

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**Arrow Field Services, LLC**  
**10-inch & 8-inch NGP Pipeline – McKenzie County**  
**Siting Application**

**Case No. PU-17-048**

**[PROPOSED] RECOMMENDED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER**

**June \_\_\_\_, 2017**

**Appearances**

Danielle M. Krause, Attorney at Law, Fredrikson & Byron, P.A., 1133 College Drive, Suite 1000, Bismarck, North Dakota 58501, on behalf of Arrow Field Services, LLC.

John Schuh, Special Assistant Attorney General, Legal Counsel for Public Service Commission, 600 E. Boulevard, Dept. 408, Bismarck, North Dakota 58505.

Timothy J. Dawson, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14<sup>th</sup> Street, Suite 303, Bismarck, North Dakota 58503.

**Preliminary Statement**

On January 23, 2017, Arrow Field Services, LLC (“Arrow”), filed with the North Dakota Public Service Commission (“Commission”) a consolidated application for a Certificate of Corridor Compatibility and Route Permit (“Application”) for an approximately 2.6-mile, 8-inch natural gas liquids (NGLs) and a 2.6-mile, 10-inch residue gas pipeline and associated facilities in McKenzie County, North Dakota (the “Project”). The Project will be installed in the same ditch and right-of-way extending from a proposed natural gas processing plant (“Plant”) to a third-party transmission pipeline and NGL facility in McKenzie County, North Dakota.

Also on January 23, 2017, Arrow filed an application for waiver of procedures and time schedules established under North Dakota Century Code sections 49-22-07.2, 49-22-08, 49-22-08.1, 49-22-13, and North Dakota Administrative Code chapter 69-06-06 and section 69-06-01-02, requiring separate filings and applications for a certificate of corridor compatibility and a route permit, separate notice of such applications, separate hearings on such applications, and certain time schedules.

On March 15, 2017, the Commission deemed Arrow’s Application complete and issued a Notice of Filings and Public Hearing (“Notice”) scheduling a hearing for May 19, 2017, at 11:00 a.m. CST, at Teddy’s Residential Suites, 113 9th Ave. SW, Watford City, North Dakota 58854.

The Notice identified the following issues to be considered with respect to the application for waiver of procedures and time schedules:

1. Are the proposed facilities of such length, design, location, or purpose that they will produce minimal adverse effects and that adherence to applicable procedures and time schedules may be waived?
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

The Notice identified the following issues to be considered with respect to the Application:

1. Will the location and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On May 19, 2017, the hearing was held as scheduled.

Having allowed all interested persons an opportunity to be heard, and having heard, reviewed and considered all testimony and evidence presented, the Hearing Officer makes the following:

#### **Findings of Fact**

1. Arrow is a Delaware limited liability company authorized to do business in the State of North Dakota, as evidenced by the corporate papers filed with the Commission in Case No. PU-11-117.

#### **Need for the Facility**

2. Arrow determined there is a need for the Project because the Project, in connection with the proposed natural gas processing Plant and associated gathering system, will provide for enhanced recovery and utilization of natural gas resources, including NGLs. The associated facilities will help reduce the volume of nonmarketed natural gas released presently, but will also minimize future releases as more wells are completed and tied into the gathering system. The Project will allow the consumer-quality residue gas produced by the Plant to be transported to an existing natural gas transmission pipeline and sent to consumers in North Dakota and nearby states. The Project will also allow the NGLs to be transported to a third-party NGL facility for subsequent use in a variety of manufacturing and commercial enterprises.

### Size, Type, and Preferred Location of Facility

3. The Project consists of two pipelines, both approximately 2.6 miles in length. The 8-inch NGL and 10-inch residue gas pipeline and associated facilities will be located in McKenzie County, North Dakota.
4. The Project will be located approximately 7.5 miles southeast of Watford City, North Dakota. The 2.6-mile-long, 10-inch residue gas pipeline will extend from the natural gas processing Plant to a third party transmission pipeline. The 8-inch NGL pipeline will extend from the same natural gas processing Plant to a different third party NGL facility. The two pipelines will be located in the same right-of-way ("ROW") and installed in the same ditch, with approximately two feet of separation between the pipelines.
5. The proposed pipe for the residue gas line will have a 10.750-inch outside diameter and wall thickness of 0.365-inches for line pipe and 0.500-inches for bore pipe.
6. The maximum operating pressure of the residue gas pipeline will be 1,480 pounds per square inch. The maximum flow rate of the residue gas pipeline will be 30 million cubic feet per day.
7. The proposed pipe for the NGL line will have an 8.625-inch outside diameter and wall thickness of 0.322-inches for line pipe and 0.500-inches for bore pipe.
8. The maximum operating pressure of the NGL pipeline will be 1,440 pounds per square inch. The maximum flow rate of the NGL pipeline will be 5,000 barrels per day.
9. Above-ground facilities for the residue gas pipeline will consist of compressors, a metering station, a block valve, and pig launcher which will be tied directly to the discharge end of the Plant.
10. Above-ground facilities for the NGL pipeline will consist of pumps, a metering station, a block valve, and pig launcher which will also be tied directly to the discharge end of the Plant.
11. Block valves at the tie-in points to the third party natural gas transmission pipeline will have pneumatic controllers and will have emergency shutdown capability.
12. Delivery point equipment will also include pig receivers and associated equipment.
13. Selection of the route for the Project was based on a multifaceted approach which will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota. The route is also compatible with environmental preservation and the efficient use of resources. Arrow further worked with landowners to ensure that the Project is placed in the preferred location of each landowner so as to minimize impacts to the environment and current land uses. Arrow reviewed the Exclusion and Avoidance Areas of the Commission and routed the Project to avoid impacts to Exclusion and Avoidance Areas.

14. The design, construction, and operation of the pipeline will be in accordance with the United States Department of Transportation (“USDOT”) regulations, including USDOT regulations as set forth in 49 Code of Federal Regulations Parts 192 and 195.

15. The total anticipated cost of the Project is approximately \$6.3 million.

#### Study of Preferred Location

16. SWCA Environmental Consultants (“SWCA”), on behalf of Arrow, evaluated a one-mile-wide study corridor centered on the route (“Study Area”) for exclusion and avoidance areas, including federal and state parks, protected and sensitive plants and animals, wildlife, and civil and social structures such as recreational areas, rural homes, and farmsteads.

17. Field surveys were conducted on a typically 200-foot-wide area centered on the route (“Survey Area”) to inventory any potential resource issues such as wetlands, water bodies, protected species, critical habitats, and/or cultural resources, as depicted in Exhibit 1, Appendix A. Additionally, environmental data collected included information on soils, land use, wetlands and waterbody crossings, noxious weeds, and protected species and habitats.

18. Arrow conducted a Class I cultural resource literature search on the Study Area and a Class III cultural resources field inventory on the Survey Area.

19. The following agencies were contacted by Arrow regarding the Project, pursuant to North Dakota Administrative Code § 69-06-01-05, to which comments were received: the North Dakota Aeronautics Commission (“NDAC”); North Dakota Department of Health (“NDDOH”); North Dakota Game and Fish Department (“NDGFD”); North Dakota Department of Transportation (“NDDOT”); the North Dakota State Historic Preservation Office (“SHPO”); North Dakota State Trust Lands Department; the North Dakota State Water Commission; United States Army Corps of Engineers, North Dakota Regulatory Office (“USACE”); U.S. Federal Aviation Administration; McKenzie County Weed Control; and McKenzie County Planning and Zoning Department.

20. In a response dated November 16, 2016, the U.S. Federal Aviation Administration noted no objection to the Project provided notification of construction or alterations are provided.

21. In a response dated November 16, 2016, the North Dakota Department of Trust Lands noted the section of land directly north of the proposed plant associated with the Project is School Trust Land. The Department of Trust Lands also noted that Arrow has an easement request to cross the land, and the concern is the availability of corridor space for additional pipelines that might serve the proposed gas plant.

22. In a response dated November 17, 2016, the McKenzie County Weed Office required Arrow to complete a weed management plan for approval.

23. In responses dated November 23, 2016, January 4, 2017, and March 20, 2017, the NDDOH recommended that care be taken during construction activity near any water of the state to minimize adverse effects on a water body from disturbance, reclamation, and oil, gas, or fuel spills associated with construction equipment; that a storm water discharge permit may be necessary; that care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality and all spills must be immediately reported to the NDDOH and appropriate remedial actions performed; that the location of the pipeline should select locations that minimize the potential for impacts to human health and the environment during and after construction by avoiding, when possible, source water protection areas and sensitive surface and groundwater environments; pipeline routes should select areas with natural barriers to both surface and ground waters; human health and the environment should be further protected by developing a spill response plan that emphasizes rapid deployment of prepositioned assets necessary to contain spills and subsequent cleanup; and proper surveillance and monitoring for early detection of leaks should be required.

24. In responses dated November 28, 2016, and January 5, 2017, the USACE noted that a Section 10 and/or Section 404 permit would be required if the Project results in work by navigable waters or discharge of dredged or fill materials into waters of the United States.

25. In responses dated December 2, 2016, and January 17, 2017, the North Dakota State Water Commission noted that no permits relative to the National Flood Insurance Program are required based on the current effective FIRM and State minimum standards. The State Water Commission also noted that initial review may require a conditional or temporary permit for water appropriation. A review of the local groundwater resources showed the Project area does not overlie a major glacial aquifer, and surface water supplies are also limited. The State Water Commission also noted that all waste material associated with the Project must be disposed of properly and not placed in identified floodway areas.

26. In a response dated December 7, 2016, the NDDOT stated the Project should have no adverse effect on the NDDOT highways, but if work needs to be done on highway right of way, appropriate permits and risk management documents need to be obtained.

27. In responses dated December 9, 2016, and January 12, 2017, the NDGFD determined it does not believe the Project will have significant adverse effects on wildlife or wildlife habitat, including species of conservation priority, provided disturbed areas are reclaimed to pre-project conditions.

28. In a letter dated December 23, 2016, the SHPO determined there has been a good faith effort to identify and avoid impacts to "Significant Sites."

29. In responses dated January 3 and January 9, 2017, the NDAC reviewed the Project and found no known private and public use airports within the Project boundary. The NDAC also noted there would be no adverse impacts to aeronautical purposes. However, the NDAC

recommended Arrow complete the Federal Aviation Administration Form for Notice of Proposed Construction or Alternation if any man made obstructions exceed 200 feet.

### Siting Criteria

30. The Commission has established criteria pursuant to North Dakota Century Code Section 49-22-05.1 to guide the Commission in evaluating the suitability of granting a certificate of corridor compatibility and route permit. The criteria, as set forth in North Dakota Administrative Code Section 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

31. Arrow evaluated the Project for the Exclusion, Avoidance, Selection, and Policy criteria of the Commission.

32. An Exclusion Area may not encompass more than fifty percent of a corridor width unless there is no reasonable alternative. An Exclusion Area must be excluded in the consideration of a route for a transmission facility. A buffer zone of a reasonable width to protect the integrity of an Exclusion Area must be included in the siting of the transmission facility.

33. No Exclusion Areas are present within the Survey Area.

34. An Avoidance Area is a geographic area that may not be considered in the routing of a transmission facility unless the applicant shows that, under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a transmission facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes.

35. No Avoidance Areas are present within the Survey Area.

36. Wetland surveys were completed for the proposed route. Wetlands and waterbodies are present within the Survey Area and will be crossed by the route. Arrow will take steps to protect wetlands and waterbodies, and no permanent impacts to wetlands or waterbodies are anticipated.

37. In accordance with the Commission's Selection Criteria, a transmission facility route shall be approved if it is demonstrated that any significant adverse effects that will result from the location, construction, and maintenance of the transmission facility will be at an acceptable minimum or managed and maintained at an acceptable minimum. Arrow has analyzed the impacts of the Project in relation to all of the relevant Selection Criteria. The Project will have no significant adverse effects on the Commission's Selection Criteria.

38. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the transmission facility. Arrow has analyzed the relevant policy criteria and has committed to: designing, constructing, and operating the

pipelines in accordance with all applicable federal, state, and local laws and regulations; energy conservation through the facility's location, process, and design; training and utilizing available labor in the state; constructing the Project to take advantage of economies of scale; achieving capacity in the most minimally intrusive and most efficient way possible; and coordinating with state and local officials. Arrow submitted evidence to demonstrate its commitment to maximize the benefits of the proposed transmission facility to the extent possible so as to meet the Policy Criteria.

#### Measures to Minimize Impact

39. Arrow testified that it will conduct regular pipeline monitoring, periodic inspection, internal inspections, and aerial patrol inspections as required by the Department of Transportation regulations ("DOT").
40. Arrow testified that it will participate in the North Dakota One-Call notification system.
41. Arrow has agreed to a number of steps to mitigate the impact of the Project, as indicated by the executed Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications, which is incorporated by reference and attached to this Order.
42. The Project's permanent ROW will typically be 50 feet wide, while its temporary construction ROW will be 100 feet wide.
43. The design, construction, and operation of the Project will be in accordance with the United State Department of Transportation regulations, including U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration regulations as set forth in 49 C.F.R. Parts 192 and 195.

From the foregoing Findings of Fact, the Hearing Officer makes the following:

#### **Conclusions of Law**

1. The Commission has jurisdiction over Arrow and the subject matter of the Application under Chapter 49-22 of the North Dakota Century Code.
2. Arrow is a utility as defined in Section 49-22-03(13) of the North Dakota Century Code.
3. The Project is a transmission facility as defined in North Dakota Century Code Section 49-22-03(12).
4. The location, construction, and operation of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The location, construction, and operation of the Project are compatible with environmental preservation and the efficient use of resources.

6. The Project will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

7. The Project is of such design and location that it will produce minimal adverse effects, in accordance with Section 49-22-07.2 of the North Dakota Century Code.

8. It is appropriate for the Commission to waive those certain procedures and time schedules as requested in the application for waiver of procedures and time schedules and pursuant to North Dakota Century Code Section 49-22-07.2 and North Dakota Administrative Code Chapter 69-06-06.

From the foregoing Findings of Fact and Conclusions of Law, the Hearing Officer now issues the following:

### **Recommended Order**

1. Arrow's application for a waiver of procedures and time schedules is granted.
2. A Certificate of Corridor Compatibility shall be issued to Arrow Field Services, LLC designating a corridor for the construction, operation, and maintenance of approximately 2.6-miles of 8-inch natural gas liquids pipeline and 2.6-miles of 10-inch residue gas pipeline and associated facilities in McKenzie County, North Dakota. The Corridor will consist of a typical 200-foot-wide corridor centered on the pipeline route as surveyed, and will also include the additional areas surveyed at the origination and termination points of the Project.
3. A Route Permit shall be issued to Arrow Field Services, LLC designating a route for the construction, operation, and maintenance of approximately 2.6-miles of 8-inch natural gas liquids pipeline and 2.6-miles of 10-inch residue gas pipeline and associated facilities in McKenzie County, North Dakota. The designated route for this purpose is depicted in Appendix A of Hearing Exhibit 1.
4. The May 17, 2017, Certification Relating to Order Provisions – Transmission Facility Siting ("Certification"), with accompanying Tree and Shrub Mitigation Specifications, is incorporated by reference and attached to this Order.

Dated at Bismarck, North Dakota this \_\_\_\_\_ day of June, 2017.

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Timothy L. Dawson  
Administrative Law Judge  
Office of Administrative Hearings