

# SRRTEP Committee BGE Supplemental Project

February 15, 2024

# 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

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

**Process Stage:** Solution Meeting 2/15/2024

**Previously Presented:** Need Meeting 12/13/2023

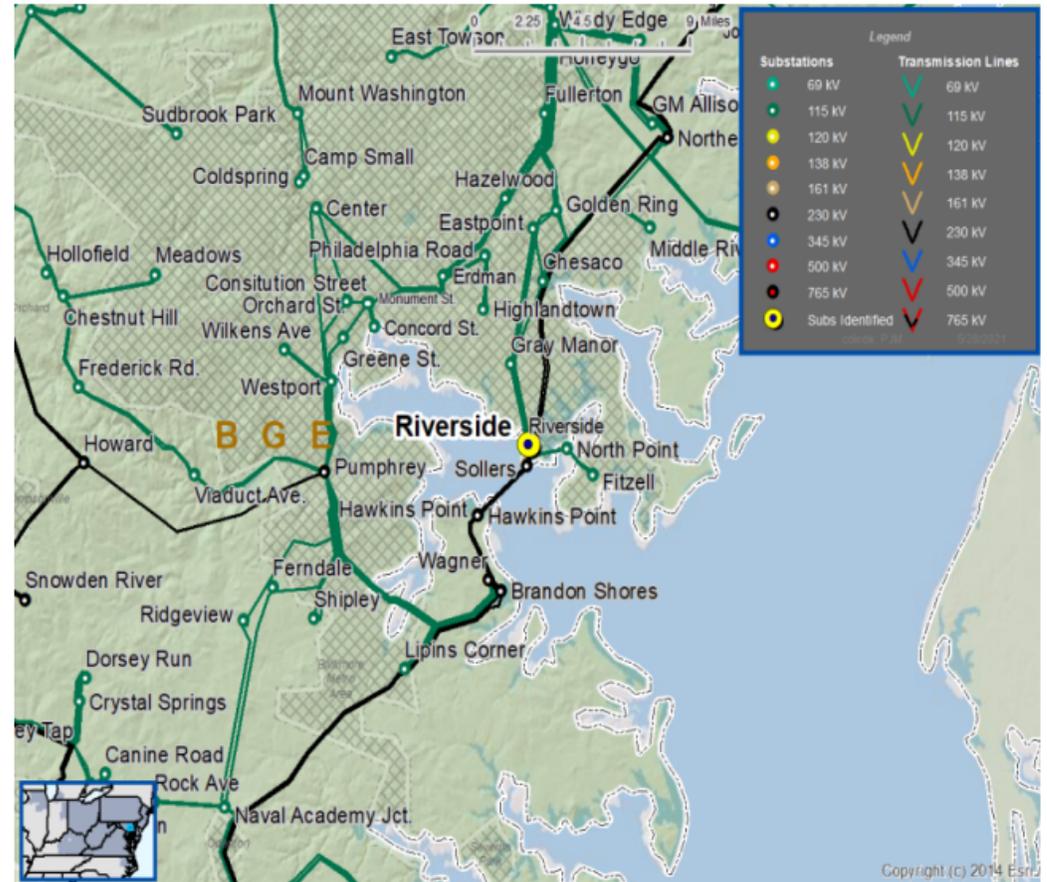
**Project Driver:** Equipment Material Condition, Performance, and Risk

**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:**

- 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.



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**Proposed 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

The estimated cost of the project is \$84.3M

**Alternatives Considered:**

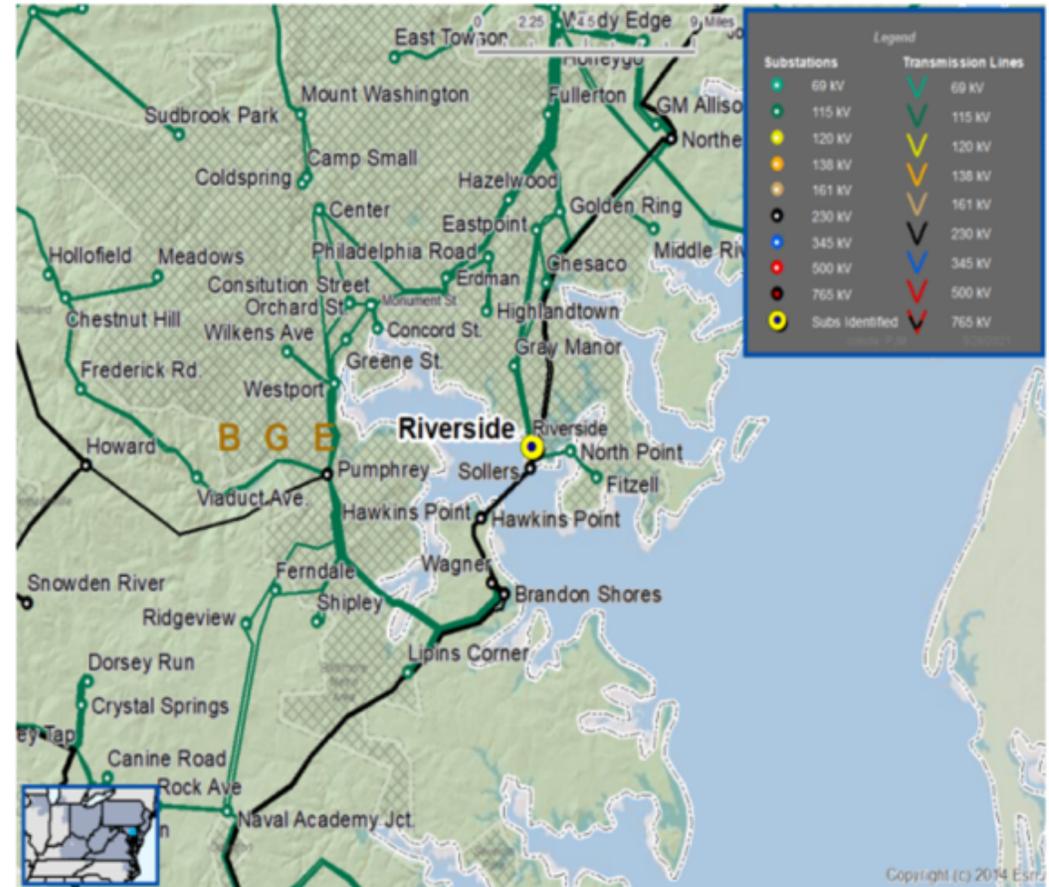
Rebuild 115kV Air Insulated Substation

- AIS will not fit on existing property
  - Potential for additional environmental risks and required mitigation for new land and larger area

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

**Project Status:** Engineering

**Model:** 2027 RTEP



# Questions?



# 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

2/5/2024 – V1 – Original version posted to pjm.com