

**DELTA NATURAL GAS COMPANY, INC.  
CASE NO. 2022-00295**

**FIRST PSC DATA REQUEST  
DATED SEPTEMBER 20, 2022**

1. Refer to the Application, paragraph 14 and Direct Testimony of Jonathan Morpew (Morpew Direct Testimony), page 9, lines 19-20. Provide a list of all necessary permits and franchises, the date they are expected to be submitted, the date approval is expected, and the organization from which the permit or franchise will be requested.

**Response:**

The process for filing for all permits and franchises will begin upon the PSC's grant of a CPCN for the project. Delta expects to file for egress of the following entities and has also provided its estimate for the timeline for approval:

- KY Department of Highways – 6 weeks
- CSX Railroad – 27 weeks
- US Army Corps of Engineers/Ky Department of Fish & Wildlife – 6 weeks
- County Public Roadways – 2 weeks
- City Public Roadways – 2 weeks
- Stanford Franchise – 12 weeks
- Crab Orchard Franchise – 12 weeks
- Brodhead Franchise – 12 weeks
- Mt. Vernon Franchise – 12 weeks

Sponsoring Witness: Jonathan Morpew

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2. Refer to the Application, paragraph 16 and the Morpew Direct Testimony, page 4, lines 1-2. Confirm that the areas that will be served by the proposed project do not currently have natural gas service from any provider, including farm tap systems. If this cannot be confirmed, provide the current providers of gas service.

Response:

The City of Stanford is currently served by Atmos Energy. Delta's purchase station on the TransCanada transmission line is located on the east side of Stanford, well outside the city limits. Atmos Energy has no facilities near the area of Delta's purchase station. The proposed route for Delta's 8" steel natural gas pipeline will follow the US 150 highway corridor to the east and pass through the cities of Crab Orchard, Brodhead, and Mt. Vernon. These three (3) cities and their surrounding communities in Lincoln and Rockcastle Counties currently have no provider of natural gas service.

Sponsoring Witness: Jonathan Morpew

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3. Refer to the Application, paragraph 19 and the Morphew Direct Testimony, page 5, lines 19-22 through page 6 line 1. Explain whether the \$20 million reimbursement from the Lincoln County Fiscal Court will be recorded as contributions in aid of construction.

Response: Yes, it will.

Sponsoring Witness: Jonathan Morphew / John B. Brown

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4. Refer to plans and specifications appended to the Application. Identify any alternative designs or material that could be used for the proposed project.

**Response:**

Delta considered several options in the engineering design of this project. The design included serving the needs of Crab Orchard, Brodhead, and Mt. Vernon, and the surrounding communities in Lincoln and Rockcastle Counties. Through the design process, Delta determined that an 8" steel pipeline was best suited to supply the current and future needs of these areas. In this process plastic natural gas pipe was considered as it is more economical to construct. However, the pressure and volume limitations of plastic pipe would not accommodate the pressure or volumes needed to support the anticipated economic development in the region. Due to the potential industrial natural gas needs, along with the expected residential customer load, the use of 8" steel pipe is required to meet the potential pressure and volume requirements.

Sponsoring Witness: Jonathan Morpew

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5. Provide the estimated costs and useful lives of alternative pipeline designs or materials identified in the response to Item 4 above.

Response: There are no reasonable alternative designs. See the response to Question 4.

Sponsoring Witness: Jonathan Morpew

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6. Refer to the Application, paragraph 8. Identify any alternative tap-in locations or other methods considered for extending service considered by Delta for expansion of service.

**Response:**

Delta conducted extensive research to locate the most appropriate and effective tap location. A natural gas tap to serve Lincoln and Rockcastle Counties needs to be capable of supplying ample pressure and volume for all communities along the Hwy 150 corridor. These volume and pressure requirements determined that the tap location needed to be near the Lincoln County Industrial Park on the existing TransCanada transmission pipeline. This specific site was the closest geographic location capable of serving all the Lincoln and Rockcastle County communities. Delta also explored the possibility of expanding its existing system from an existing pipeline in Madison County. It quickly determined that neither the pressure or volume requirements needed for the Lincoln and Rockcastle County communities and industrial sites could be provided. A route from the Madison County location would also be unable to serve the Brodhead and Crab Orchard communities as well as the Lincoln County Industrial Park properties.

Sponsoring Witness: Jonathan Morphew

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7. Provide the estimated costs of any alternative tap-in locations or other methods considered for extending service considered by Delta for expansion of service to the areas identified in Item 6 above.

Response:

After determining that Delta could not successfully serve the Lincoln and Rockcastle County communities by any alternative tap locations and pipeline routes, additional designs were abandoned with no estimated costs performed. See response to Question 6.

Sponsoring Witness: Jonathan Morphey

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8. Refer to the Morpew Direct Testimony, page 5, lines 1–2. Explain why Delta believes that the length of the proposed project pipeline determined that it should file a Certificate of Public Convenience and Necessity (CPCN) instead of an economic development extension.

Response:

Mr. Morpew’s testimony did not intend to suggest that the length of the pipeline is the sole determinative factor in Delta’s decision to seek a Certificate of Public Convenience and Necessity instead of an economic development extension. Delta requested a CPCN for several reasons. First, the proposed pipeline is a new extension for Delta into communities it has not previously served. Second, at 22 miles, it is longer than the pipelines for which the Commission required a CPCN for other gas utilities in Case Nos. 2016-00168 and 2016-00371.<sup>1</sup> Should the Commission determine that an economic development extension is more appropriate than an CPCN for this project, Delta would comply with same.

Sponsoring Witness: Jonathan Morpew

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<sup>1</sup> Case No. 2016-00168, *Application of Duke Energy Kentucky, Inc. for a Certificate of Public Convenience and Necessity Authorizing the Construction of a Gas Pipeline from Walton, Kentucky to Big Bone, Kentucky* (Ky. PSC Nov. 28, 2016) (9.5 miles); Case No. 2016-00371, *Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates and for Certificates of Public Convenience and Necessity* (Ky. PSC June 22, 2017) (10-12 miles).



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9. Refer to the Morphew Direct Testimony, page 6, lines 1–2. Identify all operations and maintenance costs associated with transmission and distribution systems described in the application.

Response:

Delta performed estimates for the operation and maintenance of the proposed Lincoln and Rockcastle County pipeline using the following parameters. Right of way mowing and maintenance will be a triennial operation.

- Annual Leak Survey and Patrol: 32 hours @ \$40/hr = \$1,280
- Annual Valve Operation and Maintenance: 8 hours @ \$40/hr = \$320
- Annual Measurement/Regulator Functions: 16 hours @ \$40/hr = \$640
- Triennial Right of Way Mowing/Maintenance:
  - 160 hours @ \$40 = \$6,400
  - 80 hours @ \$15/hr (temp labor) = \$1,200
- Total Annual Cost = \$2,240
- Every three years when right of way mowing/maintenance is performed, the annual cost will increase by \$7,600 to a total triennial cost of \$9,840.
- Total Average Annual Cost:  $(\$2,240 + \$2,240 + \$9,840)/3 = \$4,773$

Sponsoring Witness: Jonathan Morphew

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10. Refer to the Morpew Direct Testimony, page 6, lines 7–10.
- a. Refer to the Application, paragraph 8. Provide the estimated natural gas demand for each identified city.
  - b. Provide any studies or other information referencing estimated natural gas demand for the areas identified in response to Item 10(a).

Response:

- a. Survey work for community demand has not been initiated because the pipeline has not yet been approved by the Commission. However, it is estimated that residential customer demand would be similar to Delta’s ongoing experience relative to the age, current fuel source and cost of replacing existing equipment. In Delta’s experience, the majority of new construction dwellings choose natural gas. Due to the cost of HVAC, equipment conversion to natural gas from other fuel sources would occur over time. However, it is difficult to anticipate actual customer conversions when a fuel source becomes available for the first time.

Based upon conversations with Lincoln County and Rockcastle County economic development officials, natural gas availability is a prerequisite for many of the potential businesses that are considering whether to locate at the industrial parks.

- b. See the response to subpart a. There are presently no studies.

Sponsoring Witness: Jonathan Morpew

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11. Refer to the Morphew Direct Testimony, page 6, lines 7–10. Provide the forecast of customers and annual usage that Delta expects will tap onto the proposed transmission pipeline.

Response:

Delta estimates that roughly 70 farm tap customers could be served off the steel pipeline. Delta anticipates the annual usage would mirror Delta's existing customer base and average 50 to 55 Mcf per year. In addition, other clusters of retail customers could be served through installation of a regulator station and plastic distribution piping in rural areas other than the cities or towns for which Delta has provided estimated customer counts.

Sponsoring Witness: Jonathan Morphew

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12. Refer to the Morpew Direct Testimony, page 7, lines 4–7. Provide how many of the 2,000 potential customer counts Delta estimates would be residential, small non-residential, and large non-residential.

Response:

In Crab Orchard, the potential customers are: 377 residential, 40 businesses that could be small non-residential or large non-residential, and 1 school.

In Brodhead the potential customers are: 538 residential, 26 businesses that could be small non-residential or large non-residential, and 2 schools.

In Mt. Vernon, the potential customers are: 1,052 residential, 122 businesses that could be small non-residential or large non-residential, 12 manufacturing or industrial customer, 3 schools and 1 hospital.

Sponsoring Witness: Jonathan Morpew

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13. Refer to the Morphew Direct Testimony, page 7, lines 22–23. Regarding the properties the proposed pipeline will cross.

a. Explain if Delta plans to notify these properties of their ability to tap onto the line after the project is completed.

b. Explain if Delta plans to odorize the natural gas that will flow through the proposed project pipeline due to its close proximity to residential properties.

Response:

a. Yes, Delta plans to do so.

b. Yes. In the interest of public safety, Delta is required by state and federal regulations to maintain adequate odorant in all pipelines. An odorizer will be installed at the tap location in Lincoln County. All gas received from TransCanada into the pipeline system will be odorized in compliance with applicable regulations.

Sponsoring Witness: Jonathan Morphew

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14. Refer to the Morpew Direct Testimony, page 8, lines 9–11. Provide the estimated total amount of above ground facilities Delta plans to install for this project.

**Response:**

The pipeline project will consist of numerous above ground facilities. The tap location will consist of various valves, metering, and odorizing equipment, as well as preheater. The pipeline will contain approximately three above ground valves. There will also be three town border stations installed off the pipeline at each community to be served. These stations will reduce the pressure to distribution pressure for residential use. Delta anticipates that there will be approximately 70 farm tap installations on the pipeline along the Hwy 150 corridor. The farm tap facilities will reduce pressure for a single residence when it cannot receive supply from a previously mentioned distribution system.

Sponsoring Witness: Jonathan Morpew

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15. Refer to the Morpew Direct Testimony, page 8, lines 21–22. Provide an estimated timeline for when Delta plans to have all the necessary field verifications, property surveys, and testing completed.

Response:

The estimated timeline is dependent on the Commission's approval of the project. Upon Commission approval, engineering design, including the pipeline routing, may determine that slight variations in the preliminary design are necessary due to complications on Kentucky DOT Hwy right of ways, or in some cases prohibiting factors on private right of ways. The final design, verification of the pipeline route, and any testing required, is anticipated to be complete for construction on or about April 1, 2023.

Sponsoring Witness: Jonathan Morpew

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16. Refer to the Morphew Direct Testimony, Exhibit JM-1. Given the surge in inflation and supply chain issues, explain whether Delta anticipates a change to the proposed budget.

Response:

Given the recent surge in inflation, it is entirely possible to see increased cost in material and labor associated with the project. However, assuming Delta receives a CPCN for this project in a timely manner, Delta does not currently foresee any issues with the timing of material delivery.

Sponsoring Witness: Jonathan Morphew



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17. Refer to the Morphew Direct Testimony, Exhibit JM-1, at unnumbered page 12. Also, refer to Case No. 2020-00406, Delta's response to Commission Staff's First Request for Information, Exhibit 1, items listed under Phase 3. The subtotal estimated cost for the proposed project is \$14,942,604.50, while the same project discussed in Case No. 2020-00406 was estimated to be around \$12,961,000.00.

a. Explain why the estimated cost related to the items labeled, "Contractor," and "Labor" in Case No. 2020-00406 have decreased.

b. Explain why the estimated cost related to the item labeled "pipe and other material" in Case No. 2020-00406 of \$2,468,200.00 has nearly doubled to an estimated amount of \$4,618,225.00 for material cost despite the estimated length of the project decreasing from 23 miles to 22 miles.

c. Explain why the estimated cost related to the item labeled "Accounts Payable Misc" in Case No. 2020-00406 of \$963,200.00 has increased to an estimated amount of \$2,482,359.50 for accounts payable.

d. Provide an explanation for the overhead cost of 30.85 percent.

e. Explain if overhead cost was included somewhere in the Phase 3 estimate cost discussed in Case No. 2020-00406.

**Response:**

The estimates provided in the above-referenced Exhibit 1 from Case No. 2020-00406 included an overhead cost of 52.33%, while the items labeled "Material Cost," "Labor Cost," "Contractor Cost," and "Accounts Payable (Misc.);" in Exhibit JM-1 do not include overhead. As such, these estimates are not comparable. To facilitate the comparison of these costs, Delta is providing as an attachment to this response the Estimated Cost Summary that Delta used to prepare

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Exhibit 1 in Case No. 2020-00406. This attachment is in the same format as Exhibit JM-1 and shows the breakdown of costs exclusive of overhead.

- a. See attached. Exclusive of overhead, the estimated Labor Cost presented in Case No. 2020-00406 and the present case is identical: \$308,520. Exclusive of overhead, Delta estimated the Contractor Cost to be \$5,947,500 in Case No. 2020-00406. As presented in Exhibit JM-1, the estimated Contractor Cost has increased to \$7,533,500. This is due to an increase in contractor cost from \$40/foot (at the time of filing in Case No. 2020-00406) to \$53/foot (at the time of filing the present case).
- b. See attached. Exclusive of overhead, Delta estimated the Material Cost to be \$1,620,325 in Case No. 2020-00406. The estimated Material Cost has increased to \$4,618,225 in the present case. The cost of materials has increased significantly in the time period between the EDX filing and the CPCN filing.
- c. See attached. Exclusive of overhead, Delta estimated an Accounts Payable (Misc.) cost of \$632,359.50 in Case No. 2020-00406. The estimated Accounts Payable (Misc.) cost has increased to \$2,482,359.50 in the present case. This increase is due to the addition of pipeline easement and land acquisition costs of \$1,850,000.
- d. Overhead percentages vary based on actual costs incurred and the level of construction activity. As noted in Delta's response to subpart e, the overhead percentage used to estimate costs in Case No. 2020-00406 was 52.33%. The decreased estimate of 30.85% for the current case is due largely to the higher level of capital activity estimated for Delta over the years of construction of this project.
- e. Yes. Overhead costs were included in the above-reference Exhibit 1 in Case No. 2020-00406. The overhead percentage used in that estimate was 52.33% and was reflected in the estimated costs. The attachment provides a breakdown of costs exclusive of overhead.

Sponsoring Witness: Jonathan Morphew / John B. Brown

**DELTA NATURAL GAS CO. INC.  
ESTIMATED COST SUMMARY  
RENFRO VALLEY EXTENSION - 8" STEEL  
MT. VERNON, KY**

<u>ITEM</u>	<u>ESTIMATED COST</u>
CONTRACTOR COST	\$ 5,947,500.00
LABOR COST	\$ 308,520.00
MATERIAL COST	\$ 1,620,325.00
ACCOUNTS PAYABLE (MISC.)	\$ 632,359.50
<b>SUB-TOTAL</b>	<b>\$ 8,508,704.50</b>
OVERHEAD COST 52.33%	\$ 4,452,605.06
<b>TOTAL</b>	<b>\$ 12,961,309.56</b>

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18. Provide any documentation referencing the estimated operations and maintenance costs of the transmission and distributions systems described in the application.

Response:

Delta's estimated operation and maintenance costs are based on its actual experience in other parts of the systems. Presently, the precise number of new services in each community is unknown, which can impact the cost of operation. However, the estimated cost is derived by assuming that each community served has reached its maximum potential customer base. This allows the Commission to consider the likely maximum annual cost Delta may experience. For this response, a projection of 2,000 customers for all communities combined has been used. Using this methodology, the estimated annual cost of operation and maintenance for this system is as follows:

- Meter Reading: \$3,840
- Line Locates: \$57,200
- All valve and Hazardous piping inspection: \$3,200
- Public Building Inspections: \$3,200
- Odorization Checks: \$4,160
- Annual Leak Survey: \$4,700
- Average Annual Operation and Maintenance Cost: \$4,773 (see response to Question No. 9 for a breakdown of this cost)

Total Estimated Annual Cost: \$81,073

Sponsoring Witness: Jonathan Morpew

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19. Provide all studies Delta performed supporting the proposed project, including any cost-benefit analysis of the new pipeline and distribution system.

Response:

With regard to the pipeline for which a CPCN is requested, there are no cost-benefit analyses because Delta anticipates being reimbursed for the cost of the pipeline. The reimbursement ensures that Delta's existing customers are not negatively impacted by the capital project. With regard to the distribution extensions, Delta will perform cost-benefit analyses for each discrete extension and will base extensions on actual demand. Because the extensions will be fact-specific and could involve customer contributions that offset Delta's costs, Delta has not yet performed analyses beyond calculating the total estimated cost of the distribution system additions.

Sponsoring Witness: Jonathan Morpew