

Project Name: Bullitt County System Reinforcement

Total Approved Capital Expenditures: \$103,142k (\$25,000k last approved November 18, 2024)

Total O&M: \$ 0 k

Amendment Value: \$ 78,142k

Total Revised Capital Expenditures including Amendment: \$103,142k

Project Number(s): 153662

Business Unit/Line of Business: GO/Gas Operations

Prepared By: Tom Rieth

**Brief Description of Project**

This project proposes to install up to 12 miles of a new 12-inch diameter pipeline from the Calvary transmission pipeline to the existing 8-inch high-pressure distribution pipeline along the Hwy 480 corridor and install a new regulation facility at the terminus of the new pipeline to regulate the gas pressure into the high-pressure distribution system. This project will improve reliability for existing customers and provide capacity for new and expanded gas service for customers in this area by having a second geographically diverse gas supply to the system.

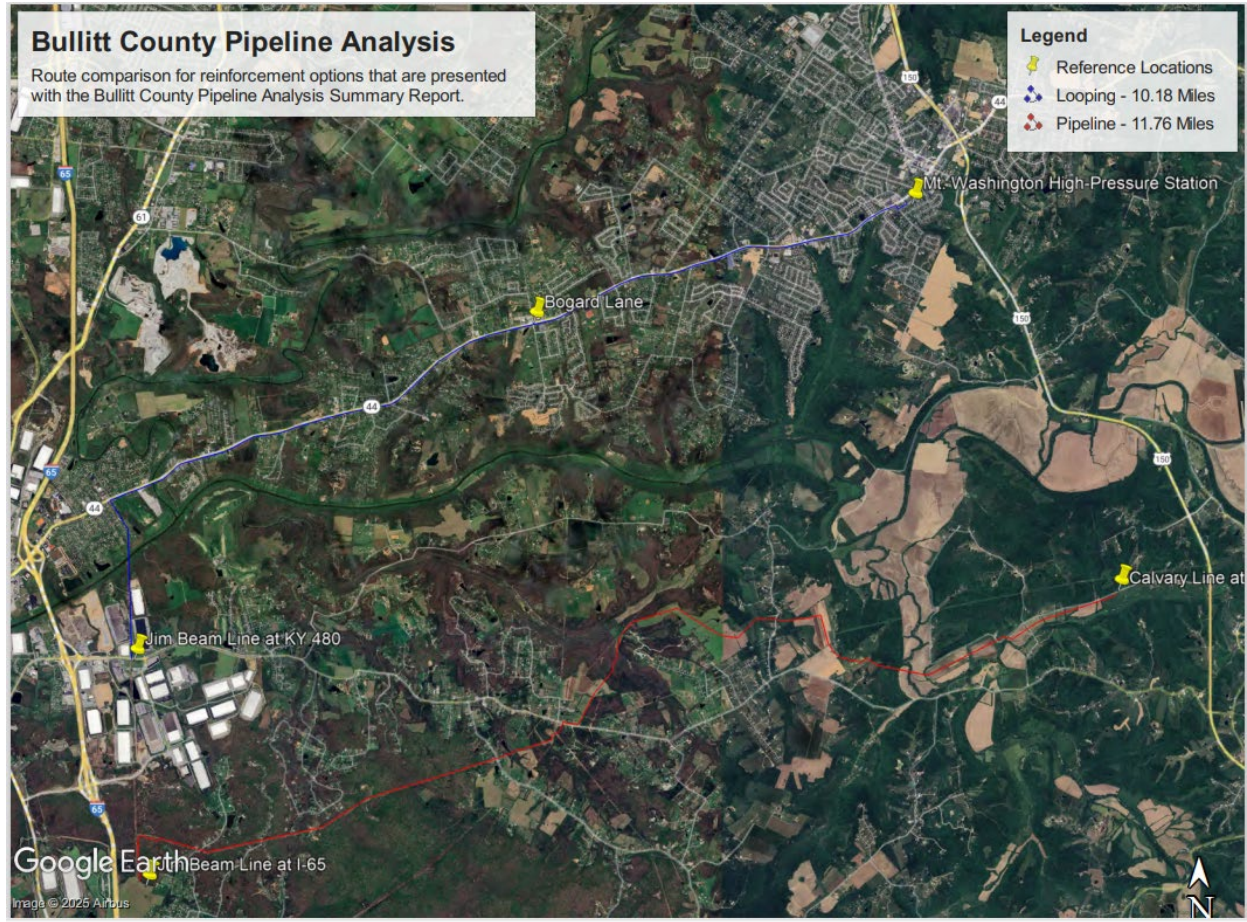
The new pipeline will start with a connection to the Calvary Transmission line near the Hwy 150 and Rummage Road intersection, traveling west, crossing Hwy 480 near Cedar Grove and then paralleling EKPC and LG&E electric transmission easements to the Pipeline's end point near I-65 between exits 114 and 112 tying into the exiting 8-inch distribution line paralleling I-65 (see map below for reference, the Recommended project is the red line). All land rights and permitting required for this project have been acquired and construction can begin in Spring 2025, with a planned in-service date by year-end 2025. The Pipeline Construction contract has been competitively bid and the least cost bidder has been recommended for the project. The Pipeline option provides both benefits of improving reliability for existing customers and increasing capacity for new and expanded service.

Through February 2025, \$18 million has been invested in the project for engineering, design, surveying, easement/material acquisition and legal costs. The project team is requesting total authorization of \$103 million dollars for the pipeline construction, commissioning and restoration activities.

Tree clearing for the project started in late February 2025 and the pipeline contractor has been selected through a competitive bid process and the project team (including Supply Chain) is in the

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process of finalizing their contract. Construction of the project is expected to begin in April 2025 with a target for pipeline completion and commissioning by the end of 2025. Restoration activities following the construction are expected to be completed by August 2026.



**Why is the project needed? What if we do nothing?**

The gas supply for large sections of Bullitt County including Mt. Washington, Shepherdsville, the Hwy 480 corridor and the system's major customers is largely provided by and in some cases only by a single 8-inch to 6-inch diameter high-pressure distribution pipeline. The supply starts as an 8-inch high-pressure pipeline in Mt. Washington that originates from a gas regulation facility supplied by LG&E's Calvary gas transmission pipeline system. The high-pressure distribution pipeline's available capacity has been almost fully utilized due to growth in the area which has occurred over the past decade with service to new and expanded loads being deferred starting in 2019. With the system being effectively a single-feed radial pipeline, the increased utilization has furthered reliability concerns, as well as, limited available capacity for growth in the area. Currently up to 9,500 customers could lose service if supply from the 8-inch high-pressure distribution pipeline is lost due to third party damage or other reason. This project would provide a second supply to this area of the system mitigating the number of customers losing service. Additionally, over 600 service requests have been deferred in this area since 2019. The new pipeline will provide capacity to serve these customers if they desire and will

allow the area to return to normal business practices for future new and expanded service requests.

This project was selected as the best project to provide a second supply to this area. If the project is not completed, the Company would have to deny new and expanded service requests in this area and would not improve the reliability risks associated with having the existing 8-inch high-pressure distribution as the primary source of supply.

**Description of Incremental Ask**

Approved Capital Expenditures (11/18/24)		\$25,000k
Revised Capital Expenditures Requested including Amendment		<u>\$103,142k</u>
Amendment Requested		<u>\$78,142k</u>

**Current Amendment Requested**

- The project team is requesting additional authorization for full funding of the capital project. Previously, the project was approved for \$25,000k to continue legal, permitting, and vegetation management work in November 2024. An additional \$78,142k is being requested for construction of the pipeline. Authorization for the full project costs are based on construction bids resulting from the July 2024 RFP and bidding process. The construction contract was approved through the Major Contract Award Recommendation process on February 3, 2025.

**Prior Approval/Amendments**

- The Bullitt County Reinforcement project was approved for \$3,654k in November 2016 for the engineering, surveying, real estate, and right-of-way (ReROW) and other preliminary activities necessary to develop a final pipeline route and detailed design specification and drawings required for submitting applicable permits and creating construction bid documents. This request included expenditures prior to 2017. The total project expenditures through the end of 2017 were \$1,669k.
- During the November 2016 Investment Committee approval, it was communicated that the remainder of the project would be brought to the Investment Committee after the pipeline construction costs were bid. Due to volatile steel prices from tariff changes, the project team went to the Investment Committee in August 2018 to request additional authorization of \$3,641k to purchase pipe in 2018 in order to mitigate potential higher material costs and needed additional authorization for this expenditure. The Investment Committee approved the request, and the project authorization was revised to \$7,295k.
- At the time of the August 2018 request it was anticipated that the pipeline construction bids would be received, and the project team would come back to the Investment Committee for full project authorization in November or December 2018. The pipeline construction bidding process was delayed due primarily to real estate issues. The real estate issues delayed work on properties needed for the pipeline construction bid and additional engineering/design

work to modify easement documents. In February 2019 the Investment Committee approved additional authorization of \$2,748k (\$10,043k total) for work necessary to prepare bid material, bid the construction labor for the project, work on real estate issues, and obtain permits.

- In May 2020 the project team requested additional authorization to continue work on obtaining the remaining necessary easements and permits along with any additional engineering/survey work necessary to support the real estate and permitting work and rebidding the construction labor. The project team requested an additional authorization of \$7,606k for a revised authorization of \$17,649k to support the work described and expected to return to the IC for full project authorization in the first half of 2021.
- In November 2024 the project team received additional authorization to continue legal, permitting, and vegetation management work. Based on pricing from the tree contractor the additional authorization allowed for tree clearing, along with other preliminary construction activities (surveying, final engineering/design) and materials to be purchased for the project in preparation for construction.

While the projected costs are trending higher than originally estimated, this project remains the lowest-cost option to reliably serve the existing and growing demand for natural gas service in Bullitt County and the surrounding area.

### **Budget Comparison & Financial Summary**

Financial Detail by Year - Capital (\$000s)	Pre-2025	2025	2026	Post 2026	Total
1. Capital Investment Proposed	17,532	83,765	1,845		103,142
2. Cost of Removal Proposed					-
3. Total Capital and Removal Proposed (1+2)	17,532	83,765	1,845	-	103,142
4. Capital Investment 2025 BP	17,532	83,765	1,845		103,142
5. Cost of Removal 2025 BP					-
6. Total Capital and Removal 2025 BP (4+5)	17,532	83,765	1,845	-	103,142
7. Capital Investment variance to BP (4-1)	-	-	-	-	-
8. Cost of Removal variance to BP (5-2)	-	-	-	-	-
9. Total Capital and Removal variance to BP (6-3)	-	-	-	-	-

Financial Detail by Year - O&M (\$000s)	Pre-2025	2025	2026	Post 2026	Total
1. Project O&M Proposed					-
2. Project O&M 2025 BP					-
3. Total Project O&M Variance to BP (2-1)	-	-	-	-	-

### **Risks**

- The project includes a 15% contingency to help mitigate unknowns such as: underground issues impacting horizontal directional drilling (HDD) or weather issues causing construction delays and/or higher usage of construction mats.

### **Alternatives Considered**

1. Recommendation: Construct Pipeline NPVRR: (\$000s) \$125,059  
Construction of a new approximately 12 mile, 12-inch diameter pipeline including a 15% contingency.

2. Alternative #1: Looping NPVRR: (\$000s) \$120,181  
This option would entail constructing an approximately 10.2 mile, 12-inch parallel pipeline next to the existing 8-inch pipeline starting in Mt Washington moving west along Hwy 44 to Shepherdsville, where it will turn south, cross Salt River and ending near Hwy 480 (exit 114) tying into the existing 8-inch distribution line. The construction area is very congested and would likely require intermittent and in some cases extended traffic interruption to Hwy 44 (see the above referenced for reference, the Looping option is the blue line).

Based on high level estimates the Looping option is about \$10,500k higher than the Recommended option going forward, but a slightly lower NPVRR due to being constructed 3 years later than the Recommended option. It is not the recommended option for multiple reasons. (1) The estimated costs are based on pipeline bids for the recommended option adjusted for the congested construction area, but detailed engineering and design work has not been completed leading to significant uncertainty when developing the estimate. (2) This project will provide similar capacity benefit as the recommended option, but does not provide the same level of reliability improvement because it would be constructed in parallel and within a few feet in most cases of the existing line meaning a third party or other damage could impact both lines. (3) There is significant risk of the line being completed by 2028 due to potential delays from easement acquisition and permitting process similarly experienced with the recommended option. (4) Due to the congested area there is increased risk some of the line would have to be constructed in Hwy 44 or in the Hwy 44 ROW meaning the Company would have to pay for relocation if the road is widened. The estimated Looping project cost includes an approximate 30% contingency.

3. Alternative #2 Do Nothing NPVRR: (\$000s) \$0  
Doing nothing is not considered a viable option because the Company could no longer serve new and expanded load in the area. The need for capacity is demonstrated by the Company having to defer over 600 service requests by residential, residential development, commercial and industrial customers. Additionally, doing nothing would also not provide the reliability benefit of the recommended option. Intermediate looping and LNG options were previously evaluated, but are no longer being considered. The intermediate looping option would only provide limited service to residential and small commercial requests and would provide limited additional reliability compared to the Recommended and Looping options. LNG is no longer being considered due to initial high level cost order of magnitude, permitting requirements, and likely extended time until it could be in service compared to the Recommended option.

**Conclusions and Recommendation**

It is recommended that the Bullitt County System Reinforcement project have its authorization increased to \$103,142k to include pipeline construction.



**Financial Summary for  
Bullitt County System Reinforcement**  
Project Number 153662  
Gas Operations: Tom Rieth  
LG&E

Financial Analysis - Project Summary	RECOMMEND- ATION	Looping	Alternative #2	Alternative #3
Total Capital Expenditures Requested, \$000s	\$103,142	\$113,830	\$0	\$0
Total Revenue/(Incurred Costs), \$000s	\$0	\$0	\$0	\$0
NPV Revenue Requirements, \$000s	\$125,059	\$120,181	\$0	\$0

RECOMMENDATION						
Financial Analysis - By Year	5-Year Total 2024-2028	2024	2025	2026	2027	2028
Capital Expenditures Requested, \$000s	\$103,142	\$17,532	\$83,765	\$1,845	\$0	\$0
Revenue/(Incurred Costs), \$000s	\$0	\$0	\$0	\$0	\$0	\$0

NPVRR general rules:

The NPVRR is the present value of the cost to the customer, so the option with the lowest NPVRR is best. NPVRR can be negative if savings are put into the model, in which case the biggest negative number is best as it represents the most benefit to the customer.