PCOR Initiative to Accelerate CCUS Deployment

Submitted by:

Energy & Environmental Research Center (EERC)

- ☐ Funding Request \$\$2,000,000 (\$500,000 for agreed scope, \$1,500,000 contingent on additional future scope from DOE)
- **□**Total Project Costs \$6,254,617
- **□**Project Duration: 5 years

PROJECT DESCRIPTION

The Energy & Environmental Research Center (EERC) has been selected for an award of \$5,000,000 from U.S. Department of Energy (DOE) for the PCOR Initiative, to foster the development of infrastructure and accelerate carbon capture, utilization, and storage (CCUS) deployment in the northwest quadrant of North America, comprising 11 U.S. states and four Canadian provinces. The initiative retains the PCOR brand name because of the success of the preceding PCOR (Plains CO2 Reduction) Partnership Program efforts related to CCUS. The PCOR Initiative will utilize a significant network of organizations to address the critical challenges outlined in DOE Funding Opportunity Announcement (FOA) DE- FOA0002000. This region is rich in fossil fuel resources, CO2 sources, and storage options, thereby providing all essential elements necessary for infrastructure development and widespread CCUS deployment. Our vision is for the PCOR Initiative to be the premier regional forum to promote CCUS infrastructure and accelerate CCUS deployment, thus enabling very low greenhouse gas emissions for current and future plants that use coal and other fossil fuels. The PCOR Initiative anticipates dynamic growth in support, building on over 120 partner companies and organizations of the PCOR Partnership. Our team also includes the partners associated with Project Tundra, which constitutes the largest planned capture of CO2 in the world from a power generation facility. With many partners actively engaged in commercial projects, the PCOR Initiative will harness a powerful team to advance and accelerate regional CCUS deployment.

• The goal of the PCOR Initiative is to identify and address onshore regional storage and transport challenges facing commercial deployment of CCUS in an expanded region, compared to past initiatives. To achieve this endeavor, the PCOR Initiative will meet the following objectives: 1) address key technical challenges by advancing critical knowledge and capabilities; 2) facilitate data collection, sharing, analysis, and collaboration; 3) evaluate regional infrastructure challenges and needs; and 4) promote regional technology transfer.

TECHNICAL REVIEWERS' RATING SUMMARY

	Technical Reviewer			
Weighting Factor	<u>G-50-06A</u>	<u>G-50-06B</u>	<u>G-50-06C</u>	Average Weighted Score
9	5	3	3	27
7	4	3	4	21
8	5	4	4	32
8	4	4	5	32
5	5	4	4	20
3	4	4	3	9
2	5	3	3	6
4	4	3	4	12
4	5	4	5	16
hted Score	228	178	198	201
hted Score			250 possible points	
	Factor 9 7 8 8 5 3 2 4 hted Score	Weighting Factor G-50-06A 9 5 7 4 8 5 8 4 5 5 3 4 4 4 4 5 hted Score 228	Weighting Factor G-50-06A G-50-06B 9 5 3 7 4 3 8 5 4 8 4 4 5 5 4 2 5 3 4 4 3 4 5 4 4 5 4 4 5 4 4 5 4 4 228 178	Weighting Factor G-50-06A G-50-06B G-50-06C 9 5 3 3 7 4 3 4 8 5 4 4 5 5 4 4 3 4 4 3 2 5 3 3 4 4 3 4 4 5 4 5 5 4 5 4 10 5 4 5 10 4 5 4 10 5 4 5 10 4 5 4 10 5 4 5 10 4 5 4 10 5 4 5 10 6 6 6 10 7 7 7 10 8 7 7 10 8 7 7

TECHNICAL REVIEWER TOTALS

• G-50-06A

Average Weighted Score: **228 out of 250**

FUND

• G-50-06B

Average Weighted Score: 178 out of 250

FUND

• G-50-06C

Average Weighted Score: 198 out of 250

FUND

TECHNICAL REVIEWER COMMENTS

Reviewer G-50-06A

The proposed next phase of the PCOR activity is critically important for the state of ND and the ND oil industry. I believe it represents a highly leveraged investment by the OGRC that will pay significant dividends in the future.

Recommendation: Fund

Reviewer G-50-06B

Multiple partners and stakeholders add benefit across the board.

Recommendation: Fund

Reviewer G-50-06C

This project aligns very well with the NDIC Oil and Gas Research Council goals and has the potential for an extremely significant impact on ND oil and gas as well as other industries. The extremely broad support for the project by elected officials, industry partners, national laboratories, trade associations, and Canadian organizations speaks to the need and potential benefits. The abstract describes the project at a very high level and will require skilled leadership to manage the scope, schedule, and cost. The proposed leadership appear to have the required experience.

Recommendation: Fund

Director's Recommendation:

Fund in the amount of \$2,000,000 (\$500,000 for agreed scope, \$1,500,000 contingent on additional future scope from DOE).