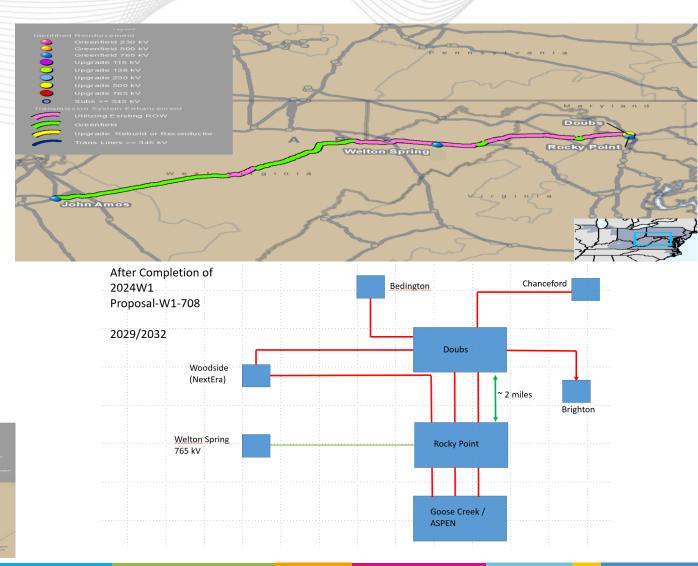


2024W1 – Regional Cluster Recommended Solution: 2024-W1-708

Recommended Solution: 2024-W1-708

- Add one 765 kV breaker at Amos Substation to expand the breaker and a half scheme to accommodate the new Amos - Welton Spring 765 kV Line \$30.87M (b4000.1)
- Construct a new 175 miles Amos to Welton Spring 765 kV line. (Roughly 30 miles in AEP Section) \$150M (b4000.2)
- Construct a new 175 miles Amos to Welton Spring 765 kV line. (Roughly 145 miles in APS/FE Section) \$725M (b4000.3)
- Construct a new 765 kV switchyard (Welton Spring) \$92.28M (b4000.4)
- Install four 250 MVAR shunt capacitors, and a +/-500 MVAR STATCOM at Welton Spring 765 kV substation \$121.54M (b4000.5)
- Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (Welton Spring to DVP local area, roughly 70.7 miles) \$353.5M (b4000.6)
- Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (in DVP local area/Millville to Lovettsville section, roughly 10.5 miles) \$52.5M (b4000.7)



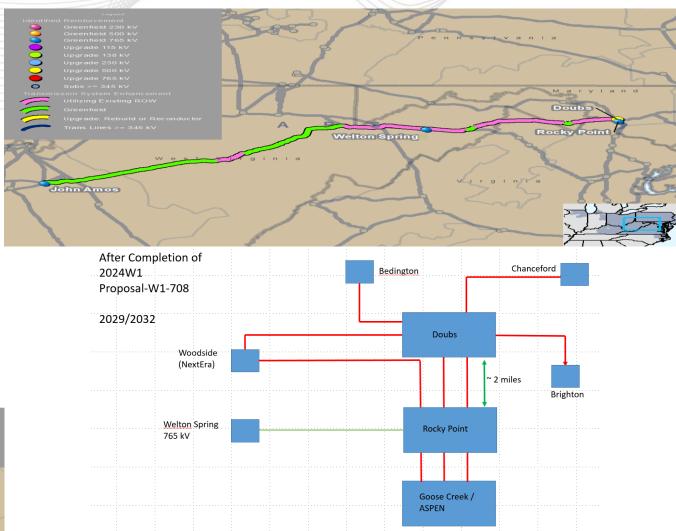


2024W1 – Regional Cluster Recommended Solution: 2024-W1-708

Recommended Solution (Cont): 2024-W1-708

- Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (DVP local area to Rocky Point, roughly 4.8 miles) \$24M (b4000.8)
- Construct a new substation called Rocky Point with a 765 kV and a 500 kV yard. Loop in the Doubs Goose Creek 500 kV line, the Doubs Aspen 500 kV line, and the Woodside Goose Creek 500 kV line. Install two 765/500 kV transformer at Rocky Point substation \$254.7M (b4000.9)
- Install four 250 MVAR cap banks (two on 765 and two on 500 kV side) and a
 +/-500 MVAR STATCOM on the 765 kV Rocky Point yard \$121M (b4000.10)
- Expand Black Oak Substation to accommodate the connection of the 502 Jct Woodside 500 kV line and loop the 502 Jct Woodside 500 kV line into the Black Oak substation by constructing ~0.85 miles of new 500 kV line into andout of Black Oak 500 kV substation \$19.23M (b4000.11)







2024W1 – Regional Cluster Recommended Solution: 2024-W1-708

Recommended Solution (Cont): 2024-W1-708

Upgrade the terminal equipment on the Doubs No. 1 500/230 kV Transformer
 \$0.43M (b4000.12)

Existing Facility Rating:

Branch	SN/SE/WN/WE (MVA)
John Amos – Welton Spring – Rocky Point	N/A

Preliminary Facility Rating:

Branch	SN/SE/WN/WE (MVA)
John Amos – Welton Spring – Rocky Point	6743/7253/7512/7918

Estimated Cost: \$1,945.05 M

Required IS Date: 6/1/2029

Projected IS Date: 12/1/2029



