

Sub-Regional RTEP Committee – Mid-Atlantic PPL Supplemental Projects

July 20, 2023



Needs

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: PPL-2023-0008

Meeting Date: 7/20/2023

Process Stage: Need

Supplemental Project Driver: Equipment Material

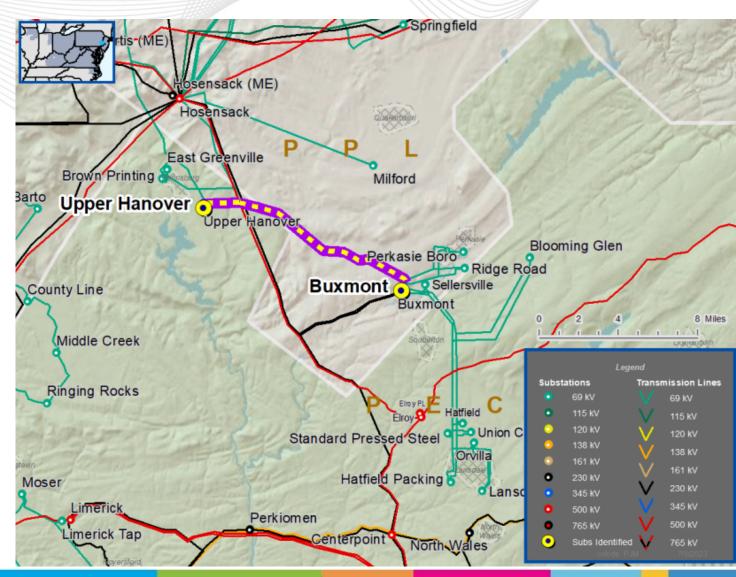
Condition, Performance and Risk;

Problem Statement:

The Buxmont 2 - Upper Hanover Tap 69kV Line is a reliability risk due to poor asset health. The line is in poor condition with the original assets installed in 1951. This is a 9.14 mile tap line with 2/0F copperweld copper conductor and primarily H-frame wood poles with steel poles interspersed.

Specific Assumption References:

PPL 2023 Annual Assumptions





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: PPL-2023-0004

Meeting Date: 07/20/2023

Process Stage: Solution

Need Slide Presented: 03/16/2023

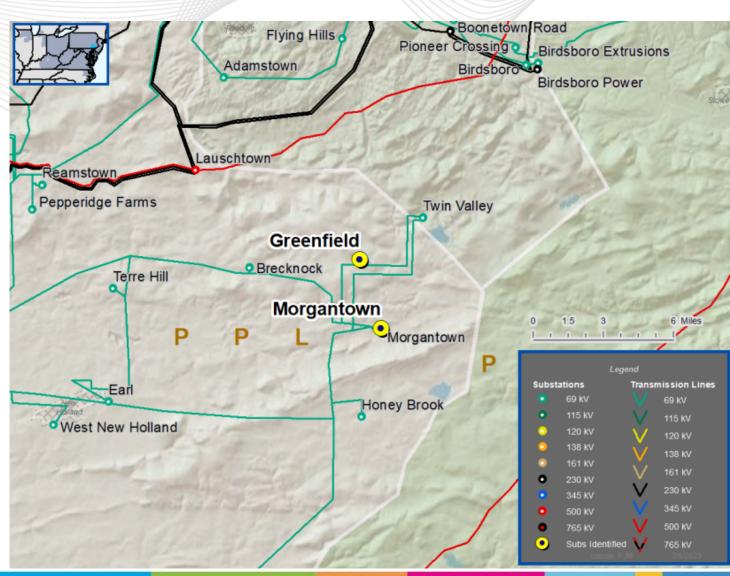
Supplemental Project Driver: Customer Service

Problem Statement:

A customer has submitted a request to have their facility served from a 69kV transmission line in Morgantown, PA. The load is approximately 25 MVA.

Specific Assumption References:

PPL 2023 Annual Assumptions





Need Number: PPL-2023-0004

Proposed Solution:

Extend a new single circuit 69kV tap from the existing Twin Valley Tap #1 69kV line to interconnect a new customer owned 69-12.47kV substation. Build 0.2 miles of new 69kV single circuit line using 556 ACSR conductor.

Alternatives Considered:

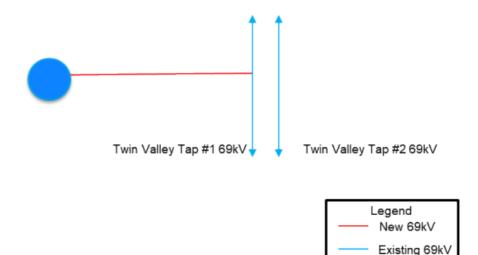
1. No feasible alternatives

Estimated Project Cost: \$0.75M

Projected In-Service: 6/30/2024

Project Status: Conceptual

Model: 2024





Need Number: PPL-2023-0005

Meeting Date: 07/20/2023

Process Stage: Solution

Need Slide Presented: 03/16/2023

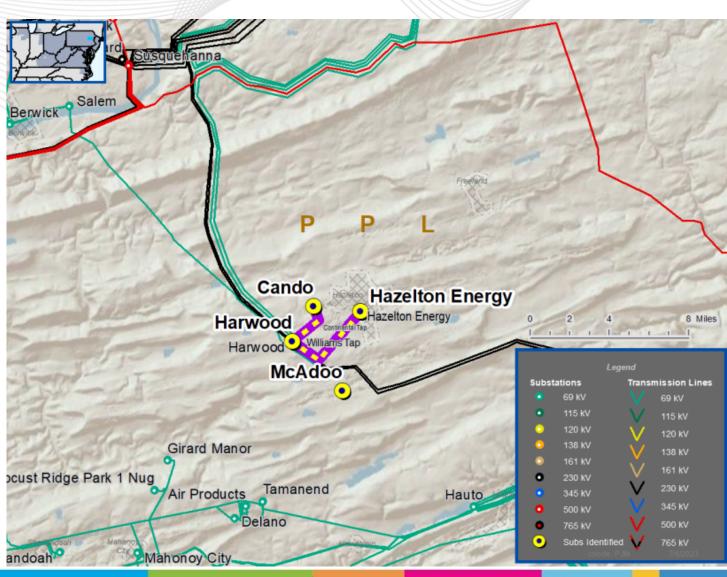
Supplemental Project Driver: Customer Service

Problem Statement:

PPL Distribution has submitted a request for double circuit 69kV service for a new 69-12kV substation near Hazelton, PA. There have been multiple requests for distribution service from new customers with a total expected load addition of 40-45 MWs. The distribution system in the area does not have sufficient capacity to serve the load.

Specific Assumption References:

PPL 2023 Annual Assumptions





Need Number: PPL-2023-0005 Proposed Solution:

Extend a new double circuit 69kV tap from the existing Harwood – East Hazelton 1 & 2 69kV lines line to interconnect a PPL Distribution owned 69-12.47kV substation (McAdoo).

Add a second circuit from Harwood substation to Cando tap (1.3 miles), reconfigure existing circuits from Cando and Harleigh, and install 3.6 miles of new double circuit 69kV from Harleigh to East Hazelton.

Alternatives Considered:

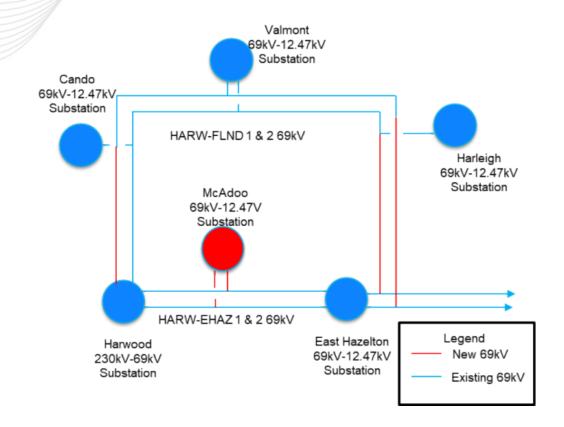
Installing a new 230/69kV substation close to McAdoo but would cost greater than \$40 million.

Estimated Project Cost: \$15M

Projected In-Service: 12/1/2027

Project Status: Conceptual

Model: 2027





Need Number: PPL-2023-0007

Meeting Date: 07/20/2023

Process Stage: Solution

Need Slide Presented: 05/18/2023

Supplemental Project Driver:

Equipment Material Condition, Performance, and

Risk

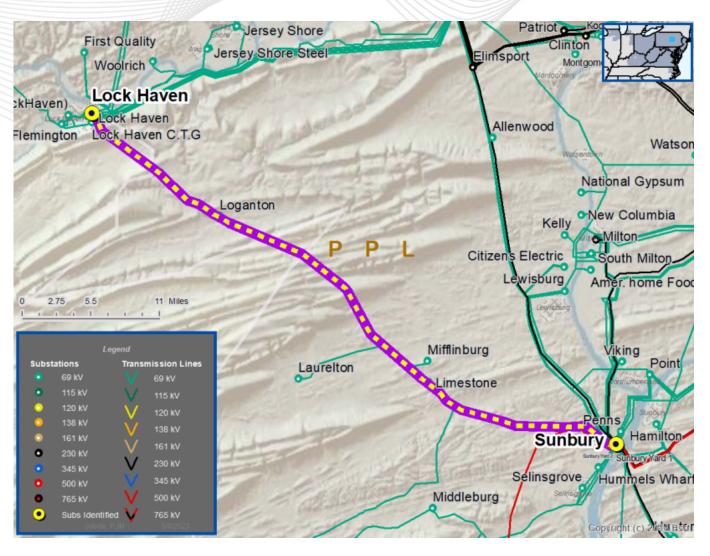
Problem Statement:

The Sunbury-Lock Haven 69kV line is a reliability risk due to poor asset health. The line is in poor condition with the majority of the original assets installed in 1949. The structures are mostly wood poles with steel poles interspersed.

Specific Assumption References:

PPL 2023 Annual Assumptions

PPL Transmission Zone: Supplemental





Need Number: PPL-2023-0007

Proposed Solution:

Rebuild the Sunbury – Lock Haven 69kV line (~39 miles) to double circuit 69kV operation with 795 ACSR conductor. Install new line terminals at Sunbury and Lock Haven substations to accommodate the new circuit.

Alternatives Considered:

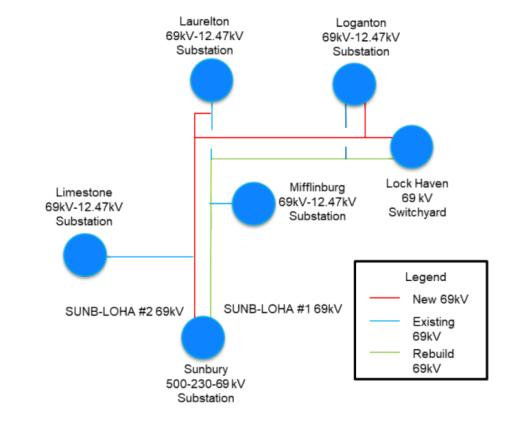
1. Single Circuit initial, future double circuit 69kV design.

Estimated Project Cost: \$103M

Projected In-Service: 12/30/2028

Project Status: Conceptual

Model: 2028









Appendix



High level M-3 Meeting Schedule

Assum	ptions

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 7/xx/2023 – V1 – Original version posted to pjm.com