

# Roughrider Carbon Storage Hub

**Submitted by:**

**ONEOK, Inc.**

Principal Investigator: Chad Schneeberger

**☐ Total Funding Request - \$1,050,000**

**Total Project Costs - \$16,550,000**

**Project Duration: 2 years**

# PROJECT DESCRIPTION

The objectives of the Roughrider Carbon Storage Hub are to accelerate wide-scale deployment of carbon capture, utilization, and storage (CCUS) by assessing and verifying the feasibility of using stacked storage complexes in McKenzie County, North Dakota, for the safe and cost-effective commercial-scale storage of anthropogenic CO<sub>2</sub> emissions captured from ONEOK and Cerilon (planned) hydrocarbon-processing facilities in northwestern North Dakota. Through the execution of the scope of work, the prospective CO<sub>2</sub> storage resource of the area of interest in McKenzie County will be advanced to a contingent storage resource as classified under the Society of Petroleum Engineers CO<sub>2</sub> Storage Resources Management System (SRMS). In addition, the proposed project will complete a thorough feasibility study for both technical and economic viability as well as develop and implement region-specific plans to engage communities and stakeholders. This project will provide new information to enable operators, investors, regulators, and other stakeholders to make informed decisions regarding potential CO<sub>2</sub> storage resource in the central portion of the Williston Basin.

## TECHNICAL REVIEWERS' RATING SUMMARY

Statement	<b>Weighting Factor</b>	<b><u>TR G-58-01A</u></b>	<b><u>TR G-58-01B</u></b>	<b><u>TR G-58-01C</u></b>	<b><u>Average Weighted Score</u></b>
Objectives	<b>9</b>	4	5	4	36
Achievability	<b>7</b>	4	4	3	21
Methodology	<b>8</b>	3	5	4	32
Contribution	<b>8</b>	4	5	4	32
Awareness/ Background	<b>5</b>	4	5	4	20
Project Management	<b>3</b>	5	5	4	12
Equipment / Facilities	<b>2</b>	4	5	3	8
Value/Industry- Budget	<b>4</b>	4	5	5	16
Financial Match – Budget	<b>4</b>	5	5	5	20
<b><i>Average Weighted Score</i></b>		<b>199</b>	<b>243</b>	<b>199</b>	<b>213</b>
<b><i>Maximum Weighted Score</i></b>				250 possible points	

# TECHNICAL REVIEWER TOTALS

- G-58-01A

Average Weighted Score: **199 out of 250**

**FUND**

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- G-58-01B

Average Weighted Score: **243 out of 250**

**FUND**

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- G-58-01C

Average Weighted Score: **199 out of 250**

**FUND**

# TECHNICAL REVIEWER COMMENTS

## Reviewer G-58-01A

The project objectives align with the goals set by Governor Burgum, the state congressional delegation, and regulatory agencies, demonstrating a clear alignment with the state's priorities. The project recognizes the need to investigate different stratigraphic intervals, including clastic-dominated and carbonate/evaporite sections, which may require different methodologies. This demonstrates an understanding of the complexity involved in defining the behavior of CO<sub>2</sub> in different geological units and the importance of studying seals associated with these units.- The project aims to mitigate environmental issues arising from North Dakota's energy-dependent economy, specifically targeting the reduction of CO<sub>2</sub> emissions, which is a critical national priority.

**Recommendation: FUND**

## Reviewer G-58-01B

The merits are to clearly advance North Dakota's carbon neutrality or carbon-negative goals. The goal of carbon capture in ND cannot be accomplished without this type of study, data generation and development.

**Recommendation: FUND**

## Reviewer G-58-01C

There is currently very limited research or experience, within the ND portion of the Williston Basin, on the subterranean injection and long-term storage of carbon dioxide. This type of cuttingedge research, and the resulting data gathered, is essential to the successful development of the proposed Roughrider Carbon Storage Hub. In addition, the stratigraphic test well and operational data acquired for this project will likely also be useful for other technologies like geothermal, oil and gas exploration, EOR development, etc.

**Recommendation: FUND**

# **Director's Recommendation:**

Fund in the amount of \$525,000