# BGE 2020 Submission of Supplemental Projects for Inclusion in the Local Plan



Process Stage: Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

**Previously Presented:** 

Need 02/04/2020

Solution 03/10/2020

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

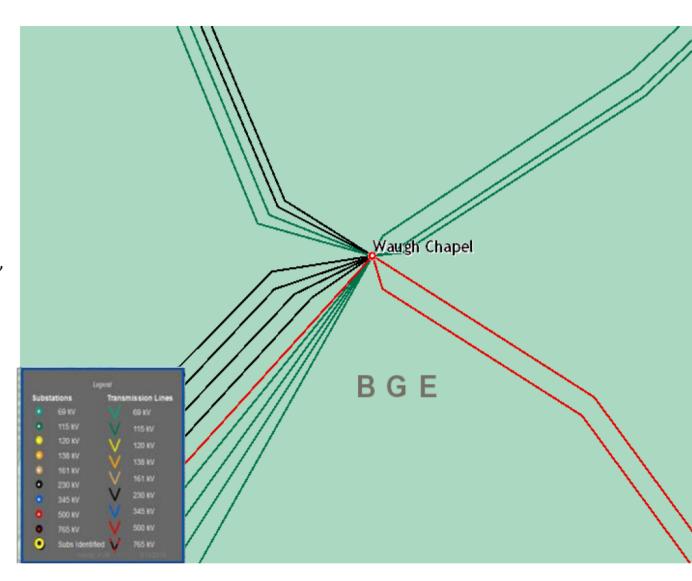
#### **Problem Statement:**

Four 230 kV oil filled circuit breakers at Waugh Chapel are at risk of poor performance, have environmental risks/concerns along with parts availability issues

# **Specific Assumption References:**

2020 Local Planning Assumptions (BGE) – 12/16/2019 Mid Atlantic SRRTEP

 Programmatic replacement of breakers, relays, wood poles, cables, etc.





BGE Transmission Zone M-3 Process Waugh Chapel Breaker Replacement

Need Number: BE-2020-0001

**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

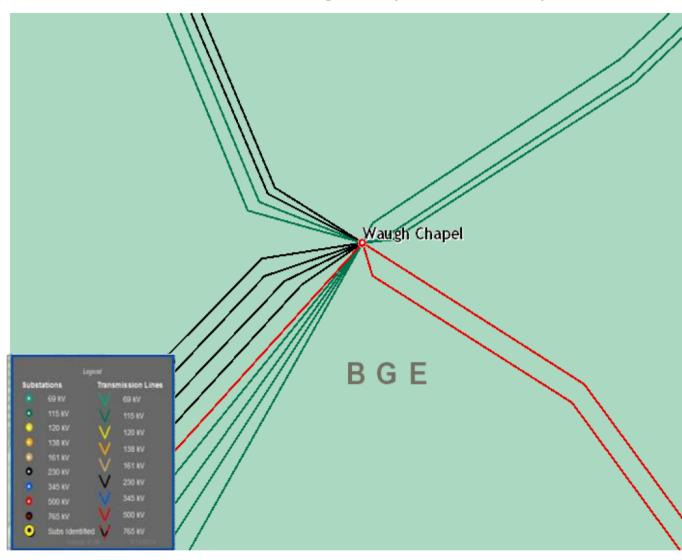
#### **Selected Solution:**

 Replace four 230 kV oil filled circuit breakers at Waugh Chapel substation with four new gas circuit breakers

Estimated Cost: \$2.3M

**Projected In-Service:** 12/31/2020

**Supplemental Project ID:** S2206





**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

# **Previously Presented:**

Need 02/04/2020

Solution 03/10/2020

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

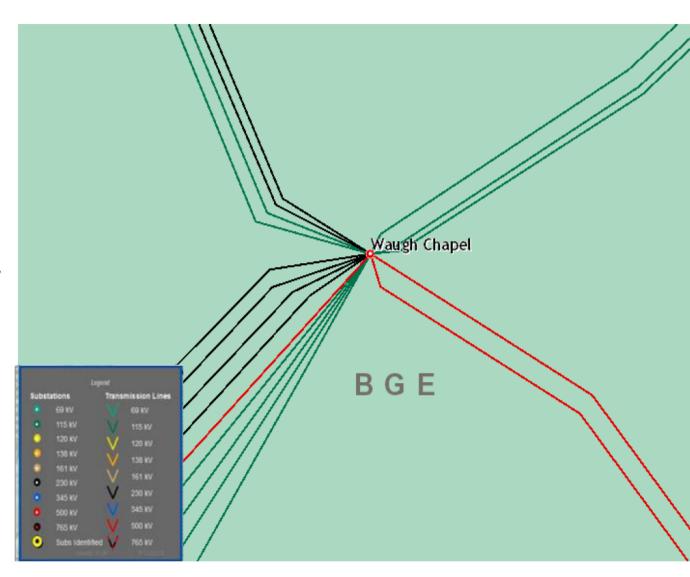
#### **Problem Statement:**

Two 230 kV circuit breakers at Raphael Road are at risk of poor performance, have had defective parts along with parts availability issues

# **Specific Assumption References:**

2020 Local Planning Assumptions (BGE) – 12/16/2019 Mid Atlantic SRRTEP

 Programmatic replacement of breakers, relays, wood poles, cables, etc.





BGE Transmission Zone M-3 Process Raphael Road Breaker Replacement

Need Number: BE-2020-0002

**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

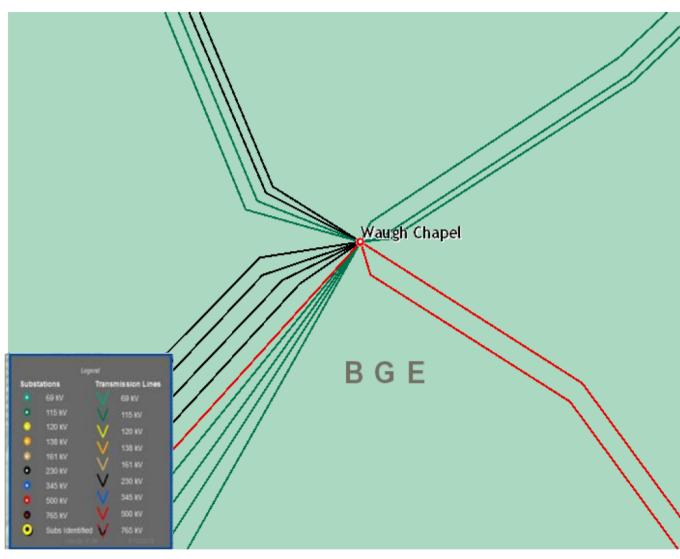
#### **Selected Solution:**

 Replace two 230 kV circuit breakers at Raphael Road substation with two new gas circuit breakers

Estimated Cost: \$0.91M

**Projected In-Service:** 12/31/2020

**Supplemental Project ID:** S2207





**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

# **Previously Presented:**

Need 02/112020

Solution 03/19/2020

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

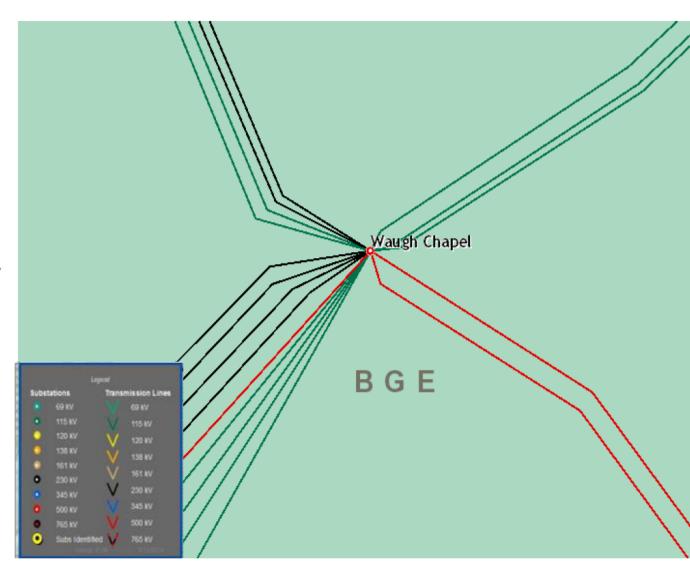
#### **Problem Statement:**

Two 115 kV oil filled circuit breakers at Granite are at risk of poor performance, have environmental risks/concerns along with parts availability issues

# **Specific Assumption References:**

2020 Local Planning Assumptions (BGE) – 12/16/2019 Mid Atlantic SRRTEP

 Programmatic replacement of breakers, relays, wood poles, cables, etc.





BGE Transmission Zone M-3 Process Granite Breaker Replacement

Need Number: BE-2020-0003

Process Stage: Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

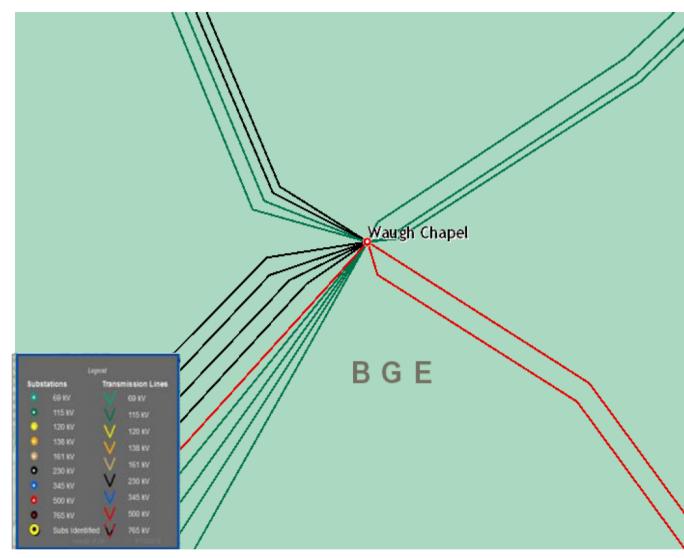
#### **Selected Solution:**

 Replace two 115 kV oil filled circuit breakers at Granite substation with two new gas circuit breakers

Estimated Cost: \$0.92M

**Projected In-Service:** 12/31/2020

**Supplemental Project ID:** S2208





**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

### **Previously Presented:**

Need 02/11/2020

Solution 03/19/2020

Supplemental Project Driver: Equipment Material Condition,

Performance and Risk

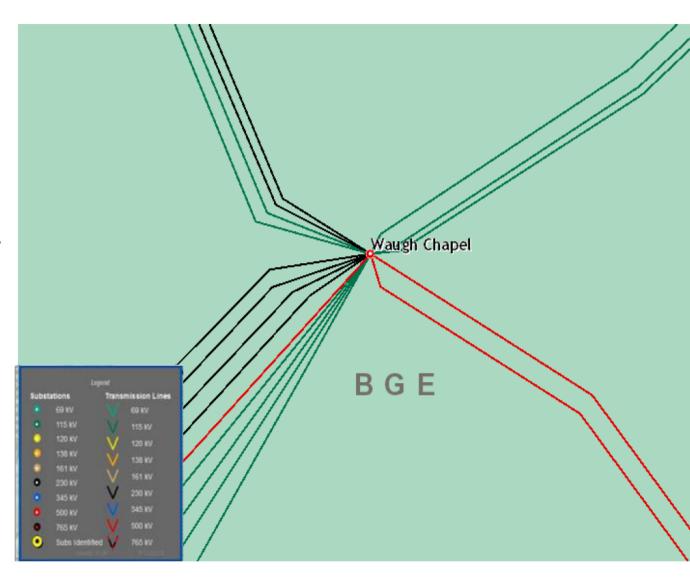
#### **Problem Statement:**

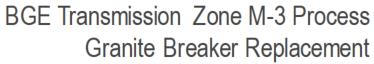
The Harford-Perryman 115kV circuits 110617, 110618 are wood H-Frame circuits with poles dating back to the 1950's with nearly every pole having significant material condition issues including degraded pole shafts, arms, tops, bird holes including those from Pileated Wood Peckers), degraded insulators and hardware etc.

# Specific Assumption References:

2020 Local Planning Assumptions (BGE) – 12/16/2019 Mid Atlantic SRRTEP

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







**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 05/19/2020

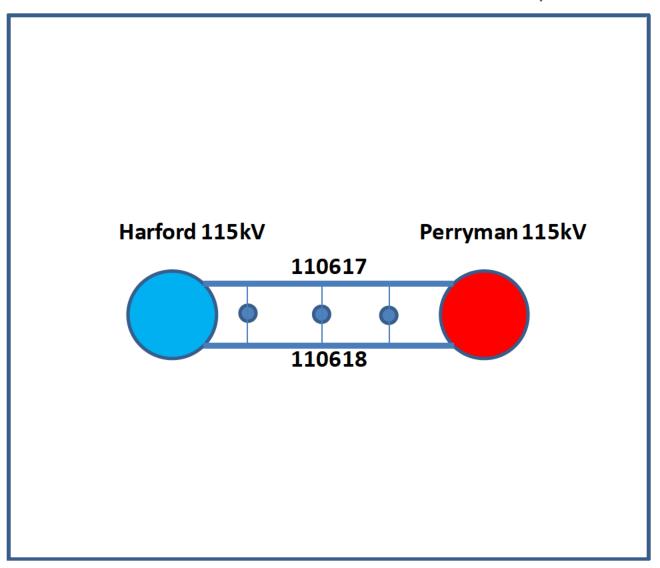
#### **Selected Solution:**

Rebuild two single circuit 115kV wood h-frame circuits (110617/110618) as one double circuit steel pole line

Estimated Cost: \$21.4M

**Projected In-Service:** 12/31/2021

**Supplemental Project ID:** S2209







**Process Stage:** Submission of Supplemental Project for inclusion in

the Local Plan 09/22/2020

**Previously Presented:** 

Need 04/14/2020

Solution 06/02/2020

**Project Driver:** Operational Flexibility and Efficiency

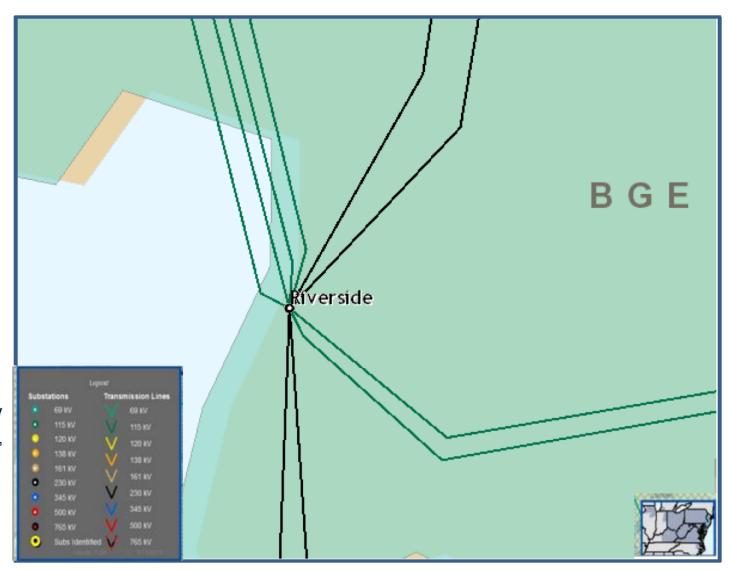
Specific Assumption Reference:

2020 Local Planning Assumptions (BGE) – 12/16/2019 Mid Atlantic SRRTEP

Enhancing system functionality, flexibility, or operability

#### **Problem Statement:**

At BGE's Riverside substation, significant switching steps and equipment outages are required to support planned outages of the 230kV 2344 circuit, 230-1 transformer or associated underlying 115kV equipment. In addition, for unplanned outages of the same equipment, there are multiple elements at both 230 and 115kV voltage levels that are automatically taken out of service in order to isolate the fault conditions.







**Process Stage:** Submission of Supplemental Project for

inclusion in the Local Plan 09/22/2020

**Proposed Solution:** 

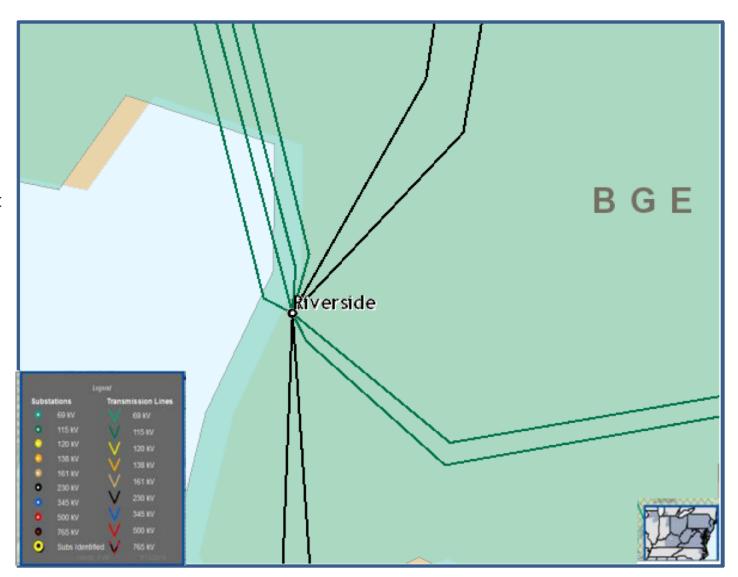
Install new 230kV 63kA breaker and associated equipment

on the 2344 circuit at Riverside substation

Estimated Cost: \$0.93M

**Supplemental Project ID:** S2277

**Projected In-Service:** 11/31/2020



# **Revision History**

5/19/2020 - V1 - Posted Local plan for S2206 to S2209

9/22/2020 - V2 - Added Local plan for S2277