Preliminary Evaluation of Offshore Transport and Storage of Carbon Dioxide

Presented By:

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National CO₂ Pipeline Infrastructure for CCS
Southeast Regional Carbon Sequestration Partnership

- USDOE-NETL
- SECARB/Southern States Energy Board (SSEB)
- Interstate Oil and Gas Compact Commission (IOGCC)
- SSEB CO₂ Pipeline Transportation Task Force (PTTF)
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Pipeline Task Force Composition

15 Authors & 34 Task Force Members

- Interstate Organizations
  - IOGCC
  - SSEB
- Federal Government
  - FERC
  - U.S. DOE & NETL
  - U.S. EPA
  - U.S. DOI

- Industry Representatives
- Environmental Representatives
- Scientists
- Legal Experts
National Pipeline Infrastructure Report

Four Parts

1. Overview
2. Background
3. Analysis
4. Recommendations
Next Step to evaluate OCS

- Advanced Resources International
- Armbrecht Jackson, LLP
- Bureau of Economic Geology, The University of Texas at Austin
- Geological Survey of Alabama
- IOGCC
- Mississippi State Mineral Lease Program
- SECARB
- State Oil and Gas Board of Alabama
- Southern Company
- Southern States Energy Board
- WESTCARB
OCS Task Force Objectives

- Some basic information and recommendations
- A guide to regulators, policy makers, legal professionals
- Evaluation of the potential for CO₂ storage, in sub-seabed geologic structures
- Analysis and consideration of legal and regulatory framework to facilitate offshore CO₂
Preliminary Draft Report

Preliminary Evaluation of Offshore Transport and Storage of Carbon Dioxide
SSEB/OOSCC Offshore Task Force

Principal Authors:

[List of authors]

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The Good

- Sediment thicknesses from 15,000’ to 50,000’ thick
- Depth of storage will assure super-critical
- >1 trillion tons capacity
- Additional assessment to follow
The Best – One landowner

- Single owner
- Sovereign Immunity
- Plume remains on controlled lands
- Benefits to government
The Bad – Offshore EOR

- Very applicable; however,
- Design & existence of infrastructure is lacking
- Economics and politics are a moving target
- More evaluation required
The Bad

- **Marine environment is dynamic**
- **MVA must be risk based (v. prescriptive)**
### The Bad – Regulatory Morass

**At the State level (5 x 12)**

- **O&G wells**
  - AL
  - CA
  - FL
  - GA
  - LA
  - MS
- **UIC**
  - OR
  - SC
- **CO₂ Storage**
  - TX
- **State Sea beds**
  - VA
- **Off-shore O&G**
  - WA
The Bad – Regulatory Morass

- DOI – BOEM
- EPA- SDWA, UIC, CWA, CAA, MRR, NEPA
- DOT - Pipeline and Hazardous Materials Safety Administration (PHMSA)
- USACE & USCG
- NOAA - Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA)
The Bad – Regulatory Morass

Subsea CCS includes jurisdiction >30 Federal Laws, including:

- Outer Continental Shelf Lands Act
- Submerged Lands Act
- National Environmental Policy Act
- Endangered Species Act
- Coastal Zone Management Act
- Marine Mammal Protection Act
- Clean Air Act
- National Historic Preservation Act
The Bad – The Obscure

- *The London Convention – ocean dumping*
- *RCRA & CERCLA*
- American Indian Religious Freedom Act
- Executive Order 12777 - Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as Amended, and the Oil Pollution Act of 1990
- Rivers and Harbors Appropriation Act of 1899
- Archeological and Historical Preservation Act and the National Historic Preservation Act
The Ugly

- Time, and
- Money....
- Great Lakes
The PurGen Project and others...
## Questions, Comments, Concerns…

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