

# BGE 2024

Submission of Supplemental Projects for  
Inclusion in the Local Plan

**Need Number:** BGE-2023-010

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

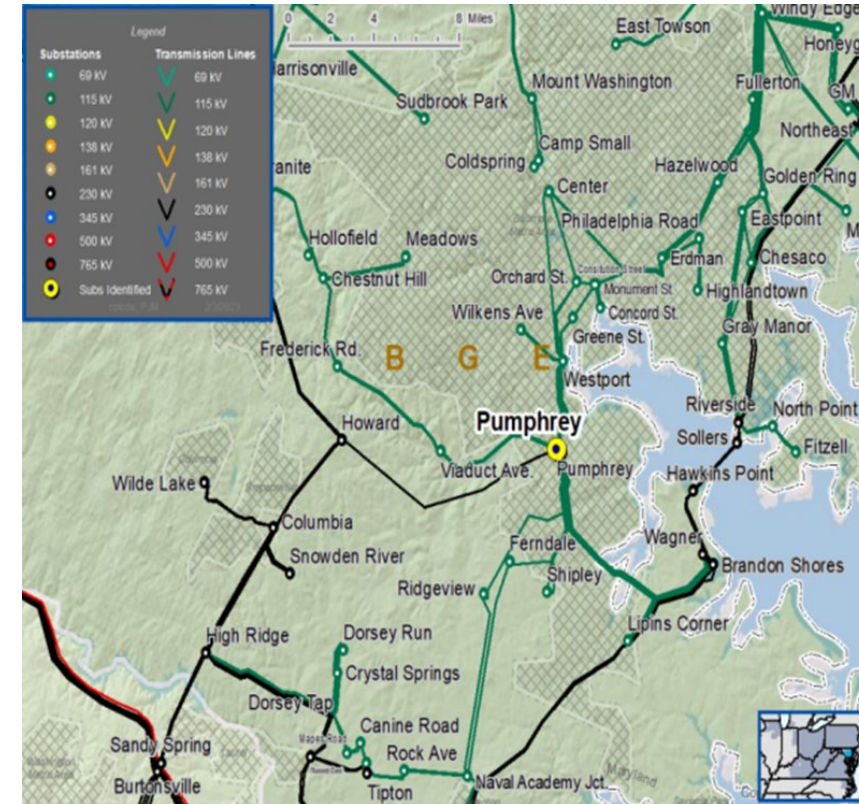
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Pumphrey 115kV circuit breaker #B4 installed in 1977 is in deteriorating condition and has elevated maintenance costs



**Need Number:** BGE-2023-010

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

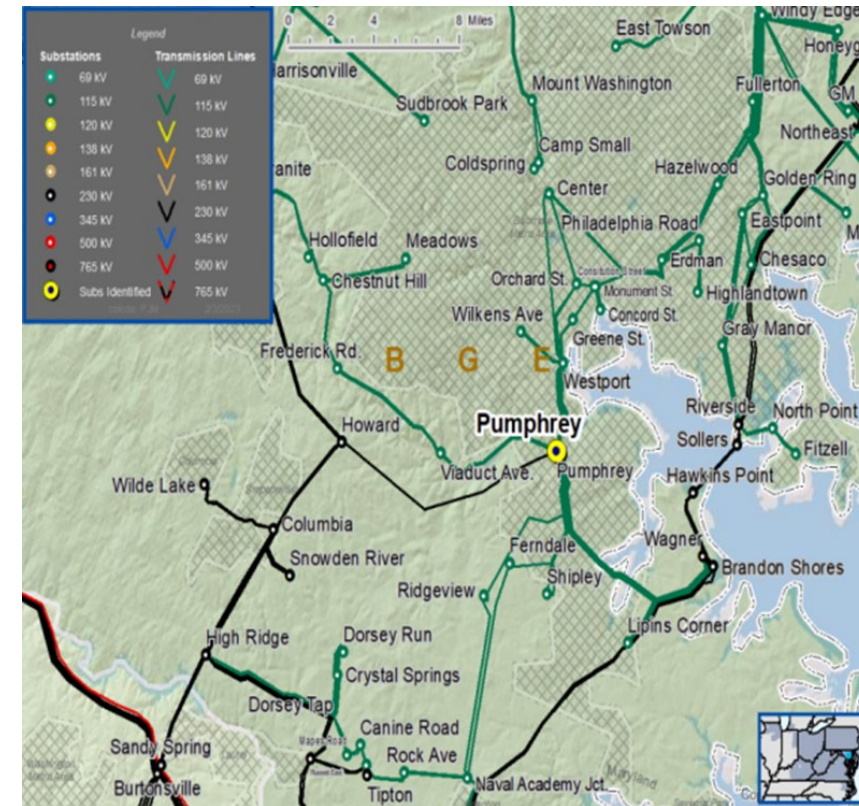
**Selected Solution:**  
Replace Pumphrey circuit breaker B4

**Estimated Cost:** \$0.7M

**Projected In-Service:** 4/5/2024

**Supplemental Project ID:** s3223.1

**Project Status:** In-service



**Need Number:** BGE-2023-011

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

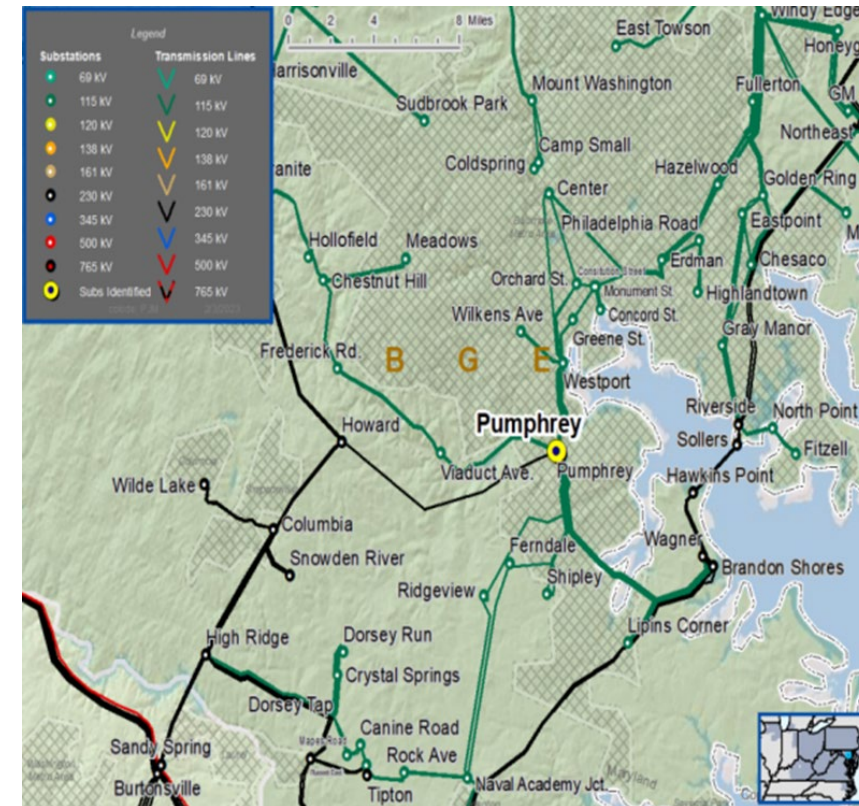
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Pumphrey 115kV circuit breaker #B5 installed in 1979 is in deteriorating condition and has elevated maintenance costs





**Need Number:** BGE-2023-011

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

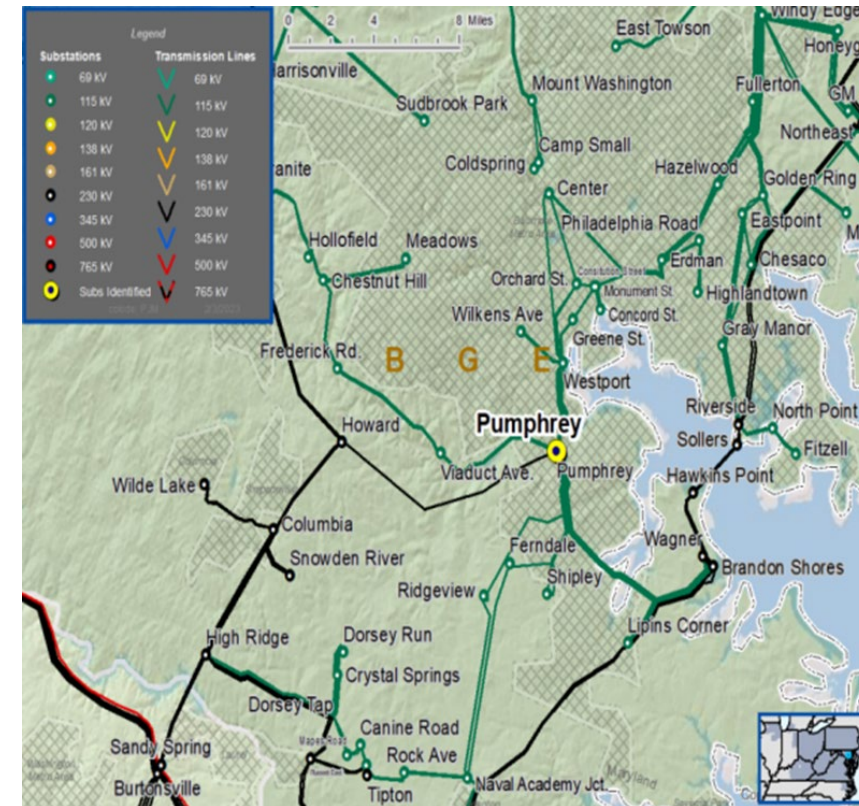
**Selected Solution:**  
Replace Pumphrey circuit breaker B5

**Estimated Cost:** \$0.7M

**Projected In-Service:** 5/10/2024

**Supplemental Project ID:** s3224.1

**Project Status:** Engineering



**Need Number:** BGE-2023-012

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

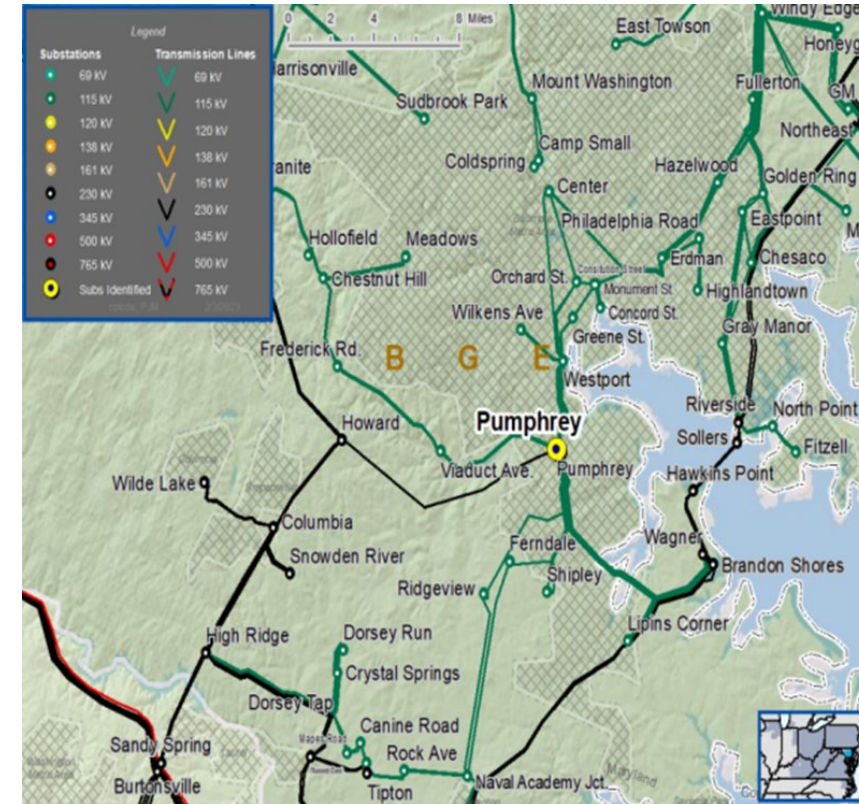
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Pumphrey 115kV circuit breaker #B6 installed in 1977 is in deteriorating condition and has elevated maintenance costs



**Need Number:** BGE-2023-012

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

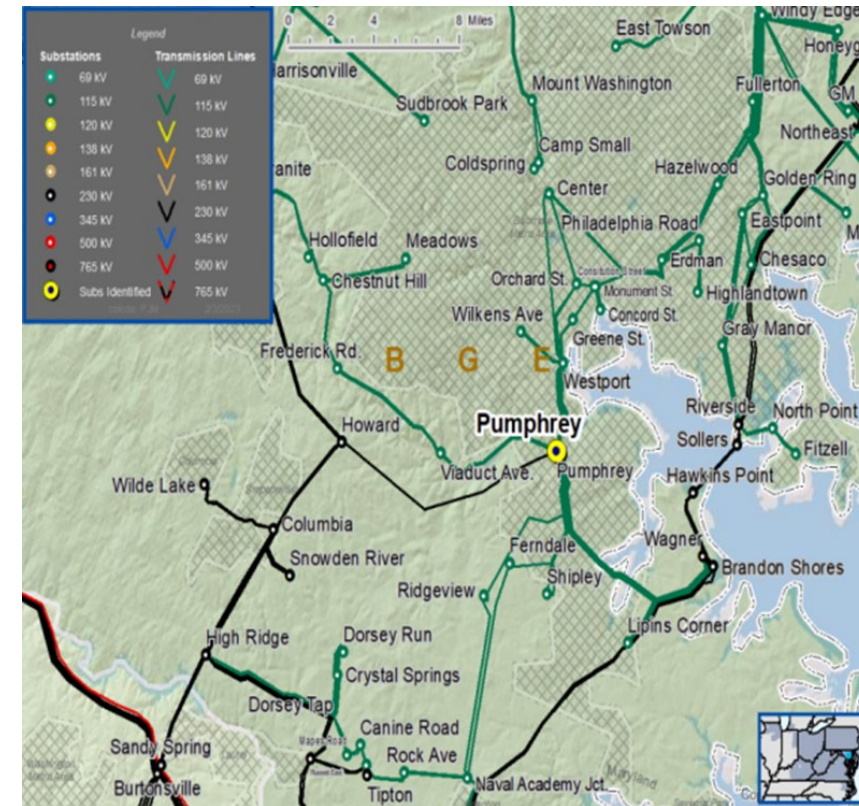
**Selected Solution:**  
Replace Pumphrey circuit breaker B6

**Estimated Cost:** \$0.7M

**Projected In-Service:** 6/13/2024

**Supplemental Project ID:** s3225.1

**Project Status:** Engineering







**Need Number: BGE-2023-013**

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

## Previously Presented:

Need 10/19/2023

Solution 11/16/2023

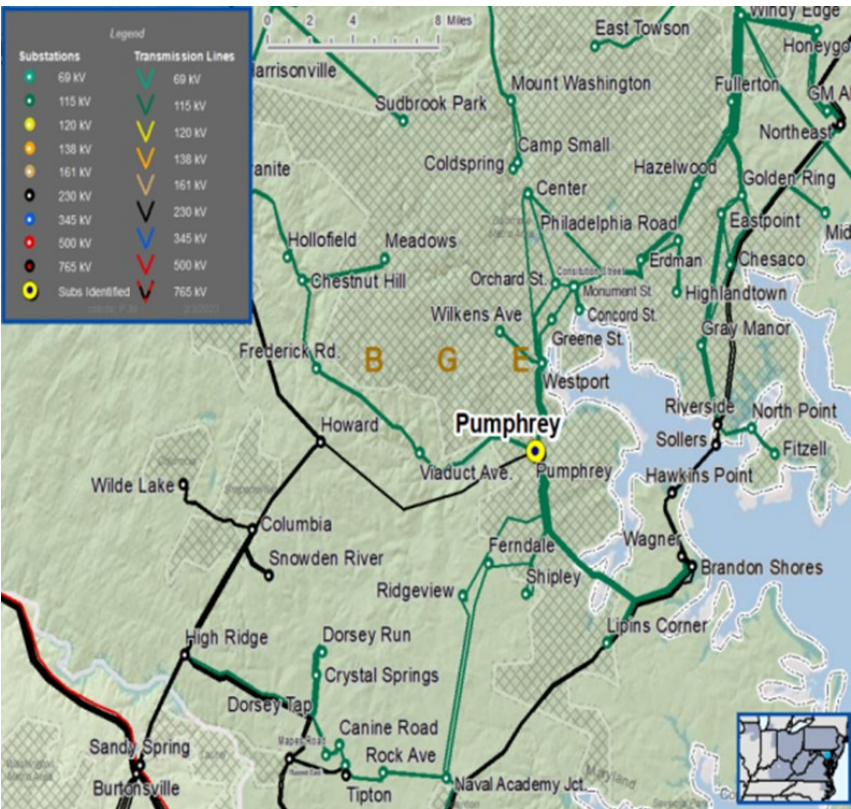
**Project Driver:** Equipment Material Condition, Performance, and Risk

### Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

### Problem Statement:

- Pumphrey 115kV circuit breaker #B7 installed in 1977 is in deteriorating condition and has elevated maintenance costs





**Need Number:** BGE-2023-013

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

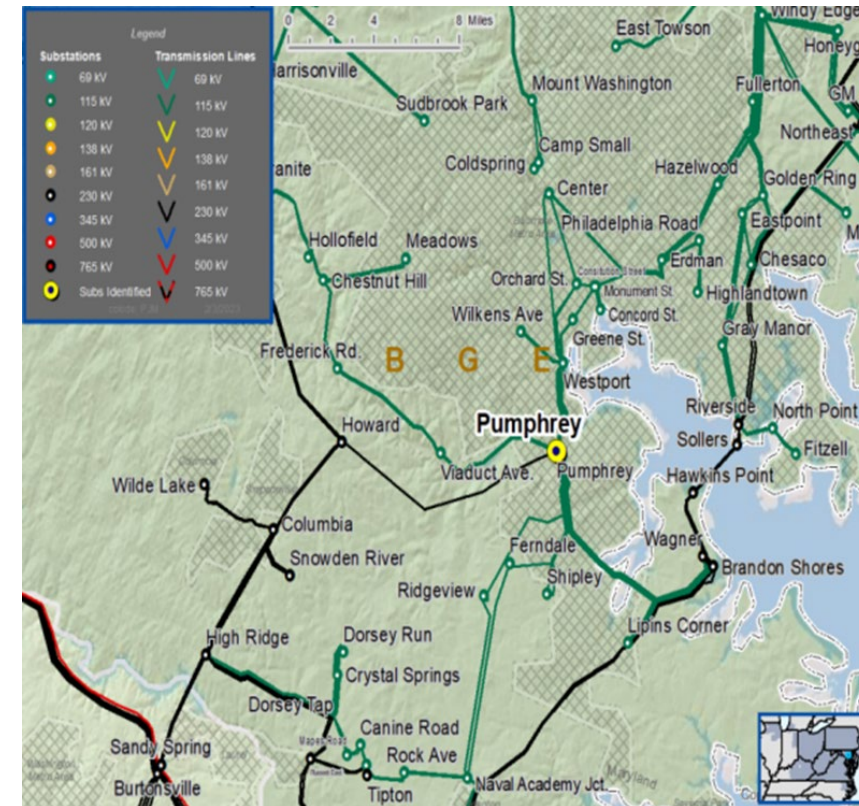
**Selected Solution:**  
Replace Pumphrey circuit breaker B7

**Estimated Cost:** \$0.7M

**Projected In-Service:** 11/28/2024

**Supplemental Project ID:** s3226.1

**Project Status:** Engineering



**Need Number:** BGE-2023-014

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

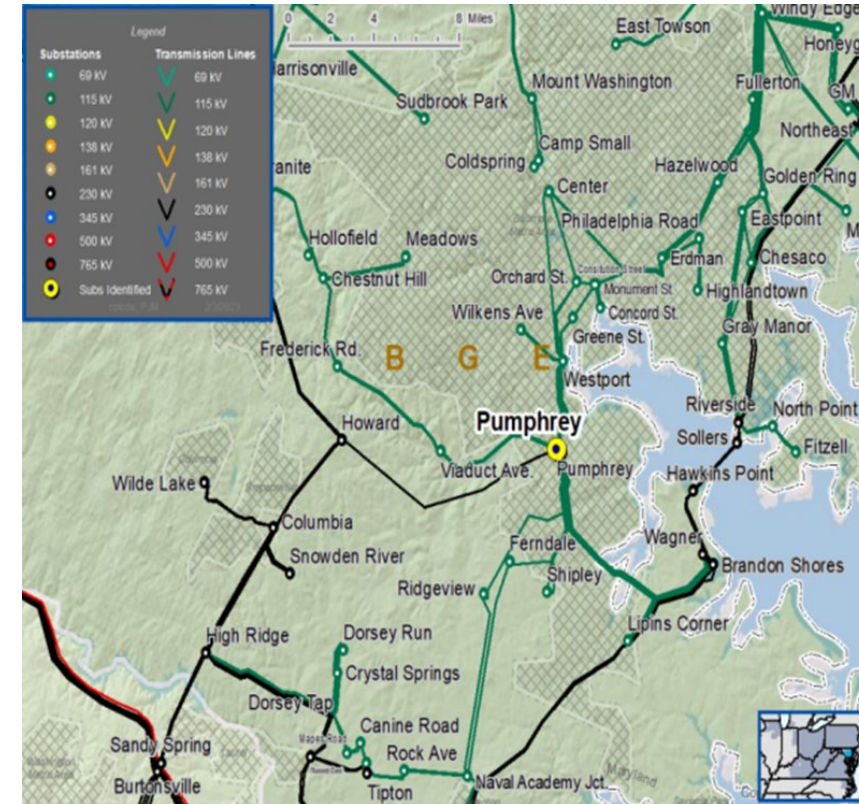
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Pumphrey 115kV circuit breaker #B9 installed in 1977 is in deteriorating condition and has elevated maintenance costs



**Need Number:** BGE-2023-014

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

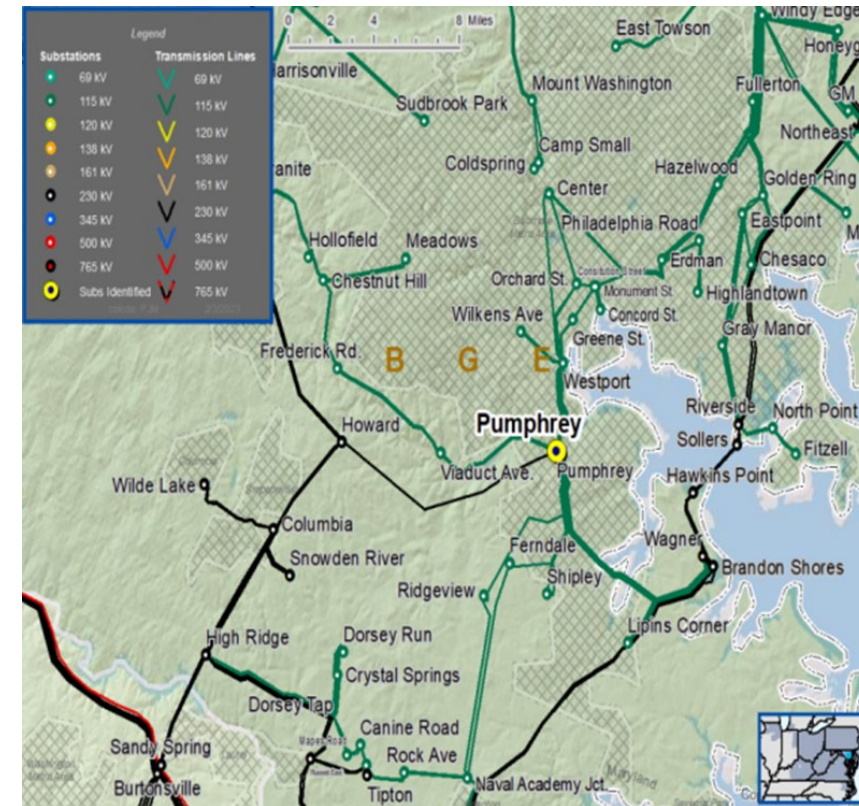
**Selected Solution:**  
Replace Pumphrey circuit breaker B9

**Estimated Cost:** \$0.7M

**Projected In-Service:** 10/18/2024

**Supplemental Project ID:** s3227.1

**Project Status:** Engineering





**Need Number:** BGE-2023-015

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

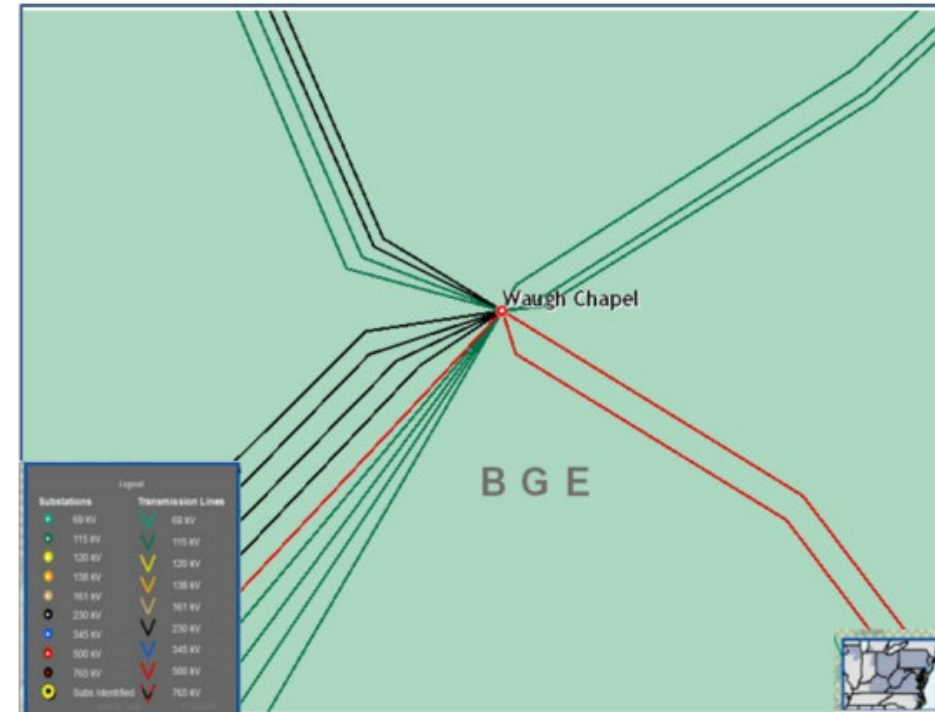
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Waugh Chapel 115kV circuit breaker #B6 installed in 1996 is in deteriorating condition and has elevated maintenance costs



**Need Number:** BGE-2023-015

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

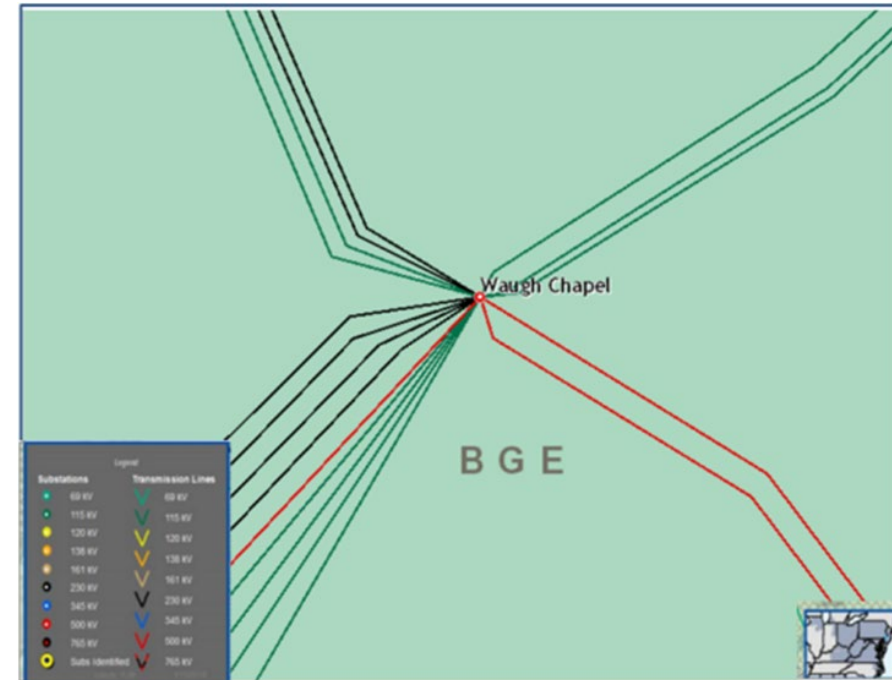
**Selected Solution:**  
Replace Waugh Chapel circuit breaker B6

**Estimated Cost:** \$0.7M

**Projected In-Service:** 10/17/2024

**Supplemental Project ID:** s3228.1

**Project Status:** Engineering



**Need Number:** BGE-2023-016

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

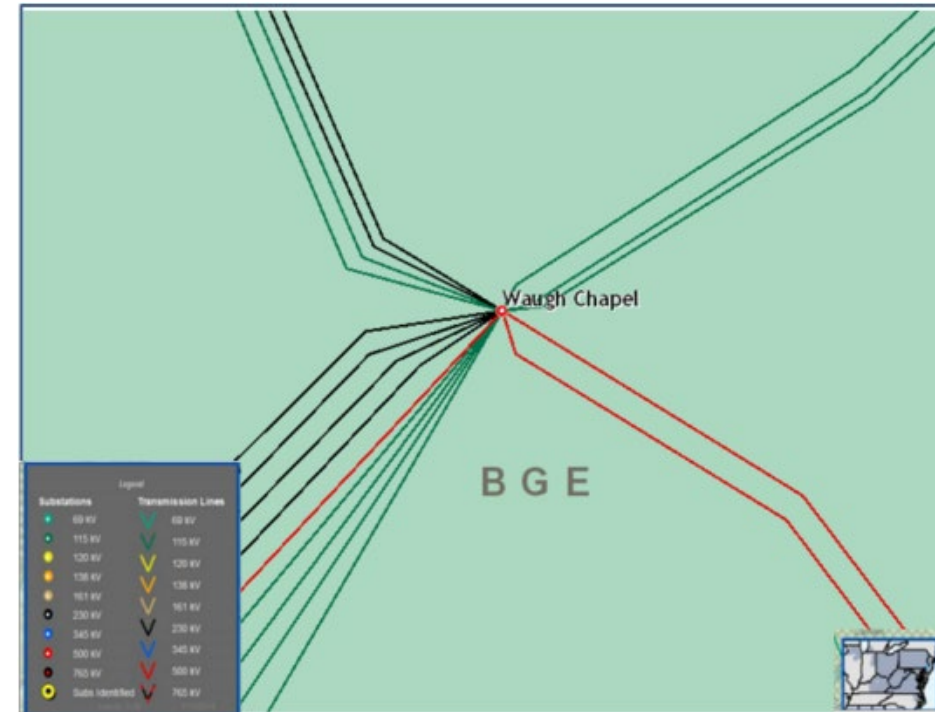
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Waugh Chapel 115kV circuit breaker #B9 installed in 1996 is in deteriorating condition and has elevated maintenance costs





**Need Number:** BGE-2023-016

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

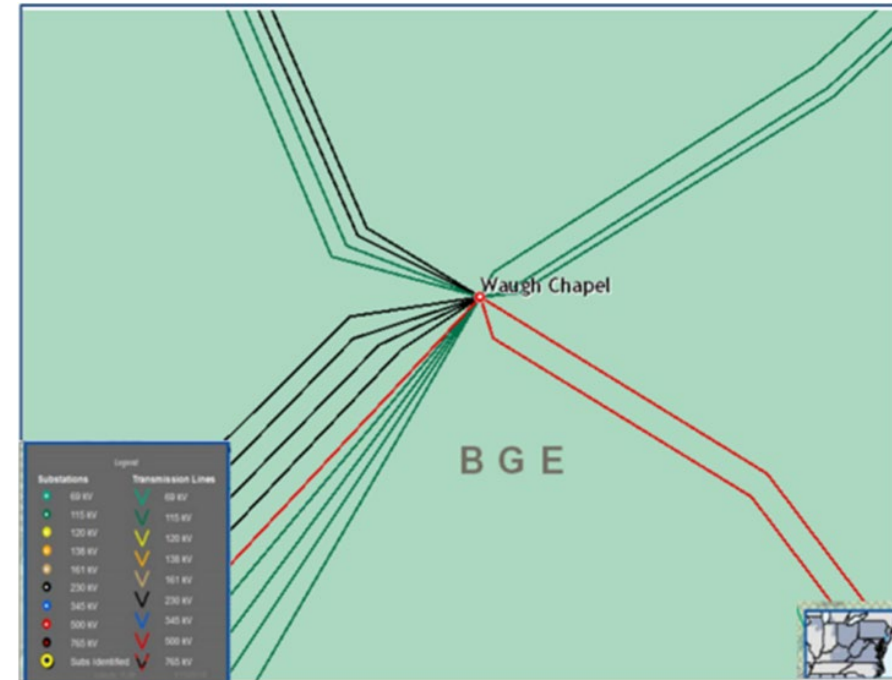
**Selected Solution:**  
Replace Waugh Chapel circuit breaker B9

**Estimated Cost:** \$0.7M

**Projected In-Service:** 6/6/2024

**Supplemental Project ID:** s3229.1

**Project Status:** Engineering



**Need Number:** BGE-2023-017

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

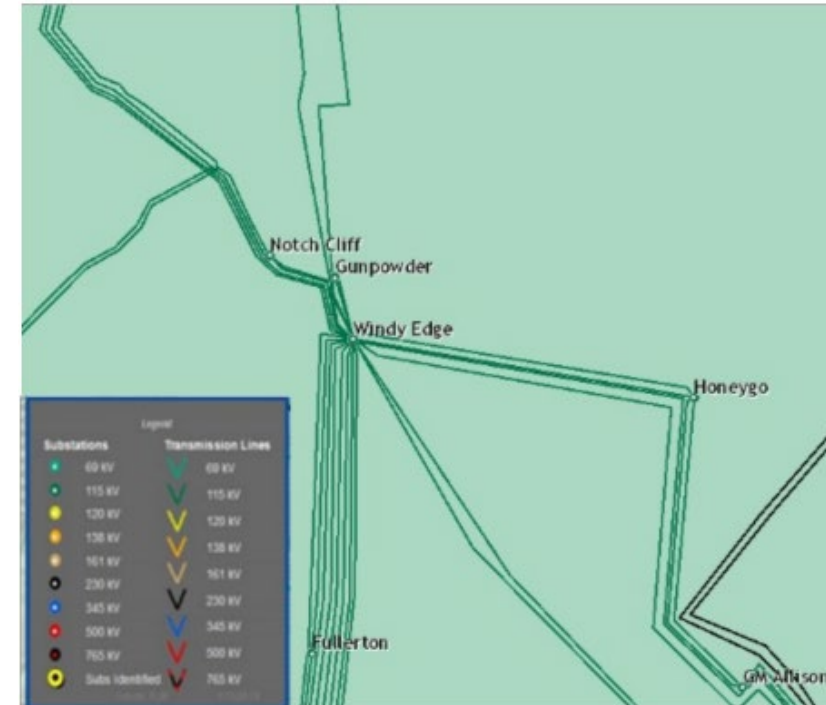
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Windy Edge 115kV circuit breaker #B19 installed in 1961 is in deteriorating condition and has elevated maintenance costs



**Need Number:** BGE-2023-017

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Selected Solution:**  
Replace Windy Edge circuit breaker B19

**Estimated Cost:** \$0.7M

**Projected In-Service:** 11/4/2024

**Supplemental Project ID:** s3230.1

**Project Status:** Engineering





**Need Number:** BGE-2023-018

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Previously Presented:**

Need 10/19/2023

Solution 11/16/2023

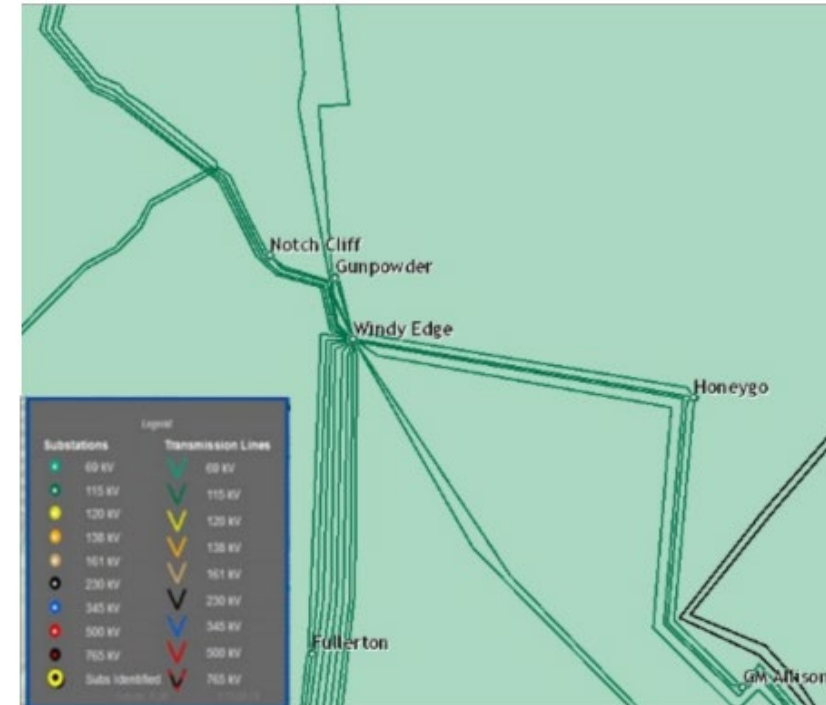
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Windy Edge 115kV circuit breaker #B20 installed in 1961 is in deteriorating condition and has elevated maintenance costs



**Need Number:** BGE-2023-018

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 4/17/2024

**Selected Solution:**  
Replace Windy Edge circuit breaker B20

**Estimated Cost:** \$0.7M

**Projected In-Service:** 10/10/2024

**Supplemental Project ID:** s3231.1

**Project Status:** Engineering



**Need Number:** BGE-2023-019

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 5/13/2024

**Previously Presented:**  
Need 12/13/2023  
Solution 2/15/2024

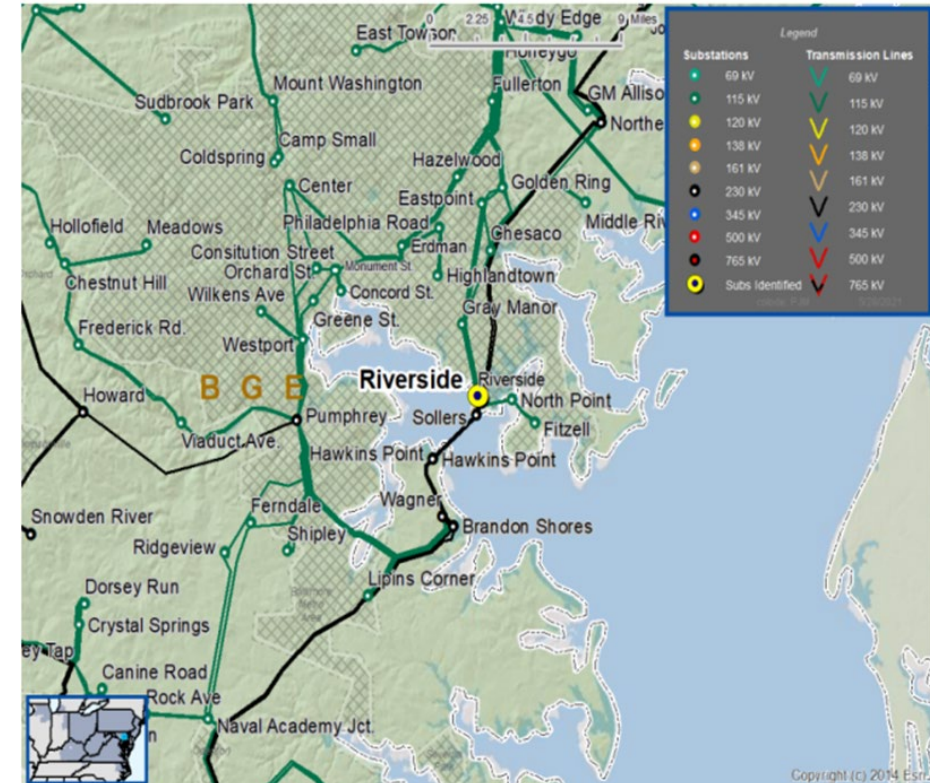
**Project Driver:** Equipment Material Condition, Performance, and Risk

**Specific Assumption Reference:**

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.

**Problem Statement:**

- Riverside 115kV substation originally constructed in 1947 was built to operate as a straight bus configuration consisting of two 115kV bus sections normally tied together with two bus tie breakers.
  - The configuration of the station results in a complicated non-standard control and protection scheme.
  - Operations switching is difficult because of existing protection schemes required for straight bus configuration.
  - Configuration creates reliability concerns with multiple element outages for various contingency scenarios including Bus and Faulted Breaker contingencies.
- Eleven 115kV oil breakers with their associated switches are currently in service with nine of the breakers being greater than 50 years old.
  - Much of the remaining equipment is original to the station.
- Frequent corrective maintenance throughout the substation
  - Maintenance items have included but are not limited to deteriorating foundations, oil leaks, relay misoperations, ground grid issues and control cables.





**Need Number:** BGE-2023-019

**Process Stage:** Submission of Supplemental Project for inclusion in the Local Plan 5/13/2024

**Selected Solution:**

Rebuild Riverside 115kV station as 12 position GIS Breaker and Half Substation on existing BGE owned property

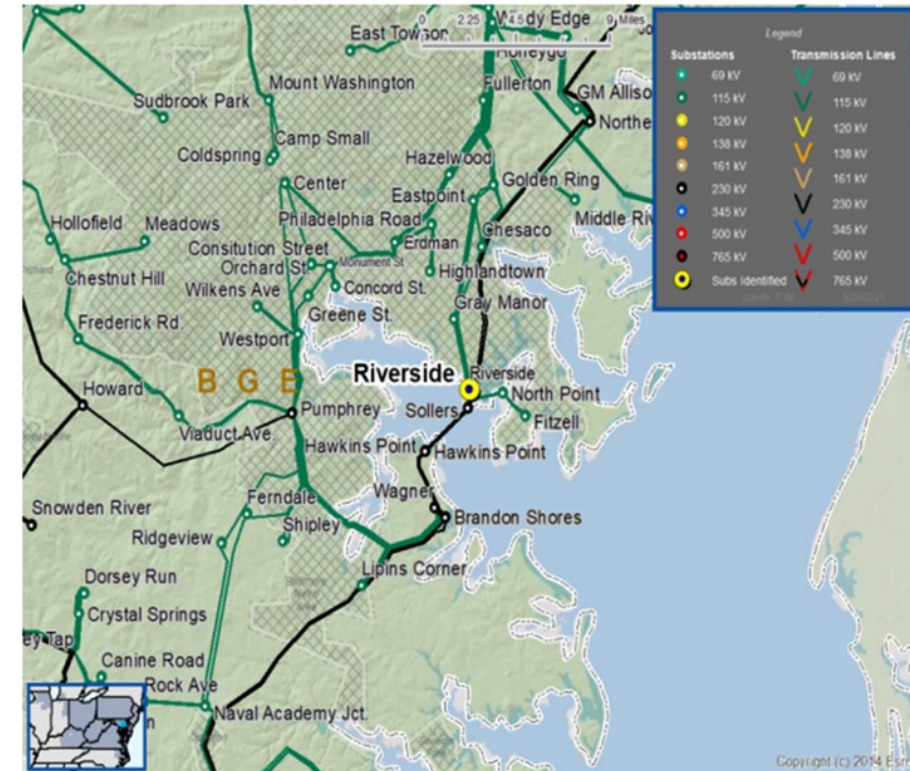
- Install 115 kV, 4000A, 63kA interrupting current equipment
- Install Relay and Control Panels
- Re-terminate existing transmission lines and transformer connections into new GIS equipment

**Estimated Cost:** \$84.3M

**Projected In-Service:** 12/31/2028

**Supplemental Project ID:** s3279.1

**Project Status:** Engineering



## Revision History

- 4/17/2024 – V1 – Local Plan posted for s3223.1 – s3231.1
- 5/13/2024 – V2 – added s3297.1