

# **FINDINGS AND RECOMMENDATIONS OF THE OPERATIONAL AND POSTOPERATIONAL SUBGROUPS PRESENTED TO THE CGS TASK FORCE**

## **Plains CO<sub>2</sub> Reduction (PCOR) Partnership Phase III Task 3 – Milestone M42**

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DOE Cooperative Agreement No. DE-FC26-05NT42592

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## **ACKNOWLEDGMENT**

This material is based upon work supported by DOE NETL under Award No. DE-FC26-05NT42592.

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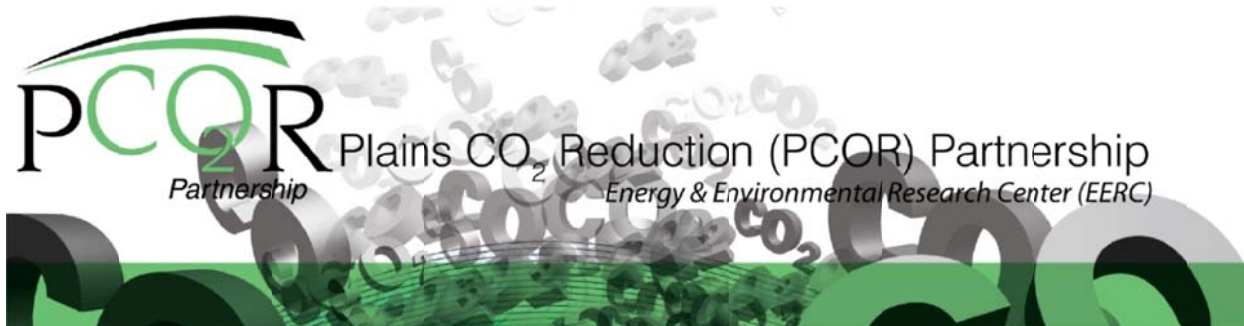
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## **FINDINGS AND RECOMMENDATIONS OF THE OPERATIONAL AND POSTOPERATIONAL SUBGROUPS PRESENTED TO THE CGS TASK FORCE**

### **BACKGROUND**

The Plains CO<sub>2</sub> Reduction (PCOR) Partnership is one of seven Regional Carbon Sequestration Partnerships (RCSPs) competitively awarded by the U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL) in 2003 as part of a national plan to mitigate greenhouse gas emissions. The PCOR Partnership is led by the Energy & Environmental Research Center (EERC) at the University of North Dakota and includes stakeholders from the public and private sector. The PCOR Partnership region includes all or part of nine U.S. states and four Canadian provinces.

Phase III, the development phase, a 10-year effort (2007–2017), is an extension of the characterization (Phase I) and validation (Phase II) phases. The Phase III efforts of the PCOR Partnership include two large-volume demonstration tests—one in Canada and one in the United States—that focus on injecting carbon dioxide (CO<sub>2</sub>) into deep geologic formations for CO<sub>2</sub> storage.

The IOGCC (Interstate Oil and Gas Compact Commission) Carbon Capture and Geologic Storage Task Force (Task Force) has been addressing legal and regulatory issues surrounding the capture and storage of anthropogenic sources of CO<sub>2</sub> since IOGCC's inception in 2002. Its membership has included IOGCC member states and international affiliates, state and provincial oil and gas agencies, DOE, RCSPs, the Association of American State Geologists (AASG), and the oil and natural gas industry.

Phase I of the Task Force project, funded by DOE and NETL through a cooperative agreement with the University of Illinois, was completed by the Task Force in early 2005 with the production of a report entitled "CO<sub>2</sub> Geological Sequestration Task Force: A Regulatory Framework for Carbon Capture and Geologic Storage." The project consisted of an examination of the technical, policy, and regulatory issues related to the safe and effective storage of CO<sub>2</sub> in subsurface geologic media for both enhanced hydrocarbon recovery and long-term CO<sub>2</sub> storage.

Phase II of the Task Force project, a cooperative agreement with the New Mexico Institute of Mining and Technology (NMMT) and funded by DOE and NMMT, consisted of a more in-depth examination of the legal and regulatory aspects surrounding the storage of CO<sub>2</sub> in geologic media. The study results, "Storage of Carbon Dioxide in Geologic Structures, A Legal and Regulatory Guide for States and Provinces," published in September 2007, presented model legislation and regulations for use by states and provinces. It should be noted that the model

legislation and rules were necessary only for carbon geologic storage (CGS) that did not involve enhanced oil recovery (EOR), as most oil- and natural gas-producing states already had law and regulations on the books for EOR-related storage. Further Phase II work supplemented the 2007 work of the Task Force with the production in 2010 of a report entitled “IOGCC CCGS Task Force Phase II Biennial Review of the Legal and Regulatory Environment for the Storage of Carbon Dioxide in Geologic Structures.” Included in the biennial review was an update of the model legislation and regulations and a review of state and provincial actions to enact laws or promulgate regulations relating to CGS.

In July 2012, with funding from DOE and NETL, the IOGCC Task Force, renamed the Carbon Geologic Storage (CGS) Task Force, began a Phase III effort. Under the terms of the agreement with DOE NETL through the PCOR Partnership, the Task Force will focus on the issues of operational and postoperational liability, only as they pertain to deep storage, not EOR-related storage. It will seek to augment the Task Force’s existing guidance to states and provinces in this area. This is the sole focus of the work to be undertaken by the Task Force in the 14-month effort.

The PCOR Partnership Statement of Project Objectives (SOP) Task 3 – Permitting and NEPA Compliance was amended to include the following provisions:

#### Subtask 3.5 – IOGCC Carbon Geologic Storage (CGS) Task Force Activities

This subtask, through the efforts of the IOGCC CGS Task Force, will address issues relating to liability (operational and postoperational) that remain as barriers to the establishment of state and federal legal and regulatory frameworks for CCUS. Clarification of attendant liability issues will remove significant barriers to CCUS deployment and thus provide prospective CCUS project developers with greater regulatory certainty, a necessary prerequisite for CCUS project development to move forward. Findings, recommendations, and guidance will be developed. IOGCC will communicate the CGS Task Force output to the public, along with state and local elected and administrative officials, industry representatives, prospective CCUS project operators and financiers, and other stakeholders through an outreach and awareness effort.

*Subtask 3.5.1 – Operational/Postoperational Legal Analysis.* IOGCC and the EERC will form two liability subgroups, i.e., an Operational Liability Subgroup and a Postoperational Liability Subgroup, to conduct CGS Task Force research. It is anticipated that one chairperson will lead both subgroups and that there will be considerable overlap (50%–80%) on the two subgroups. It is, therefore, anticipated that meetings of the subgroups will take place sequentially at one location over 2 days.

*Subtask 3.5.1.1 – Form Subgroups.* In coordination with the EERC, IOGCC will identify and recruit content area experts and subgroup members for the effort.

*Subtask 3.5.1.2 – Conduct Research and Analysis.* The subgroups’ content area experts, working with Kevin J. Bliss Consulting, will take the lead on behalf of the subgroups in conducting necessary research and analysis. The work will include the following:

- Potential recommendations of regulations requiring a financial assurance from the project operator
- The definition of financial assurance requirements including acceptable instruments for that assurance and the risks covered/not covered by that assurance
- Potential recommendations addressing noncovered risks
- The potential development of a guidance document for states regarding creating, administering, and funding a state-operated trust fund
- The definition of a state-operated trust fund and how it would work
- How risks not assumed by the trust might be covered
- The potential development of strategies and mechanisms to ensure a trust fund is able to fulfill, over time, its assigned responsibility

The subgroups will perform research and analyses through Web conferencing, conference calls, e-mails, and subgroup meetings. IOGCC anticipates two separate meetings of each subgroup, with the subgroups in each case meeting one after the other at the same location. IOGCC will plan and host these subgroup meetings. During the second of the two sets of meetings, each subgroup will draft findings and recommendations for the consideration and/or approval of the CGS Task Force (D97).

*Subtask 3.5.2 – Integration of Significant Findings.* The CGS Task Force will review and homogenize the findings and recommendations produced by each subgroup into a final technical report. Individual subgroup findings and recommendations will be evaluated by the entire CGS Task Force, and edits will be incorporated into a final report (D98).

*Subtask 3.5.2.1 – Conduct CGS Task Force Wrap-Up Meeting.* This meeting will include representation of the subgroups (Operational/Postoperational Liability). The CGS Task Force will evaluate each subgroup's findings and recommendations and make final findings and recommendations for inclusion in the final report.

*Subtask 3.5.2.2 – Homogenize Final Report.* A small editing subgroup consisting of the EERC, members of the CGS Task Force, and IOGCC staff, if deemed necessary, may come together for one meeting to finalize the complete report. This editing subgroup may meet before or after the CGS Task Force Wrap-Up Meeting, depending upon which is deemed best to accomplish the goals of this task. When in final form, the report will be sent for layout and the outreach materials prepared.

In addition, a new milestone, M42, was created.

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The IOGCC Task Force Meeting was held in Denver, Colorado on June 19–20, 2013. Task Force members who were able to participate are as follows:

- Chris Arnot (representing Mike Fernandez), Alberta Energy
- Steve Melzer, Melzer Consulting
- John Harju, EERC
- Kevin Connors (representing Lynn Helms), North Dakota Industrial Commission
- Rob Finley, Advanced Energy Technology Initiative, Illinois State Geological Survey
- Scott Anderson, Environmental Defense Fund

Others in attendance included the following:

- Kevin Bliss, Bliss Consulting
- Lisa Botnen, EERC
- Fred Eames, Hunton & Williams LLP

The draft report was reviewed and discussed. Various sections were edited by the group, and the recommendations of the subgroup were accepted by the Task Force. The updated report will be sent to the Task Force by the end of June for a final review. The documents and meeting notes are available on OneHub, the document-sharing site used by the subgroup and the Task Force.

This was the final Task Force meeting. However, discussions via e-mail and small group conference calls may continue.