BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF SCS CARBON TRANSPORT LLC FOR A PERMIT TO CONSTRUCT A CARBON DIOXIDE PIPELINE.	HP22-001

REBUTTAL TESTIMONY OF

AARON ELDRIDGE

ON BEHALF OF

SCS CARBON TRANSPORT LLC

SCS EXHIBIT #____

July 7, 2023

Q. Please state your name and business address for the record.

A. My name is Aaron Eldridge. I am employed by SCS Carbon Transport, LLC, and my business address is 2321 N Loop Drive, Suite 221, Ames, IA 50010.

Q. What is your position with SCS Carbon Transport, LLC ("SCS")?

A. I am the South Dakota Pipeline Project Manager. In this role, I am tasked with working through the design, construction, and operation of Summit's Midwest Carbon Express Pipeline, namely the mainline, trunklines, and laterals located in South Dakota. While the specifics of my position vary daily, my tasks usually involve working with contractors and consultants to develop designs and procedures that either meet or exceed regulatory requirements which ensure the safe and responsible construction and operation of the CO2 Pipeline. As a part of this, my role has included numerous meetings with individuals along the pipeline route, frequent appearances with county commissions and planning and zoning boards, and working with various entities across the state to find mutually agreeable crossing arrangements.

Q. Please briefly describe your educational experience.

A. I have a Bachelor of Science degree in Mechanical Engineering from Rose-Hulman Institute of Technology and have 5 years of experience working on and managing various pipeline projects across the country ranging from small facilities to large diameter transmission pipelines. This experience includes the design, construction, commissioning, and operation of hundreds of miles of 3" to 40" diameter pipelines and as a result, hundreds of pipeline crossings and encroachments with various utility groups. Prior to my current position as the South Dakota Pipeline Project Manager for Summit Carbon Solutions, I worked as a Project Engineer for Marathon Petroleum Corporation.

Q. Have you previously submitted direct testimony and exhibits in this proceeding?

A. No.

Q. What is the basis for your rebuttal testimony?

A. I have reviewed the testimony submitted by:

- Kuprewicz (WEB)
- Schutza (WEB)
- Tobin (WEB)
- Koehn (SDARWD)
- Smith (SDREA)
- Mutziger (SDTA)

These witnesses all offered testimony on behalf of incumbent utilities with existing distribution facilities located in rural areas.

Q. Who is responsible for the utility crossing design and execution in South Dakota?

A. While the crossing agreements will be reviewed by many different individuals within the company to ensure standardization to the extent pratical, the design and execution of the utility crossings in South Dakota will be ultimately determined and implemented by me.

Q. Is there a common theme in these utility groups testimony?

A. Yes, all of the groups appear to desire a standard approach to crossing of their utility lines by Summit - or vice versa. Summit shares in this desire with an acknowledgement that special considerations may be warranted on a site-specific/case-by-case basis. While there are some disagreements on a few of the specifics, I'm confident we can come to satisfactory agreements between all parties.

Q. What are some examples of those disagreements?

A. Separation distance of utility lines, for instance. In general, Summit's standard approach is for a minimum of 24-inches vertically separating any crossing utilities. We believe consideration of distances greater than this should be on a case-by-case basis to determine necessity and feasibility. It's not possible to predetermine greater distances as none of the existing utilities exist in a vacuum. All of them are in an environment which has constraints andthose constraints must be taken into consideration.

Another is the desire to install casing around waterlines that cross our pipeline. The apparent thought is that doing so will minimize the opportunity for liquification of soils in the event of a water leak – the leaking water would be diverted away from the crossing and our pipeline. However, liquification of soils would only be of a concern along steep topography where sloughing of the soil could occur and cause axial strain on our pipeline. Pipeline casing introduces additional integrity risk and should be avoided when possible. As such, state DOT offices, railroads, and others prefer uncased crossings. SCS is confident that alternative means of protection can be implemented that would mitigate concern.

Q. There has been reference in other testimony to drawings or agreements that Summit has proposed. Can you provide details on this?

A. Yes. In discussions with many of the utility companies on the identified encroachments, it was clear that all parties would like to work towards a mutually acceptable crossing agreement. While most parties did have an agreement they were able to share, Summit's proposed crossing agreements and standard drawings include optionality to open cut or bore given the specific crossing, a minimum of 24" separation from other utilities, exposure of the utility pipe by non-mechanized equipment when within 24" of the utility, and a cathodic protection test station if the

utility is made of a conductive material. It is worth noting that Summit's proposed crossing agreement does exceed federal regulations with respect to separation (49 CFR 195.250).

Q. How many crossings have been identified in South Dakota? How were these identified?

A. A total of 678 crossings have been identified along the current Midwest Carbon Express Pipeline route in South Dakota. The vast majority of these crossings are waterlines or electrical distribution lines. These crossings have been identified by a combination of desktop review of maps and GIS databases, captured by survey crews in the field, and through data exchanges with the utility companies themselves.

Q: Is it the goal of SCS to negotiate a mutually acceptable agreement with these Utility Groups, outside of the formal hearing scheduled in this docket?

A. Yes.

Q: Is it your intent that all current and future crossings would be covered by these agreements?

A. Yes. The intent is to work with the utility companies and groups to develop a crossing agreement that will apply to any crossings currently identified as well as any future crossings. This said, it is understood that due to the unique circumstance surrounding each crossing, specific changes may be required. The intent of these agreements is to include language that allows for these unique cases to be addressed appropriately.

Q. Will Summit accept responsibility for damage to utility lines caused by their, or their contractors', actions during construction and subsequent operation of the pipeline?

A. Yes.

Q. Does the ROW agreement with each landowner prohibit the landowner from granting an easement for other utilities without Summit's permission?

A. Summit's easement requires landowners to obtain written permission in the event the landowner constructs or permits the construction or installation of any temporary or permanent building or site improvements that encroaches upon Summit's ROW. This is to establish an orderly process so Summit is aware of any newly introduced conditions that may arise and, where appropriate – such as with a utility crossing - make sure the crossing will not damage any facility or otherwise impede the operation of Summit's proposed pipeline.

Q. What about the need for interference cathodic protection test stations where Summit's pipeline crosses metal water pipelines?

A. Cathodic protection of pipeline systems is important for all pipelines, Summit's proposed pipeline included. Summit's pipeline monitoring system includes monitoring for stray current, because we agree that cathodic protection systems can interfere with one another. SCS wants to work with all existing pipeline operators to ensure both parties can monitor their cathodic protection systems at line crossings. Summit's cathodic protection system will ensure interfering currents are found through monitoring and mitigated through testing by qualified corrosion engineers and technicians.

Q. Does this conclude your testimony?

A. Yes.

Dated this 7th day of July, 2023.

/s/ Aaron Eldridge

Aaron Eldridge