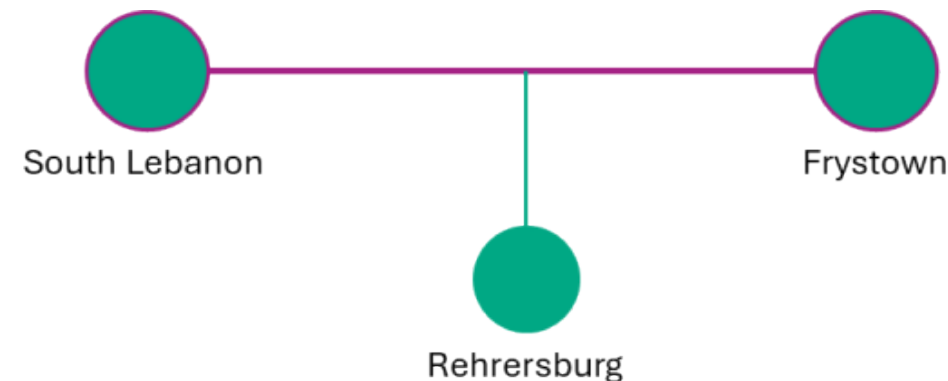
Ratings:

- Frystown - Rehrersburg 69 kV Line
 - Before Proposed Solution: 55 / 56 / 62 / 62 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)
- Rehrersburg - South Lebanon 69 kV Line
 - Before Proposed Solution: 55 / 56 / 62 / 62 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$32.59M

Projected In-Service: 12/14/2029

Supplemental Project ID: s3977.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2024-007

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – TEAC – 07/07/2026
Need Meeting – TEAC – 04/30/2024

Project Driver:

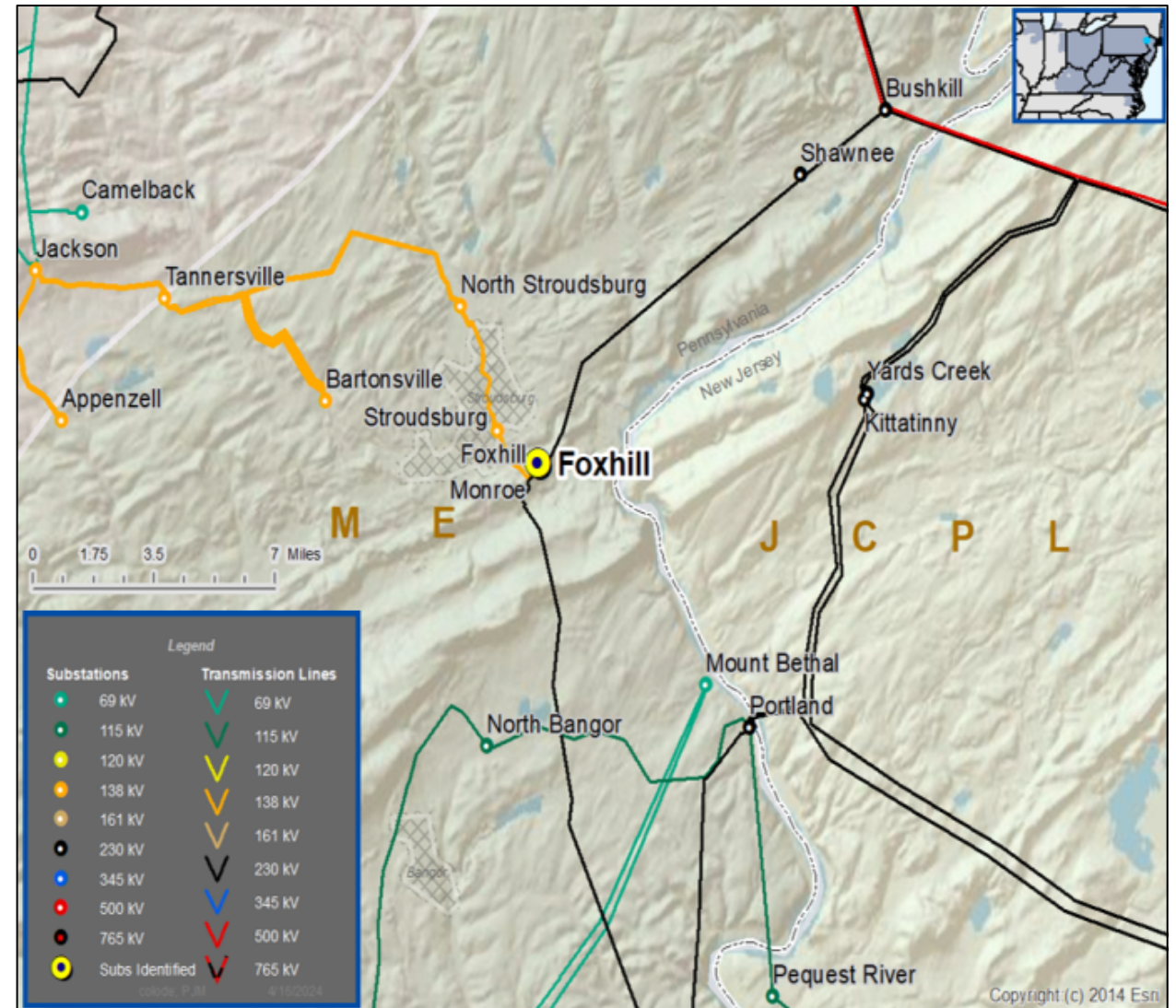
Operational Flexibility and Efficiency

Specific Assumption Reference:

- System Performance Projects
 - Add/Expand Bus Configuration
 - Load at risk in planning and operational scenarios
 - Reduce the amount of exposed potential local load loss during contingency conditions
 - Eliminate simultaneous outages to multiple networked elements

Problem Statement:

Foxhill Substation has a 230 kV straight bus configuration with terminals to two 230 kV transmission lines and two 230-34.5 kV transformers. A faulted breaker would result in an outage to the entire station. Foxhill Substation serves approximately 50 MW of load and 5,100 customers.



Need number: ME-2024-007
Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

Convert Foxhill Substation into a four-breaker 230 kV ring bus.

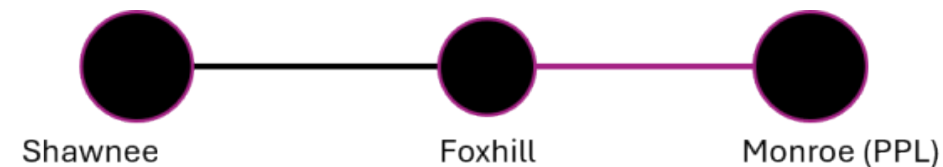
At Shawnee Substation: Revise relay settings.

At Monroe Substation: Revise relay settings.

Ratings:

- Foxhill - Shawnee 230 kV Line:
 - Before Proposed Solution: 494 / 630 / 545 / 685 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 494 / 630 / 545 / 685 MVA (SN/SE/WN/WE)
- Foxhill - Monroe 230 kV Line:
 - Before Proposed Solution: 634 / 796 / 734 / 906 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 634 / 796 / 734 / 906 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$11.80M
Projected In-Service: 12/21/2029
Supplemental Project ID: s4015.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

MetEd Transmission Zone M-3 Process North Hanover 115 kV Breaker and a Half Substation

Need Number: ME-2024-012

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 06/16/2026
Need Meeting – SRRTEP-MA – 05/16/2024

Project Driver:

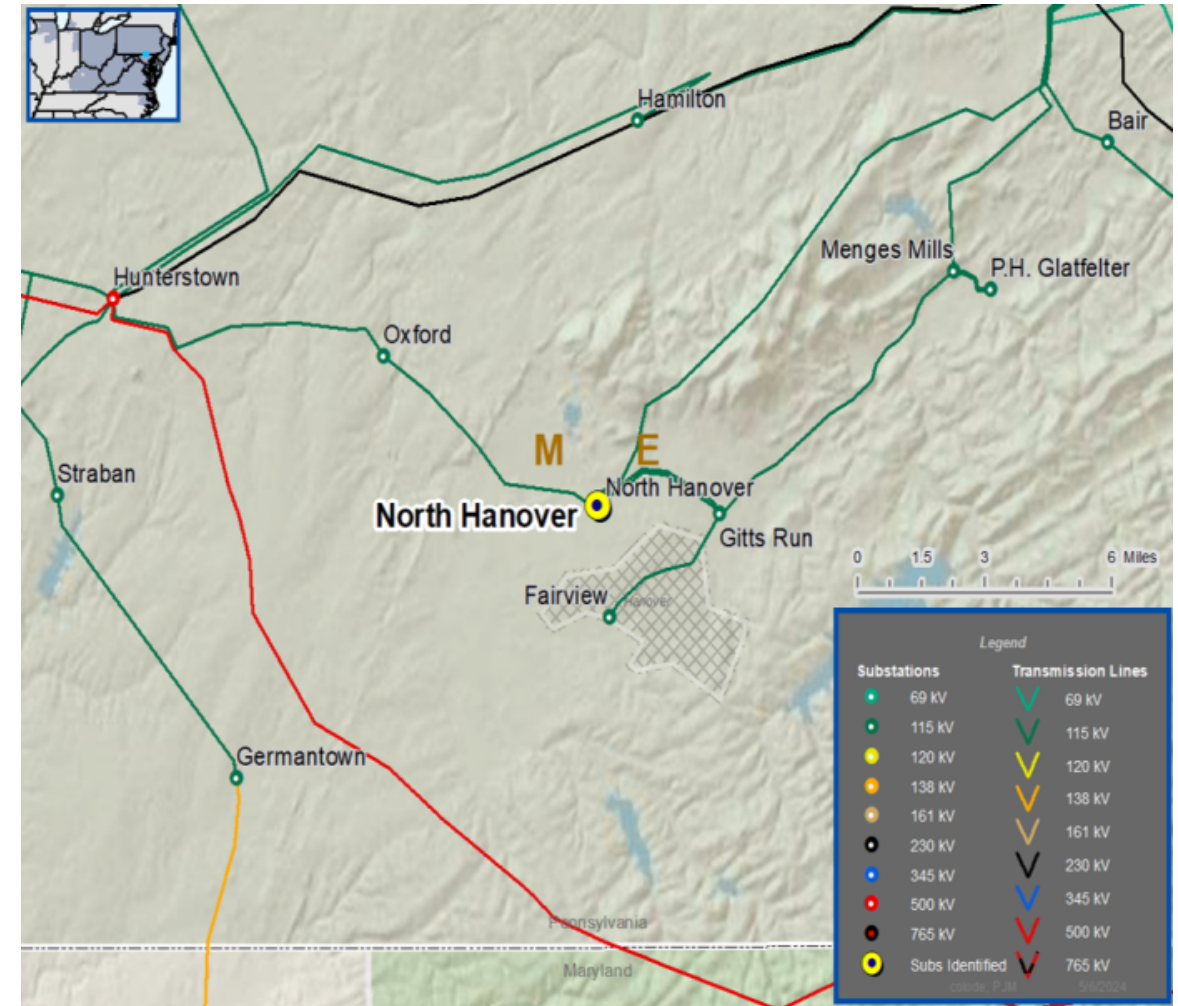
Operational Flexibility and Efficiency

Specific Assumption Reference:

- System Performance Projects
 - Add/Expand Bus Configuration
 - Load at risk in planning and operational scenarios
 - Reduce the amount of exposed potential local load loss during contingency conditions
 - Eliminate simultaneous outages to multiple networked elements

Problem Statement:

North Hanover Substation is in a straight bus configuration with terminals to three distribution transformers and four 115 kV transmission lines. The substation serves approximately 59 MW and 7,500 customers. A bus fault or faulted breaker would result in an outage to the entire substation.



MetEd Transmission Zone M-3 Process

North Hanover 115 kV Breaker and a Half Substation

Need number: ME-2024-012

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

Convert the 115 kV yard at North Hanover Substation into an 11 breaker, breaker-and-a-half configuration.

Revise relay settings at Gitts Run, Hunterstown, and Jackson substations.

Modify the 115 kV N. Hanover 960 Line terminal at Hunterstown Substation for fiber installation.

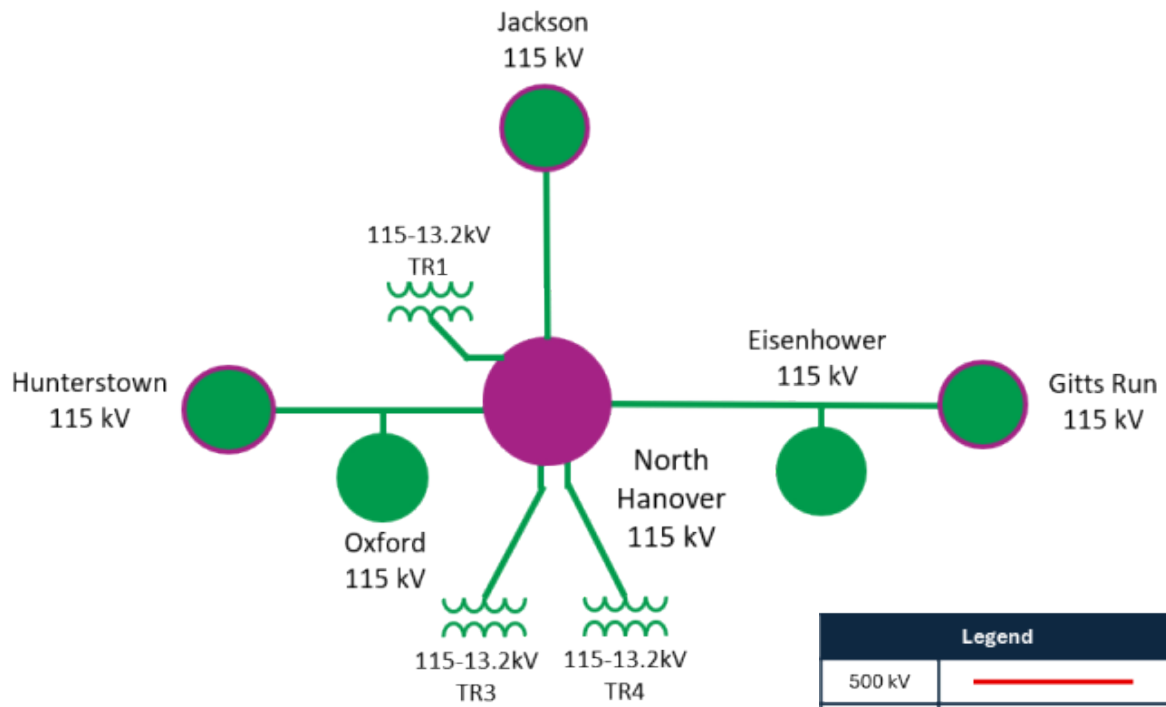
Ratings:

- Jackson - North Hanover 115 kV 968 Line:
 - Before Proposed Solution: 133 / 160 / 150 / 190 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 133 / 160 / 150 / 190 MVA (SN/SE/WN/WE)
- Hunterstown - North Hanover 115 kV 960 Line:
 - Before Proposed Solution: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)
- Gitts Run - North Hanover No. 1 115 kV Line:
 - Before Proposed Solution: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)
- Gitts Run - North Hanover No. 2 115 kV Line:
 - Before Proposed Solution: 221 / 263 / 263 / 301 MVA (SN/SE/WN/WE)
 - After Proposed Solution: 221 / 263 / 263 / 301 MVA (SN/SE/WN/WE)

Estimated Project Cost: \$36.79M

Projected In-Service: 12/29/2028

Supplemental Project ID: s4016.1



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Need Number: ME-2025-001

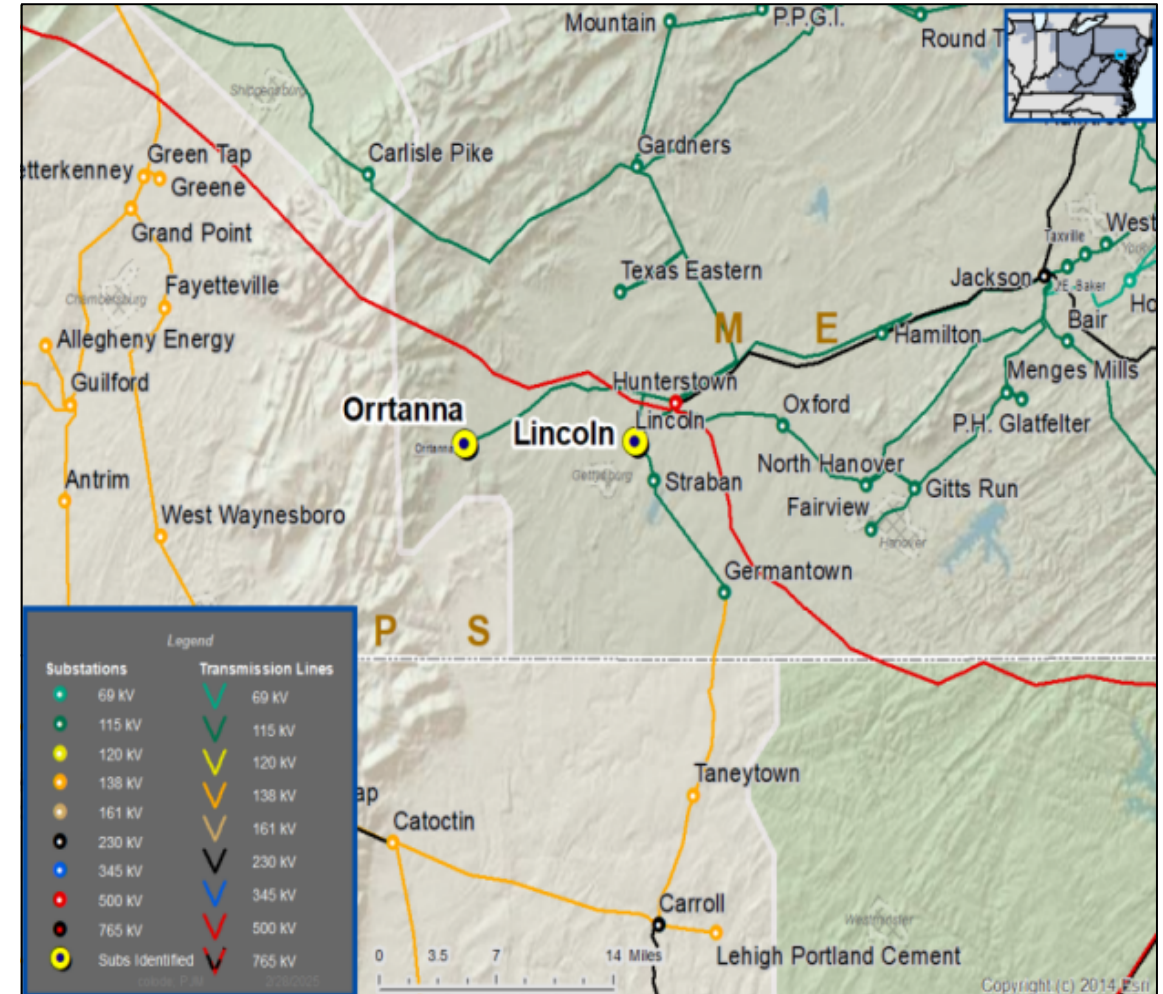
Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Previously Presented: Solution Meeting – SRRTEP-MA – 02/12/2026
Need Meeting – SRRTEP-MA – 03/13/2025

Project Driver:
Customer Service

Specific Assumption Reference:
New customer connection request will be evaluated based on FirstEnergy's "Requirements for Transmission Connected Facilities" document and FirstEnergy's "Transmission Planning Criteria" document.

Problem Statement:
New Customer Connection – A customer requested a new 115 kV delivery point near the Lincoln - Orrtanna 115 kV Line. The anticipated load of the new customer connection is 22 MVA. The request is approximately three miles from Orrtanna Substation.



Need number: ME-2025-001

Process Stage: Submission of Supplemental Projects for Inclusion in the Local Plan

Selected Solution:

- Tap the Lincoln - Orrtanna 115 kV Line and install 2 network SCADA controlled switches and 1 radial SCADA controlled switch
- Construct 1-2 spans of transmission line conductor from tap location to new Customer substation
- Install 115 kV revenue metering
- Adjust relay settings at Lincoln Substation and Orrtanna Substation.

Ratings:

Orrtanna - West Gettysburg 115 kV Line:

- Before Proposed Solution: 147 / 180 / 187 / 211 MVA (SN/SE/WN/WE)
- After Proposed Solution: 147 / 188 / 193 / 211 MVA (SN/SE/WN/WE)

Lincoln - West Gettysburg 115 kV Line:

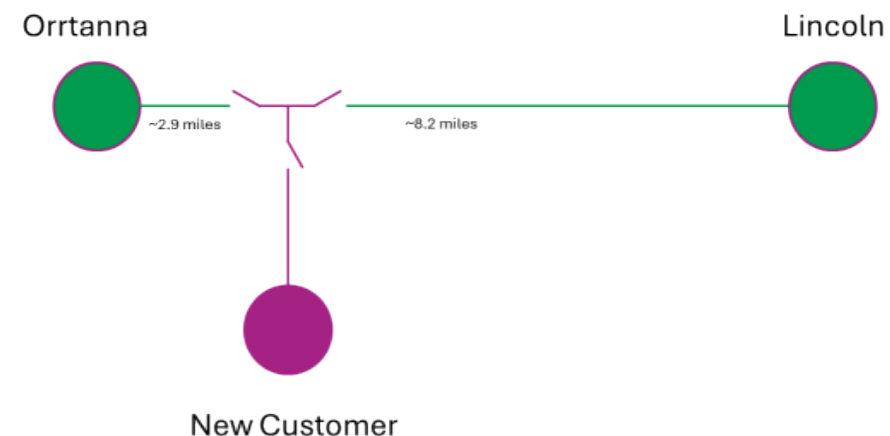
- Before Proposed Solution: 147 / 180 / 187 / 211 MVA (SN/SE/WN/WE)
- After Proposed Solution: 147 / 188 / 193 / 211 MVA (SN/SE/WN/WE)

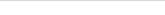
Estimated Project Cost: \$3.06M

Projected In-Service: 04/08/2031

Supplemental Project ID: s4017.1

MetEd Transmission Zone M-3 Process Lincoln-Orrtanna 115 kV Customer Connection



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

Revision History

01/02/2026 – V1

s3733

s3742

s3743

10/01/2026 – V2

s3817

s3973

s3974

s3975

s3976

s3977

s4015

s4016

s4017