



State CCS Legislation

Virginia Commission on Coal and Energy
November 15, 2010

M. Patrick McShane
Legal and Regulatory Analyst

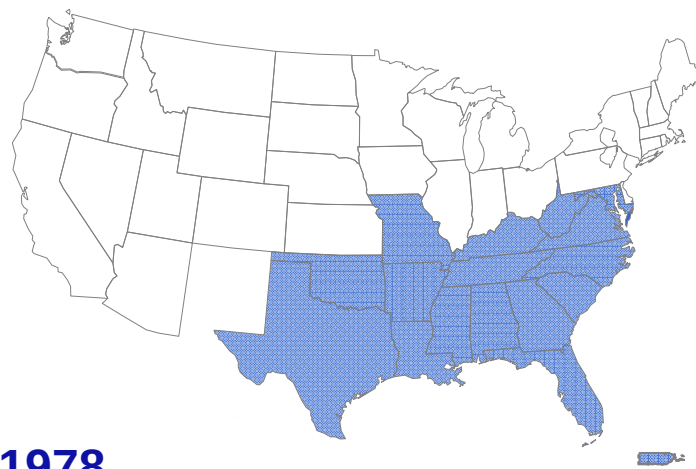


Background



Through innovations in energy and environmental policies, programs and technologies, the Southern States Energy Board enhances economic development and the quality of life in the South.

- SSEB Mission Statement



- **Established 1960, expanded in 1978**
- **16 U.S. States and Two Territories**
- **Each jurisdiction represented by the governor, a legislator from the House and Senate and a governor's alternate**
- **Federal Representative Appointed by U.S. President**



SSEB Activities Related to Reliable Power Supply



- Southeast Regional Carbon Sequestration Partnership
- SECARB-Ed
- State Energy/ Environmental Legislation
- International Cooperation – IEA, WEC, CSLF, GCCSI
- Water for Energy
- Southern States Biobased Alliance / National Biomass Partnership
- CASL- Nuclear Hub
- Nuclear Energy/ Radioactive Materials Transportation Committees
- Clean Coal Technology and Advanced Power Systems
- CO2 Pipeline and Outer Continental Shelf Studies
- Advanced Coal Technology Education and Outreach
- State Energy Planning
- Electric Utility Transmission Planning issues – CSG Committee
- Puerto Rico Green Energy Manufacturing
- 50th Anniversary Annual Meeting



Legislative Digest



- compendium of energy and environmental legislation enacted by the Board's 18 member states and territories during the legislative session
- thoroughly examines legislation passed state by state and features regional issue trends identified as predominant legislative concerns throughout the South



Carbon Capture and Sequestration



- States with CCS related Legislation
 - Colorado, Connecticut, Florida, Idaho, Illinois, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Montana, New Mexico, North Dakota, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, Washington, Wisconsin, West Virginia, Wyoming
- States had CCS Bills Introduced in 2010
 - Florida, Indiana, Kentucky, Kansas, Michigan, Missouri, New Mexico, New York, Oklahoma, Rhode Island, Virginia, Wyoming



CCS State Legislation



- Key issues to be addressed by state CCS legislation
 - Project Authority
 - Pore Space and CO₂ Ownership
 - Liability
 - Financing Sources

Federal Climate Legislation

- American Clean Energy and Security Act of 2009 (Waxman-Markey)
- Clean Energy Jobs and American Power Act (Kerry-Boxer)
- American Power Act (Kerry-Lieberman)
- Carbon Limits and Energy for America's Renewal (CLEAR) Act (Cantwell-Collins)
- Renewable Electricity Promotion Act of 2010 (Bingaman-Brownback-Dorgan-Collins)
- Clean Energy Standard Act of 2010 (Graham)



EPA Regulations



- Massachusetts v. EPA
 - GHG/CO₂ deemed a “pollutant” under the CAA
- Endangerment Finding
 - GHG/CO₂ may endanger public health & welfare
- Cause or Contribute Finding
 - Car emissions contribute to GHG/CO₂ emissions
- Light-Duty Vehicle Rule
 - Established controls for GHG/CO₂ emissions



EPA Regulations



- Johnson Memo
 - “subject to regulation”
- Tailoring Rule
 - 100/250-tpy → 75,000/100,000 tpy
- Transport Rule
 - SIP v FIP in 13 states
- PSD and Title V Permitting Guidance Document for GHGs

EPA Regulatory Backlash

- Murkowski Resolution
- Rockefeller Bill
- States Object to EPA Transport Rule
 - Arizona, Indiana, Kentucky, Ohio, Texas, West Virginia and Wyoming



Federal Input on CCS



- February 3, 2010: President's memorandum establishing an Interagency Task Force on Carbon Capture and Storage
 - develop a comprehensive and coordinated federal strategy to speed the development and deployment of clean coal technologies
 - develop within 180 days a plan to overcome the barriers to the deployment of widespread affordable CCS within ten years
 - goal of bringing five to ten commercial demonstration projects on line by 2016



Federal Input on CCS



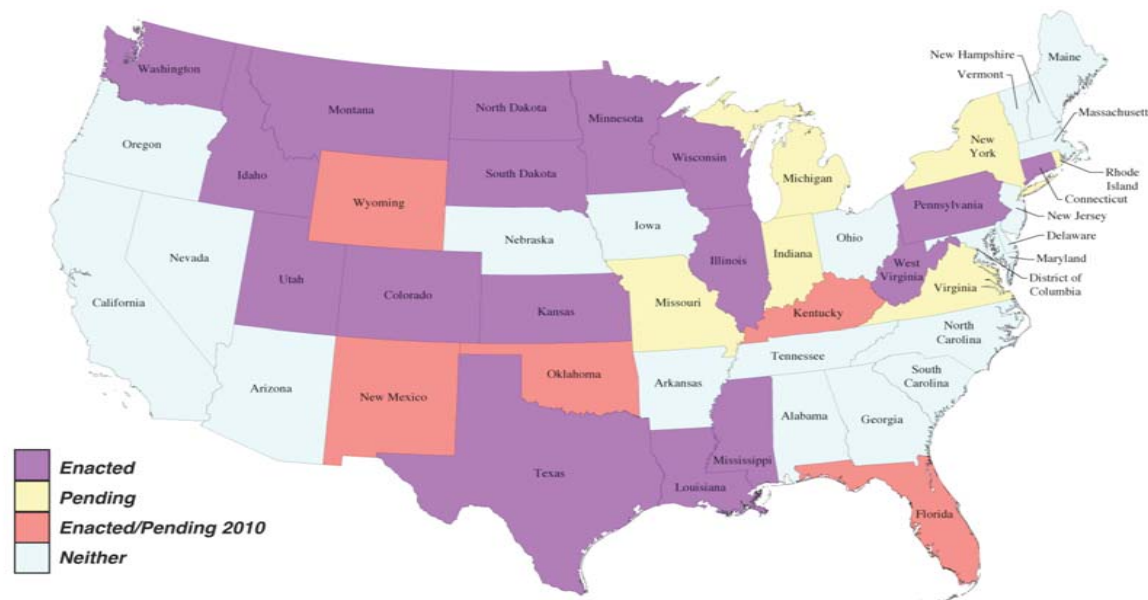
- Interagency Task Force on Carbon Capture and Storage
 - asserted that large-scale carbon capture and storage is viable, but widespread adoption will require a price on carbon
 - recommended creating a standing federal agency roundtable and expert committee to help achieve that goal
 - recommended setting up a joint Energy Department-EPA effort to track regulatory progress for early commercial projects
 - conceded long-term liability could be a barrier to CCS deployment
 - EPA, DOE and the Justice Department will continue efforts to improve long-term liability frameworks and will make further recommendations on that front late next year
- Carbon Capture and Storage Early Deployment Act (Boucher)



State CCS Legislation



SOUTHERN STATES ENERGY BOARD Carbon Capture and Sequestration Legislation In the United States of America



www.sseb.org



2



State CCS Legislation



- State responses to key issues
 - Project Authority
 - State Environmental Authority
 - Pore Space and CO2 Ownership
 - Pore space owned by surface owner
 - CO2 owned by operator
 - Liability
 - Operator liable during operation; state assumes long term liability
 - Financing Sources
 - Tax incentives



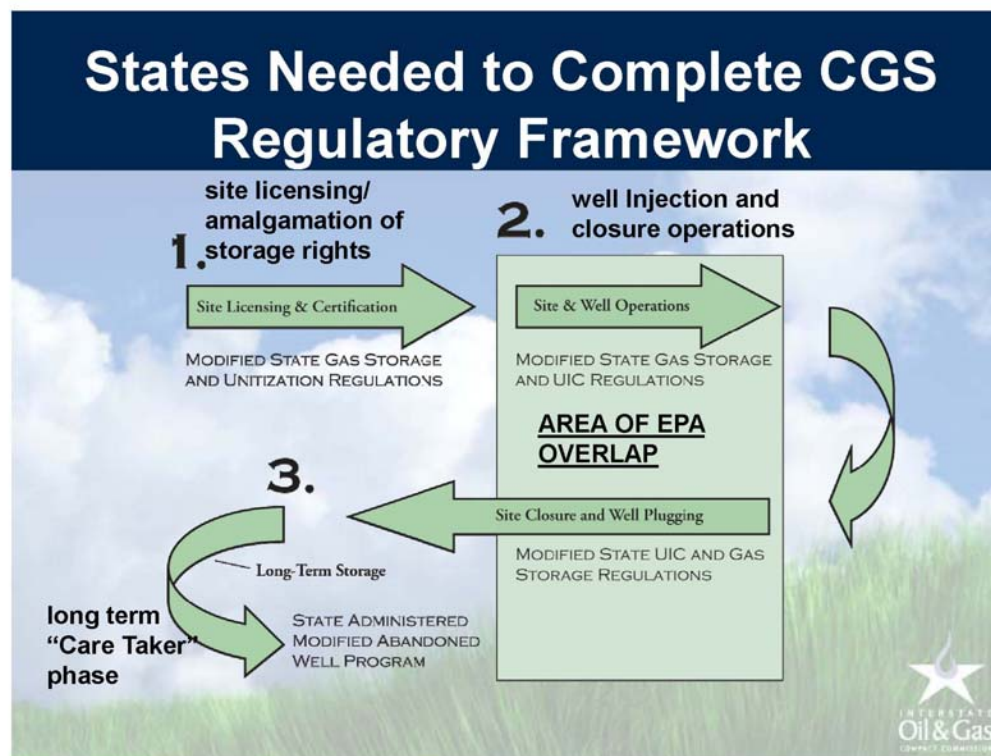
State CCS Legislation



- Some states are pushing full steam ahead, others are awaiting an EPA final rule
- Some states tackle the statute first and regulations second (Wyoming, North Dakota) while others are working to create legislative recommendations (Utah, Illinois, West Virginia)
- Some states have concluded that existing legislative authority is sufficient and are able to move directly to promulgation of final regulations (Kansas)

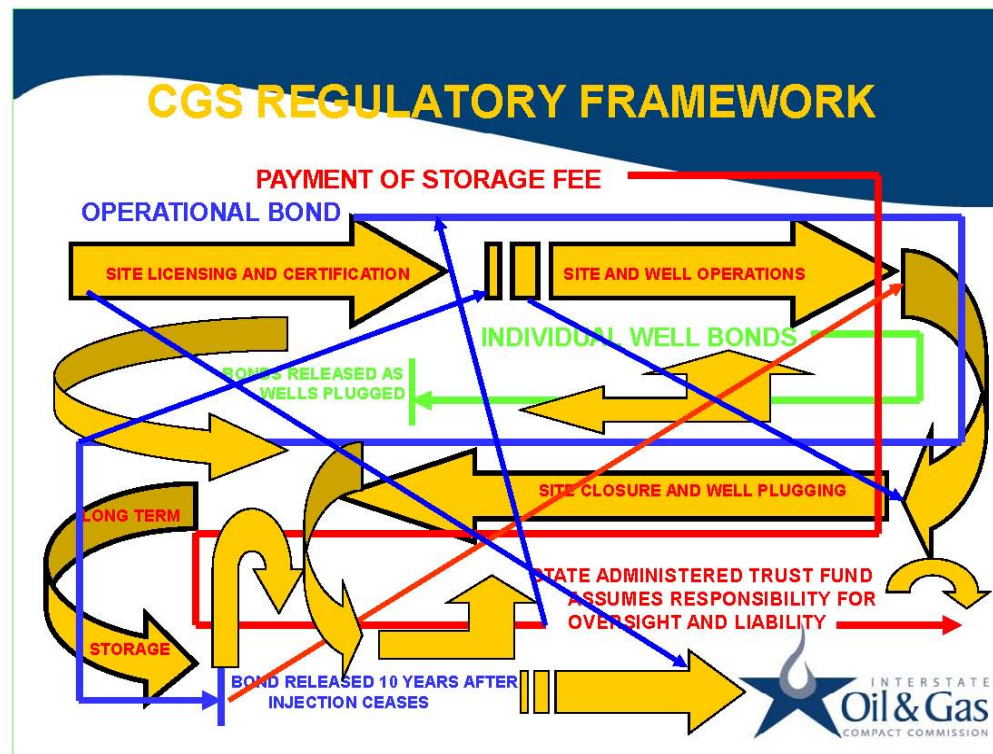


Regulatory Framework





Regulatory Framework





WY CCS Framework



- Wyoming passed legislation in 2008 and 2009 covering the total general legislative framework
- HB 90 (2008): Project Authority
 - Provides for regulation by the Department of Environmental Quality of the injection of carbon dioxide
 - Permit application requirements
 - Notice requirements



MT CCS Framework



- SB 498: An Act Regulating Carbon Sequestration (2009)
 - Pore Space Ownership
 - Pore space owned by surface estate
 - CO2 Ownership
 - CO2 owned by operator during injection



TX CCS Framework



- Three bills were passed in the 2009 legislative session that addressed various aspects of CCS
 - HB 469, SB 1387, SB 1796
- HB 469: Incentives for the capture and sequestration of carbon dioxide
 - Franchise tax credit of 10% of capital costs of project up to \$100 million
 - Capacity of at least 200MW
 - IGCC or pre-combustion technology
 - Capture and sequester at least 70% of CO₂ generated
 - Supply CO₂ for EOR projects



LA CCS Framework



- HB 661: Louisiana Geologic Sequestration of Carbon Dioxide Act (2009)
 - Provides for a coordinated statewide program related to the storage of carbon dioxide
 - Liability
 - Operator is liable during operation
 - State assumes liability 10 years after injection is complete
 - Operator is released from future liability



KS CCS Framework



- HB 2418: Carbon Dioxide Reduction Act (2010)
 - Exempts the State from assuming liability for the underground storage of carbon dioxide or the maintenance of any carbon dioxide injection well or underground storage of carbon dioxide
 - Except as provided by the Kansas tort claims act



State CCS Legislation

M. Patrick McShane
Legal and Regulatory Analyst

Southern States Energy Board
6325 Amherst Court
Norcross, Georgia 30092
770-242-7712
mcshane@sseb.org

www.sseb.org