



July 14, 2021

VIA US Mail and Electronic Mail

Mr. Steve Kahl
Executive Director
North Dakota Public Service Commission
600 E. Boulevard Ave, Dept. 408
Bismarck, ND 58505-0480

Dear Mr. Kahl:

RE: Case No. PU-21-150
Dakota Gasification Company/Carbon Dioxide Gas Pipeline- Mercer County
OAH File No. 20210145

Enclosed please find the proposed Findings of Fact, Conclusions of Law & Order regarding the above captioned matter.

Sincerely,

Casey Jacobson
Senior Staff Counsel

/gmj

cc: Hope L. Hogan, Administrative Law Judge (via e-mail)
Zachary Pelham (via e-mail)

25 PU-21-150 Filed 07/14/2021 Pages: 9
Proposed Findings of Fact, Conclusions of Law and Order
Dakota Gasification Company
Casey Jacobson, Senior Staff Counsel



STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Dakota Gasification Company
Carbon Dioxide Gas Pipeline – Mercer County
Siting Application

Case No. PU-21-150

Proposed FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

July ____, 2021

Appearances

Commissioners Julie Fedorchak, Randy Christmann and Brian Kroshus.

Casey Jacobson, Senior Staff Counsel, Basin Electric Power Cooperative, 1717 East Interstate Avenue, Bismarck, North Dakota 58501, on behalf of Dakota Gasification Company.

Zachary Pelham, as Special Assistant Attorney General, Counsel for the North Dakota Public Service Commission, 600 E. Boulevard Avenue, Dept. 408, Bismarck, North Dakota 58505.

Hope L Hogan, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, North Dakota 58503.

Preliminary Statement

On April 23, 2021, Dakota Gasification Company (DGC), filed with the North Dakota Public Service Commission (Commission) a combined application for a certificate of corridor compatibility and route permit (Application) concerning the location of a carbon dioxide gas pipeline, approximately 2.9 miles of 12-inch and 3.9 miles of 6-inch in length, in Mercer County, North Dakota (Project).

On June 9, 2021, the Commission deemed DGC 's Application complete and issued a Notice of Filing and Public Hearing (Notice) scheduling a hearing for July 12, 2021, at 8:30 a.m. Central Time at the Energy Wellness Center, 1900 Central Avenue North, Beulah, North Dakota 58523.

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

1. Will construction, operation, and maintenance of the facility at the proposed location produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?

2. Is the proposed facility compatible with the environmental preservation and the efficient use of resources?
3. Will construction, operation, and maintenance of the facility at the proposed location 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 July 12, 2021, the hearing was held as scheduled allowing any interested parties to present testimony in person at the Energy Wellness Center, 1900 Central Avenue North, Beulah, North Dakota 58523. Hearing Exhibits 1-11 were admitted at the hearing. Exhibit 12 was filed as a late filed Exhibit on July 13, 2021.

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

Findings of Fact

1. DGC is a North Dakota corporation authorized to do business in the State of North Dakota and a wholly owned subsidiary of Basin Electric Power Cooperative, a North Dakota cooperative corporation as evidenced by the corporate papers filed with the Commission on October 31, 2012, in Case No. PU-08-113.

Size, Type, and Preferred Location of Facility

2. The Project is comprised of a 12-inch and 6-inch carbon dioxide transmission lines located in Mercer County, North Dakota. The purpose of the Project is to transport carbon dioxide (CO₂) in order to facilitate the geologic storage or sequestration of CO₂. The Project originates at DGC's Great Plains Synfuels Plant, in Mercer County and terminates at up to six individual CO₂ injection well locations north of the plant site. The proposed facility corridor and pipeline route is identified in Hearing Exhibit 8.

3. The proposed pipe will have a wall thicknesses of 0.280 to 0.432 inches (6-inch pipe) and 0.375 to 0.625 inches (12-inch pipe) and a maximum operating pressure of 2,700 pounds per square inch. The maximum operating temperature of the pipeline will be 120 degrees Fahrenheit.

4. The design flow rate for the pipeline is 30 million standard cubic feet per day or for each lateral and 200 million standard cubic feet per day for the 12" mainline.

5. Eight (8) aboveground facilities will be associated with the project. One (1) aboveground location is on DGC property and is associated with flow control, metering, and pig launching for the 12-inch mainline. One (1) aboveground location is adjacent to Well Site 3 and is associated with pig receiving for the 12-inch mainline and for metering and communications equipment at the CO₂ custody transfer point to Well Site 3. Five (5) of the aboveground facilities are for metering and communications equipment at each of

Case No. PU-21-150

Findings of Fact, Conclusions of Law and Order

Page 2

the five other injection well sites. One additional aboveground site is necessary to accommodate the lateral line from the mainline to Well Site 1. A chain link fence and a building to house the control and communications equipment will also be installed at each site.

6. The estimated cost of the Project is \$25 million.
7. The estimated in-service date is August 2022.

Study of Preferred Location

8. DGC conducted a Class I cultural resource literature review and a desktop analysis for wetlands, waterbodies, and other sensitive environmental resources across a one-mile-wide area centered on the pipeline route (Study Area).

9. DGC conducted several surveys across an approximately 200-foot-wide area centered on the Project route (Survey Area). DGC conducted surveys for wetlands, waterbodies, threatened and endangered species, critical habitats, and trees/saplings/shrubs.

10. DGC conducted a Class III cultural resource inventory across the Survey Area. The Class III reports were submitted to the North Dakota State Historic Preservation Office (SHPO). In a response dated May 20, 2021, SHPO concurred with a determination of “No Significant Sites Affected” for the Project, provided it takes place in the location and in the manner described in the documentation.

11. DGC initiated correspondence seeking comments from the following federal, state and local agencies and entities as follows:

- a. Federal: (1) Federal Aviation Commission; (2) U.S. Army Corps of Engineers; (3) U.S. Department of Defense; and (4) U.S. Fish and Wildlife Service;
- b. State: (1) North Dakota Aeronautics Commission; (2) North Dakota Attorney General; (3) North Dakota Department of Agriculture; (4) North Dakota Department of Career and Technical Education; (5) Job Service of North Dakota; (6) North Dakota Department of Environmental Quality; (7) North Dakota Department of Health; (8) North Dakota Department of Human Services; (9) North Dakota Department of Transportation; (10) North Dakota Department of Trust Lands; (11) North Dakota Energy Development Impact Office; (12) North Dakota Game and Fish Department; (13) North Dakota Indian Affairs Commission; (14) North Dakota Industrial Commission; (15) North Dakota Labor Department; (16) North Dakota Parks and Recreation Department; (17) North Dakota Pipeline Authority; (18) North Dakota Soil Conservation Committee;

(19) North Dakota State Water Commission; (20) North Dakota Transmission Authority; (21) North Dakota Geological Survey; (22) SHPO; and (23) Office of the Governor;

c. Local: (1) Mercer County Commission.

Siting Criteria

12. The Commission has established criteria pursuant to North Dakota Century Code Section 49-22.1-03 to guide the site, corridor, and route suitability evaluation and designation process. 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.

13. DGC evaluated the Project for the Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria of the Commission.

14. 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.

15. DGC's studies and surveys did not record any Exclusion Areas within the Survey Area.

16. 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.

17. Historical resources which are not specifically designated as exclusion or avoidance areas are designated avoidance areas under NDAC section 69-06-08-02(2)(c). DGC's studies and surveys recorded one Avoidance Area within the Survey Area that related to historical resources. Recorded site 32ME220 is located within and adjacent to the Corridor. 32ME220 was mitigated in 1989 as part of the surface mine development. No avoidance was recommended by Metcalf Archaeological Consultants (MAC). North Dakota State Historic Preservation Office concurred with MAC's Recommendation.

18. Within five hundred feet [152.4 meters] of a residence, school, or place of business are designated avoidance areas under NDAC section 69-06-08-02(2)(c). The DGC plant site and Coteau Properties Office and shop complex are within 500 feet of the Route. No

impacts are anticipated to these industrial facilities and no buffer is proposed. DGC entered Exhibits 9 and 10, which are waivers from DGC and Coteau.

19. In accordance with the Commission's Selection Criteria set forth in North Dakota Administrative Code section 69-06-08-02(3), 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. DGC 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.

20. Wetlands are a selection criteria While NWI wetlands and NHD waterbodies were identified along the proposed Route and within the Corridor, analysis of aerial photography and field surveys shows these areas as appearing to be previously disturbed by surface mining activities. Of eleven potential wetlands identified intersecting the Corridor, there were nine areas where no obvious signs of wetland vegetation or wetland hydrology were present. Many wetlands that initially were identified during desktop efforts were found to no longer be a wetland likely due to past mining and reclamation activities. One identified wetland intersects the 200-foot wide Corridor boundary but will not be impacted by the 75-foot wide construction ROW. A second wetland crosses the entire Corridor and will be avoided using the horizontal drilling technique

21. The impact upon agricultural production and family farms and ranches is a selection criteria. No family farms or ranches will be impacted by the Project.

22. In accordance with the Commission's Policy Criteria set forth in North Dakota Administrative Code section 69-06-08-02(4), preference may be given to an applicant demonstrating certain benefits of the transmission facility. DGC 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.

Additional Measures to Minimize Impact

23. DGC 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.

24. The Project will be designed, constructed, and operated in accordance with U.S. Department of Transportation regulations governing the transportation of hazardous liquids by pipeline, which are set forth in 49 Code of Federal Regulations (CFR) Part 195.

25. DGC testified that it will follow a written manual of procedures for conducting normal operations and maintenance activities and for handling abnormal operations and emergencies in accordance with 49 CFR Part 195. In the event that the pipeline's pressure exceeds operating tolerance, Great Plains Synfuels Plant is equipped with

pressure release systems. Furthermore, once constructed, a leak detection and monitoring system will be employed and testimony showed that DGC will monitor the Project 24 hours a day, 7 days a week by trained personnel.

26. DGC testified that they conduct outreach meetings with local emergency response officials to educate them on the steps DGC takes during pipeline emergencies.

27. DGC has developed several project control documents that will be utilized in connection with the construction and operation including an Unanticipated Discovery Plan and a Storm Water Pollution Prevention Plan will be developed. DGC will file a copy of the permit with the Commission once obtained.

28. DGC testified that it will conduct regular pipeline monitoring, periodic inspections, and right-of-way patrol foot patrol inspections as required by the Department of Transportation regulations.

29. DGC will require its contractors to remove soil and debris capable of spreading noxious weeds, prior to the beginning of construction. Furthermore, DGC will ensure that seed mixes are certified weed free from approved certified sources as recommended by the county weed agencies.

30. DGC testified that it will participate in the North Dakota One-Call notification system.

31. DGC testified that it will comply with all applicable safety laws and standards.

32. The Project's permanent right-of-way will be 50 feet wide, while the temporary construction right-of-way will be 75 feet wide.

From the foregoing Findings of Fact, the Commission now makes its:

Conclusions of Law

1. The Commission has jurisdiction over the applicant, DGC, and the subject matter of the Application under Chapter 49-22.1 of the North Dakota Century Code.

2. DGC is a utility as defined in Section 49-22.1-01(12) of the North Dakota Century Code.

3. The Project is a gas or liquid transmission facility as defined in North Dakota Century Code Section 49-22.1-01(7).

4. The construction, operation, and maintenance of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

5. The Project is compatible with environmental preservation and the efficient use of resources.

6. The construction, operation, and maintenance of the Project minimizes 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. 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 49-22.1-05 and North Dakota Administrative Code Chapter 69-06-06.

From the foregoing Findings of Fact and Conclusions of Law, the Commission makes the following order:

Order

1. Certificate of Corridor Compatibility No. ___ is issued to Dakota Gasification Company designating a corridor for the construction, operation, and maintenance of approximately 2.9 miles of 12-inch and 3.9 miles of 6-inch of a carbon dioxide gas pipeline in Mercer County, North Dakota. The Corridor will consist of a typical 200-foot-wide corridor centered on the pipeline route as depicted on Exhibit 8.

2. Route Permit No. ___ is issued to Dakota Gasification Company designating a route for the construction, operation, and maintenance of approximately 2.9 miles of 12-inch and 3.9 miles of 6-inch of a carbon dioxide gas pipeline in Mercer County, North Dakota, as depicted on Exhibit 8.

3. The Certification Relating to Order Provisions – Transmission Facility Siting (“Certification”), with accompanying Tree and Shrub Mitigation Specifications, executed on July, 2021 is incorporated by reference and attached to this Order.

4. To the extent there are any conflicts or inconsistencies between DGC’s Application and the Certification, the Certification provisions control.

5. DGC shall obtain all other necessary licenses and permits prior to commencing construction on such portion of the Project for which the license and/or permit is required, and shall provide copies of such licenses and permits to the Commission prior to construction.

6. DGC is required to comply with all applicable laws, rules, and/or regulations in the event it desires to construct another or a different transmission facility than was specified in the Application within the corridor designated in this proceeding.

7. DGC shall file a copy of its Public Awareness and Damage Prevention Program with the Commission prior to construction.

PUBLIC SERVICE COMMISSION

**Julie Fedorchak
Commissioner**

**Brian Kroshus
Chairman**

**Randy Christmann
Commissioner**