



INDUSTRIAL COMMISSION OF NORTH DAKOTA

Doug Burgum
Governor

Drew H. Wrigley
Attorney General

Doug Goehring
Agriculture Commissioner

Memorandum

TO: Brent Brannan, Director, Oil and Gas Research Program

FR: Reice Haase, Deputy Executive Director

DT: October 11, 2022

RE: Amendment to Contract G-054-104: "Field Study to Determine the Feasibility of Developing Salt Caverns for Hydrocarbon Storage in Western North Dakota"

Senate Bill 2014 passed by the 67th Legislative Assembly included an appropriation of \$9.5 million to the Oil and Gas Research Program (OGRP) from the Strategic Investment and Improvement Fund (SIIF) for the purpose of studying the feasibility of constructing underground salt caverns in North Dakota "for the storage of energy resources, including natural gas, liquified natural gas, NGLs, and hydrogen". The Industrial Commission approved a proposal from EERC to meet the intent of the bill at its June 9th, 2021 meeting, and Contract G-054-104 was executed.

During the spring and early summer of 2022, a stratigraphic test well was drilled to obtain samples of core from subsurface formations containing salt beds. Due to challenges encountered during drilling, costs exceeded the original \$9.5 million budget.

On July 26th, 2022, the Oil and Gas Research Council voted to recommend the Industrial Commission reallocate \$2.5 million from Contract G-049-092: "Underground Storage of Produced Natural Gas" to Contract 054-104 for the purposes of covering immediate plugging and reclamation costs as well as time-sensitive laboratory analysis. During discussion, the Council deferred taking action on remaining costs for modeling and reporting and directed EERC to pursue cost discounts from vendors.

On October 6th, 2022, EERC completed the task of securing discounts from vendors. Well completion costs were reduced from previous estimates in part due to departures from earlier authorized costs and from vendor discounts totaling \$263,989. The total amount needed to complete the project is **\$986,200**, which is approximately \$1.3 million below the estimate presented at the July Council meeting. A detailed breakdown of project costs is included in the following table:

Project Associated Expense	Currently Approved Budget NDIC Share*	Estimate of Total Cost at Completion	Variance
Labor	\$3,016,919	\$2,332,583	-\$684,336
Travel	\$35,969	\$49,329	\$13,360
Equipment > \$5000	\$16,300	\$0	-\$16,300
Supplies	\$14,515	\$19,678	\$5,163
Subcontract – Naset Consulting	\$6,500,000	\$8,706,477	\$2,206,477
Consultant – Engineering Design Advisement (TBD)	\$250,000	\$0	-\$250,000
Communications	\$500	\$65	-\$435
Printing & Duplicating	\$1,010	\$1,556	\$546
Food		\$200	\$200
Laboratory Fees & Services			
EERC Natural Materials Analytical Research Lab	\$112,392	\$40,700	-\$71,692
EERC Graphics Services	\$19,382	\$675	-\$18,707
EERC Document Production Services		\$20,920	\$20,920
EERC Engineering Services Fee	\$1,507	\$2,614	\$1,107
EERC Field Safety Fee	\$20,448	\$25,556	\$5,108
EERC Geoscience Fee	\$0	\$15,894	\$15,894
EERC Shops & Ops	\$0	\$638	\$638
EERC Software Tech	\$0	\$97	\$97
Petroleum Engineering – Triaxial Testing	\$67,200	\$29,043	-\$38,157
Outside Lab – Core Labs	\$80,000	\$0	-\$80,000
Outside Lab – Wagner Petrographic	\$8,000	\$0	-\$8,000
Outside Lab – RESPEC	\$0	\$281,500	\$281,500
Freight & Laundry	\$0	\$184	\$184
Professional Development	\$0	\$6,500	\$6,500
Total Direct Costs	\$10,144,142	\$11,534,209	\$1,390,067
Facilities & Administration	\$1,855,858	\$1,451,991	-\$403,867
Total Cash Requested from NDIC	\$12,000,000	\$12,986,200	\$986,200

* The approved NDIC share budget includes \$9.5M from the original proposal (EERC Proposal 2021-00187) plus \$2.5M transferred from Underground Storage of Produced Natural Gas – Conceptual Evaluation and Pilot Project(s) (HB 1014); Contract No. G-049-092. LR 10/6/2022

Therefore, I recommend the Oil and Gas Research Council approve a motion to recommend that the North Dakota Industrial Commission approves an amendment to Contract 054-104 and allocates \$986,200 in additional grant funding from the Oil and Gas Research Fund (research) for the purpose of completing project tasks as outlined in the table above. I further recommend that the Council recommends the Industrial Commission supports a request of the 68th Legislative Assembly to reimburse the Oil and Gas Research Fund for a total amount of \$986,200 from SIIF.