

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

**SCS Carbon Transport LLC  
Midwest Carbon Express CO2 Pipeline Project  
Siting Application**

**Case No. PU-22-391**

**FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER**

**August 4, 2023**

**Appearances**

Commissioners Sheri Haugen-Hoffart, Randy Christmann, and Substitute decisionmaker Timothy J. Dawson

Lawrence Bender, Fredrikson & Byron, P.A. on behalf of Applicant, SCS Carbon Transport LLC.

Randall J. Bakke, Bakke Grinolds Wiederholt on behalf of Intervenor John H. Warford, Jr. Revocable Trust, Chad Wachter and Chad Moldenhauer.

Steven J. Liebel, Knoll Leibel and Brian Jorde, Domina Law Group on behalf of Intervenor Dean Twardoski, et al.

Kevin Pranis on behalf of Intervenor Laborers District Council of Minnesota and North Dakota (LIUNA).

**Preliminary Statement**

On October 17, 2022, SCS Carbon Transport LLC (SCS) filed applications for a certificate of corridor compatibility and for a route permit concerning approximately 320 miles of carbon dioxide pipeline ranging from 4.5 to 24-inch diameter and associated facilities in Burleigh, Cass, Dickey, Emmons, Logan, McIntosh, Morton, Oliver, Richland and Sargent Counties, North Dakota (Application).

Also on October 17, 2022, SCS filed an application for waivers of procedures and time schedules established under North Dakota Century Code (NDCC) Sections 49-22.1-05, 49-22.1-08 and 49-22.1-10, and North Dakota Administrative Code (NDAC) Sections 69-06-01-02 and Chapter 69-06-06, requiring separate filings, time schedules, notices, hearings, and requirements on such applications.

On December 30, 2022, the Public Service Commission (Commission) provided notification of the Application to the townships with retained zoning authority, cities, and counties in which any part of the proposed pipeline corridor is located.

On February 1, 2023, the Commission deemed the Applications complete and issued a Notice of Filings and Public Hearings (Notice) scheduling four separate public hearings as follows:

1. March 14, 2023, at 8:30 a.m. Central Time, at the ND Heritage Center & State Museum, Russell Reid Auditorium, 612 E. Boulevard Avenue, Bismarck, ND 58505. This hearing will focus primarily on portions of the project in Oliver, Morton, and Burleigh Counties.
2. March 28, 2023, at 9:00 a.m. Central Time, at the North Sargent School Activity Center, 16 1st Street SW, Gwinner, ND 58040. This hearing will focus primarily on portions of the project in Dickey and Sargent Counties.
3. April 11, 2023, at 9:00 a.m. Central Time, at the Harry Stern and Ella Stern Cultural Center, ND State College of Science, 820 6th Street Oval, Wahpeton, ND 58075. This hearing will focus primarily on portions of the project in Cass and Richland Counties.
4. May 9, 2023, at 9:00 a.m. Central Time, at Emmons County Courthouse Auditorium, 100 4th Street NW, Linton, ND 58552. This hearing will focus primarily on portions of the project in Emmons, Logan, and McIntosh Counties.

The Notice identified the following issues to be considered in 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, requirements, and time schedules may be waived?
2. Is it appropriate for the Commission to waive any procedures, requirements, and time schedules as requested in the application?

The issues to be considered in the applications for a certificate of corridor compatibility and a route permit are:

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 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 March 14, 2023, the public hearing was held as scheduled in Bismarck, North Dakota.

On March 20, 2023, the Commission issued a Notice of Public Hearings, scheduling an additional hearing for June 2, 2023, at 8:30 a.m. Central Time, at the ND Heritage Center & State Museum, Russell Reid Auditorium, 612 E. Boulevard Avenue, Bismarck, ND 58505. This hearing will focus primarily on portions of the project in Oliver, Morton, and Burleigh Counties.

On March 28, 2023, the public hearing was held as scheduled in Gwinner, North Dakota.

On April 11, 2023, the public hearing was held as scheduled in Wahpeton, North Dakota.

On May 9, 2023, the public hearing was held as scheduled in Linton, North Dakota.

On May 30, 2023, SCS filed a Bismarck Route Analysis.

On June 1, 2023, SCS filed a motion and brief in support of the motion to declare Emmons County and Burleigh County ordinances superseded and preempted.

On June 1, 2023, Randall Bakke filed a petition to reopen the proceedings and schedule an additional public hearing.

On June 1, 2023, SCS filed pre-filed direct testimony of M. Rorie, J. Skaare, J. Powell and R. Dillon. It also filed a Market Research letter from Boulder Appraisal.

On June 2, 2023, the public hearing was held as scheduled in Bismarck, North Dakota.

On June 12, 2023, SCS filed a response to the petition to reopen the proceedings and schedule an additional public hearing recommending the Commission deny Randall Bakke's petition.

On July 17, 2023, Knoll Leibel filed a post hearing brief.

On July 19, 2023, Randall Bakke filed a post hearing brief.

On July 19, 2023, SCS filed a post hearing brief.

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

### **Findings of Fact**

1. Applicant, SCS Carbon Transport LLC, is a Delaware limited liability company authorized to do business in the State of North Dakota.

#### **Size, Type and Preferred Location of Facilities**

2. SCS proposes to construct approximately 320 miles of Carbon Dioxide (CO<sub>2</sub>) pipeline and associated facilities in Burleigh, Cass, Dickey, Emmons, Logan, McIntosh, Morton, Oliver, Richland and Sargent Counties, North Dakota (Project). The CO<sub>2</sub> is compressed into a supercritical or dense phase state and transported through an interstate pipeline network that terminates northwest of Bismarck in Oliver and Mercer Counties where the CO<sub>2</sub> will be injected in pore space for permanent sequestration.

3. The Project will range in size from 4.5 to 24 inch outside diameter of carbon steel pipe with a wall thickness ranging from 0.189 inches to 0.750 inches. Pipe wall thickness categories will be calculated utilizing 49 CFR Part 195.106. The maximum operating pressure will be 2,183 pounds per square inch gauge. The maximum operating temperature will be 120 degrees Fahrenheit.

4. The Project will have a flow rate capacity of up to 936 million standard cubic feet per day. The valve spacing will have a maximum spacing of 20 miles. The valve spacing will be spaced no more than every 15 miles in high-consequence areas consistent with rules set forth by the Pipeline and Hazardous Materials Safety Administration.

5. Thirty-four (34) aboveground facilities will be associated with the Project as specified and detailed on page 5 of the Application.

6. The proposed Project corridor is generally 300 feet in width as depicted as the "Facility Boundary" in Appendix 1 – ND PSC Aerial Mapbook and identified precisely by the associated GIS map data.

7. The Application estimated the cost of the Project at \$4.5 billion. During the public hearing, James Powel testified that the estimated cost of the Project is \$5.5 billion. The North Dakota portion of the Project is estimated at \$898 million.

#### **Study of Preferred Location**

8. SCS initiated correspondence seeking comments from the following federal, state, and local agencies regarding the project:

- a. Federal: (1) Federal Aviation Administration; (2) U.S. Fish and Wildlife Service; (3) U.S. Army Corps of Engineers; (4) U.S. Department of Defense; (5) Federal Bureau of Land Management; (6) Grand Forks Air Force Base; (7) Minot Air Force Base; (8) Military Aviation and Installation Assurance Siting Clearinghouse; (9) Natural Resource Conservation Service; (10) Twentieth Air Force Ninety-first Missile Wing.
- b. State: (1) ND Attorney General; (2) ND Department of Agriculture; (3) ND Department of Career and Technical Education; (4) ND Department of Commerce; (5) ND Department of Environmental Quality; (6) ND Aeronautics Commission; (7) ND Department of Human Services; (8) ND Department of Labor and Human Rights; (9) ND Department of Transportation; (10) ND Department of Trust Lands; (11) ND Energy Infrastructure and Impact Office; (12) ND Game and Fish Department; (13) ND Office of the Governor; (14) ND Indian Affairs Commission; (15) ND Industrial Commission; (16) Job Service of North Dakota; (17) ND Forest Service; (18) ND Geological Survey; (19) ND Pipeline Authority; (20) ND Transmission Authority; (21) ND Parks and Recreation Department; (22) ND Department of Health; (23) ND State Historical Society; (24) ND Department of Water Resources.
- c. Local: (1) Burleigh County Commission; (2) Cass County Commission; (3) Dickey County Commission; (4) Emmons County Commission; (5) Logan County Commission; (6) McIntosh County Commission; (7) Morton County Commission; (8) Oliver County Commission; (9) Richland County Commission; (10) Sargent County Commission.

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

10. SCS conducted several surveys across a generally 300-foot-wide area centered on the Project route as approximated as the "Facility Boundary" in Appendix 1 – ND PSC Aerial Mapbook and identified precisely by the associated GIS map data (Survey Area). SCS conducted surveys for threatened and endangered species, critical habitats, wetlands, waterbodies, and trees/saplings/shrubs.

11. SCS conducted a Class III cultural resources inventory across a portion of the Survey Area. The Class III report was submitted to the State Historical Society of North Dakota (SHPO). In a response dated March 1, 2023, SHPO advised that the report does not meet the standards and they have not yet received a revised report addressing their concerns. SHPO concurrence is commonly required by the Commission for the issuance of a site certificate or route permit. SCS did not address SHPO's concerns further during the proceedings. The Commission finds that cultural resource impacts have not been appropriately addressed.

## Issues Raised by Intervenor and Public Comment

12. The Commission received extensive public comment during the public hearings. The public comments expressed broad concerns regarding eminent domain, safety, the policy of permanent CO<sub>2</sub> sequestration and storage, setback distances, irreparable harm to underground drain tile systems, impacts on property values, and the ability to obtain liability insurance due to the Project.

13. Having considered the public comments, the issues of eminent domain, safety compliance with The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) construction and operation, and permanent sequestration and storage of CO<sub>2</sub> were outside the jurisdiction and consideration of the Commission.

14. Commenters asserted that greater setback distances and topography should be considered for a CO<sub>2</sub> pipeline. NDCC Section 49-22.1-03 specifies that areas within 500 feet of an inhabited rural residence must be an avoidance area unless waived by the owner of the inhabited rural residence. No testimony was presented that provided a sufficient basis to depart from the avoidance requirements set forth in the statute. The company testified that it met this requirement by either avoiding the location or obtaining a waiver.

15. Several commenters expressed that the Project will cause irreparable harm to their underground drain tile systems. Additionally, the commenters expressed concerns that if repairs were not performed properly, it would result in sediment buildup and ultimately failure of the drain tile systems. Jeremy Ellingson with Ellingson Drainage testified that his company has been hired by SCS to repair or replace any drain tile systems damaged or modified because of the Project. Dr. Thomas F. Scherer an Associate Professor in the Department of Agriculture and Biosystems Engineering at North Dakota State University testified that drain tile repairs such as those described by Mr. Ellingson can be done successfully if completed using proper procedures for both topsoil and subsoil segregation and tile repair procedures. The Commission finds that proper drain tile system repair and/or replacement by SCS will produce minimal adverse effects to drain tile systems.

16. Commenters and intervenors asserted that the Project will cause significant adverse effects on the value of their property and residential development projects. SCS filed a letter from Boulder Appraisal in response to the assertions. The letter summarizes the effect of existing natural gas and hazardous liquids pipelines upon the development and sale of current residential properties in Bismarck, North Dakota. However, the filing was not tendered during a hearing and the parties and Commission were not afforded an opportunity to question the document or witness provided by SCS as required by NDAC Section 69-02-05-02. This limits the weight that the Commission is willing to provide to the document.



17. The weight of the assertions given by the Commission largely depends on proximity to the project and the timeline of residential development. It also converges with concerns regarding expansive setback requirements. While some of the intervenors and developers stretch the plausibility of the adverse impacts on future property values and development, based upon the record, the Commission finds that the effects have not been adequately minimized for the welfare of the people and the environment of the state.

18. A number of commenters provided that the Project will make them unable to purchase liability insurance due to the risk of a release. In the pre-filed testimony of Micah Rorie on June 1, 2023, SCS testified that it would hold the liability for a rupture of the Project unless the rupture was caused by a third-party line strike. Based upon this testimony, the Commission finds that no additional requirements are needed to ensure the Project will have minimal adverse impacts on the liability insurance requirements of the landowners.

19. SCS has requested the Commission to supersede and preempt the ordinances of both Emmons and Burleigh Counties, North Dakota. SCS has not filed an application with either county for a variance or waiver to their ordinances.

20. LIUNA intervened in this proceeding and submitted testimony relating to the benefits of hiring a local labor force for transmission projects and the safety record of the contractors SCS intends to use to construct the Project. SCS's application indicated approximately 1,934 equivalent annual personnel, both skilled and unskilled, would be required for project construction and up to 34 full-time workers will be required during operations. Consistent with Commission precedent, the Commission finds that LIUNA's assertions in relation to SCS's plans for the construction of the Project are not applicable to the Commission's jurisdiction in siting transmission projects.

#### Siting Criteria

21. The Commission has established criteria pursuant to NDCC Section 49-22.1-03 to guide the site, corridor, and route suitability evaluation and designation process. The criteria, as set forth in NDAC Section 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria. Exclusion and avoidance areas may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor width unless there is no reasonable alternative. SCS provided an evaluation of the Project for Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria in its application.

22. An Exclusion Area is a geographic area that must be excluded in the consideration of a route for a transmission facility. A transmission facility route must not be sited within an exclusion area.

23. Areas critical to the life stages of threatened or endangered animal or plant species are designated as exclusion areas under NDAC Section 69-06-08-02(1)(d). SCS's studies

and surveys identified that the Project crosses piping plover critical habitat at the Missouri River crossing. The Project will cross the Missouri River using Horizontal Directional Drilling (HDD). As the piping plover habitat is not beneath the Missouri River, a reasonable buffer zone exists for the protection of the piping plover's habitat, and there is no evidence of an adverse impact.

24. SCS studies and surveys did not record any other Exclusion Areas within the Survey Area. No other exclusion areas were presented by an intervenor, the public, or Commission staff during the pendency of the proceeding.

25. 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. Economic considerations alone will not justify the approval of avoidance areas.

26. National Wildlife Refuges are designated avoidance areas under NDAC Section 69-06-08-02(2)(a). SCS's studies and surveys identified the Dakota Lake National Wildlife Refuge (DLNWR) in Dickey County, North Dakota is within the proposed corridor. The DLNWR does not encompass more than fifty percent of the corridor width and will not be crossed by the route. The Commission finds that the impact to the DLNWR is at an acceptable minimum.

27. Game Management Areas are designated avoidance areas under NDAC Section 69-06-08-02(2)(b). SCS's studies and surveys indicated that six waterfowl production areas are within the proposed corridor. The Richland County Waterfowl Production Area is directly crossed by the proposed corridor and route and encompasses greater than fifty percent of the corridor width in Section 16, Township 136N, Range 51W. The Sargent County Waterfowl Production Area is directly crossed by the proposed corridor and route and encompasses greater than fifty percent of the corridor width in Section 7, Township 131N, Range 55W, it is also within the proposed corridor but does not encompass more than fifty percent of the corridor width and will not be crossed by the route in Section 8, Township 131N, Range 54W. The Dickey County Waterfowl Production Area is directly crossed by the proposed corridor and route and encompasses greater than fifty percent of the corridor width in Section 14, Township 129N, Range 61W, Section 28, Township 129N, Range 63W and Section 29, Township 129N, Range 62W. The McIntosh County Waterfowl Production Area is within the proposed corridor, but does not encompass greater than fifty percent of the corridor width in Section 7, Township 129N, Range 70W. The Emmons County Waterfowl Production Area is directly crossed by the proposed corridor and route and encompasses greater than fifty percent of the corridor width in Section 16, Township 133N, Range 74W. The Burleigh County Waterfowl Production Area is within the proposed corridor, but does not encompass greater than fifty percent of the corridor width in Section 30, Township 138N, Range 78W, Section 19, Township



138N, Range 78W, and Section 7, Township 138N, Range 78W. SCS did not demonstrate that there is no reasonable alternative to a route through the avoidance areas. Therefore, the Commission finds that the impacts on Game Management Areas in North Dakota are not at an acceptable minimum.

28. Areas that are geologically unstable are avoidance areas under NDAC Section 69-06-08-02(2)(d). SCS's studies and surveys noted that the US Geological Survey and Natural Resources Conservation Service soil data and topographical information were reviewed to identify areas of potential geologic instability. In a letter dated March 3, 2023, the North Dakota Geological Survey (NDGS) noted 14 areas of potential geologic instability within the Project corridor. On April 3, 2023, SCS submitted a letter to the Commission that was sent from SCS to the NDGS on March 31, 2023. SCS has not submitted information to the Commission demonstrating how it has addressed the concerns raised by the NDGS regarding the potentially geologic unstable areas. The Commission finds that SCS has not properly addressed areas that are geologically unstable.

29. Areas within 500-feet of a residence, school or place of business are avoidance areas under NDAC Section 69-06-08-02(2)(e). This avoidance area may be waived by the owner. SCS's studies and surveys identified eight residential structures and one business within 500-feet of the Project. SCS has provided a waiver for one of the residences. SCS submitted that it will not construct within 500-feet of the remaining residences or business without obtaining and filing with the Commission signed waivers from the owner(s) of those structures.

30. SCS's studies and surveys did not record any other Avoidance Areas within the Survey Area. No other avoidance areas were presented by an intervenor, the public, or Commission staff during the pendency of the proceeding.

31. In accordance with the Commission's Selection Criteria set forth in NDAC Section 69-06-08-02(3), a transmission facility corridor or route shall be approved only if it is determined 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 that those effects will be managed and maintained at an acceptable minimum. SCS provided an analysis of the impacts of the Project in relation to all relevant Selection Criteria.

32. The Commission finds that the Project's impact upon agriculture and livestock will be at an acceptable minimum. However, the Company has not taken the steps to address outstanding legitimate impacts expressed by landowners during the public comment or demonstrated why a reroute is not feasible.

33. The Commission finds that the Project's impact upon the criteria listed in NDAC Section 69-06-08-02(3)(b) will be at an acceptable minimum.

34. SCS analyzed the relevant Policy Criteria set forth in NDAC Section 69-06-08-02(4). There is no need for the Commission to give preference to the applicant in this proceeding.

#### Additional Measures to Minimize Impact

35. SCS 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.

36. SCS has developed an Unanticipated Discovery Plan, an Emergency Response Plan, a Noxious Weed Management Plan and a Dust Control Plan, which are included with the Application.

37. The Project will be designed, constructed and operated in accordance with PHMSA regulations utilizing industry standards.

38. SCS testified that it will have an operations control center in Ames, Iowa, that will be monitored 24 hours per day. The Project will include a supervisory control and data acquisition system that will communicate with all field sites and provide real-time information of the systems operations. The operations control center will have the capability to remotely shut down pump stations and isolate pipeline segments in the event abnormal operating conditions are observed. SCS modeled a valve closure time of 2 minutes, although the timing of the closure is capable of closure much quicker than 2 minutes.

39. SCS noted in its application that meetings have occurred with the emergency management directors of all counties crossed by the Project. The emergency management directors were asked to provide a list of equipment needs in order to respond to potential incidents.

40. SCS requested a 300-foot corridor width in its Application. During the hearing, SCS testified that SCS would not object to the PSC issuing a narrower corridor designation of 200 feet in width.

41. SCS testified that if winter construction were necessary, that it would follow the Interstate Natural Gas Association of America Foundation guidelines for pipeline construction during frozen conditions.

42. Commissioners requested responses from SCS on a number of issues. Some of the specific requests were regarding rerouting the Project on Vculek's, Doolittle's, Barnhardt's, and Dotzenrod's properties; confirmation on the number of 500-foot setback waivers required and obtained; follow-up with the ND Geological Survey; BNI coal permit status; SHPO concurrence status; and an analysis of the south Bismarck alternate route. SCS either did not adequately address these requests or did not tender a witness to

answer questions as required by NDAC Section 69-02-05-02. The basis for SCS's recommended denial of Mr. Bakke's June 1, 2023, petition to reopen the proceeding and hold an additional public hearing was an assertion that it provided a full and complete record in this proceeding. The Commission finds that SCS has not provided sufficient evidence to demonstrate that the location, construction, operation and maintenance of the Project will produce minimum adverse impacts upon the welfare of the citizens of North Dakota with the existing record.

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

### **Conclusions of Law**

1. The Commission has jurisdiction over the applicant, SCS Carbon Transport LLC, and the subject matter of the Application under NDCC Chapter 49-22.1.
2. SCS is a utility as defined in NDCC Section 49-22.1-01(13).
3. The Project is a gas or liquid transmission facility as defined in NDCC Section 49-22.1-01(7).
4. Due to this Application being denied, the issue of whether the county ordinances are automatically superseded and preempted is moot.
5. Based on the above findings of fact, the Commission concludes that the proposed facilities are not of such length, design, location, or purpose that they will produce minimal adverse effects and that adherence to applicable procedures, requirements, and time schedules should not be waived.
6. Based on the above findings of fact, the Commission concludes that it is not appropriate for the Commission to waive any procedures, requirements, and time schedules as requested in the application.
7. Based on the above findings of fact, the Commission concludes SCS failed to meet its burden of proof to show the location, 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.
8. Based on the above findings of fact, the Commission concludes SCS failed to meet its burden of proof to show 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.

9. Based on the above findings of fact, the Commission concludes SCS failed to meet its burden of proof to show the location, construction, and operation of the Project are compatible with environmental preservation and efficient use of resources.

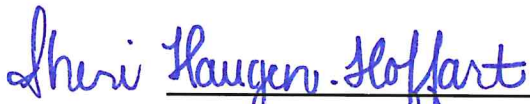
From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes the following:

### Order

The Commission Orders:

1. SCS Carbon Transport LLC's Application for a waiver of procedures and time schedules is denied.
2. SCS Carbon Transport LLC's Application for a Certificate of Corridor Compatibility is denied.
3. SCS Carbon Transport LLC's Application for a Route Permit is denied.
4. The June 1, 2023, petition to reopen the proceedings and schedule an additional public hearing is denied, and any outstanding procedural motions are denied.

### PUBLIC SERVICE COMMISSION



**Sheri Haugen-Hoffart**  
Commissioner



**Randy Christmann**  
Chair



**Timothy J. Dawson**  
Substitute decisionmaker