



State CCS Legislation

Virginia Commission on Coal and Energy
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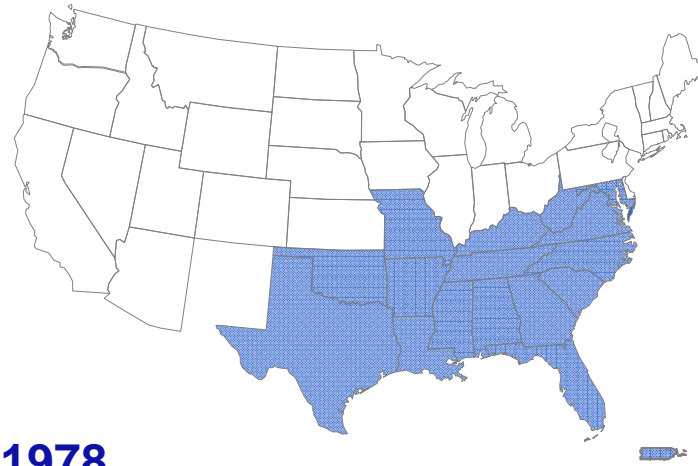


Background



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



- 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



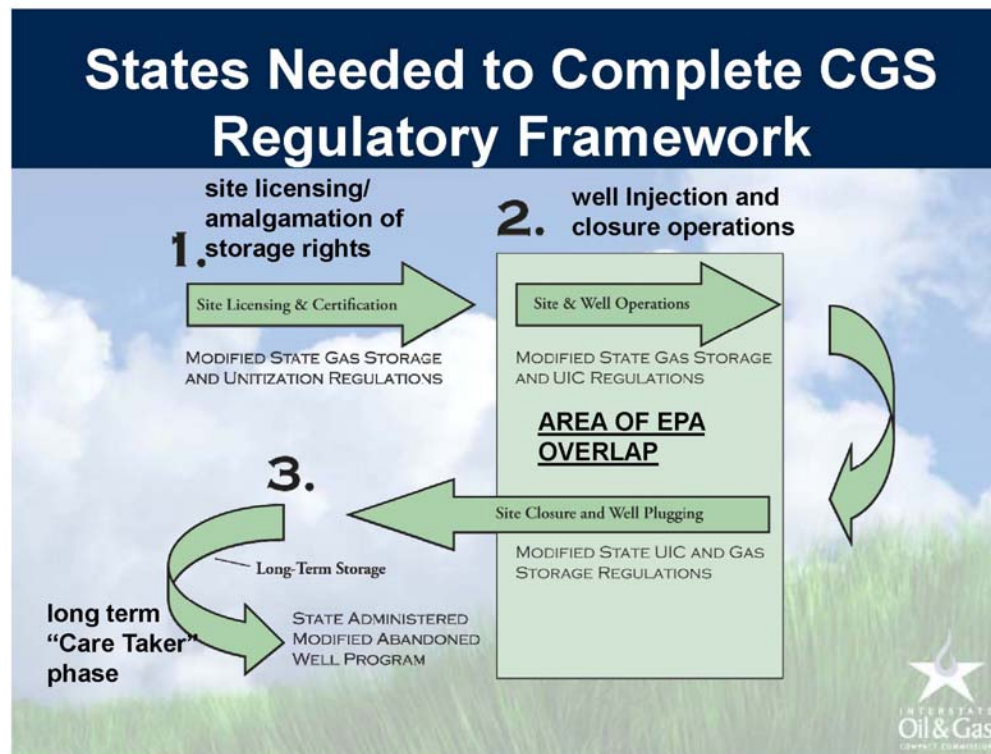
State CCS Legislation



- 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)

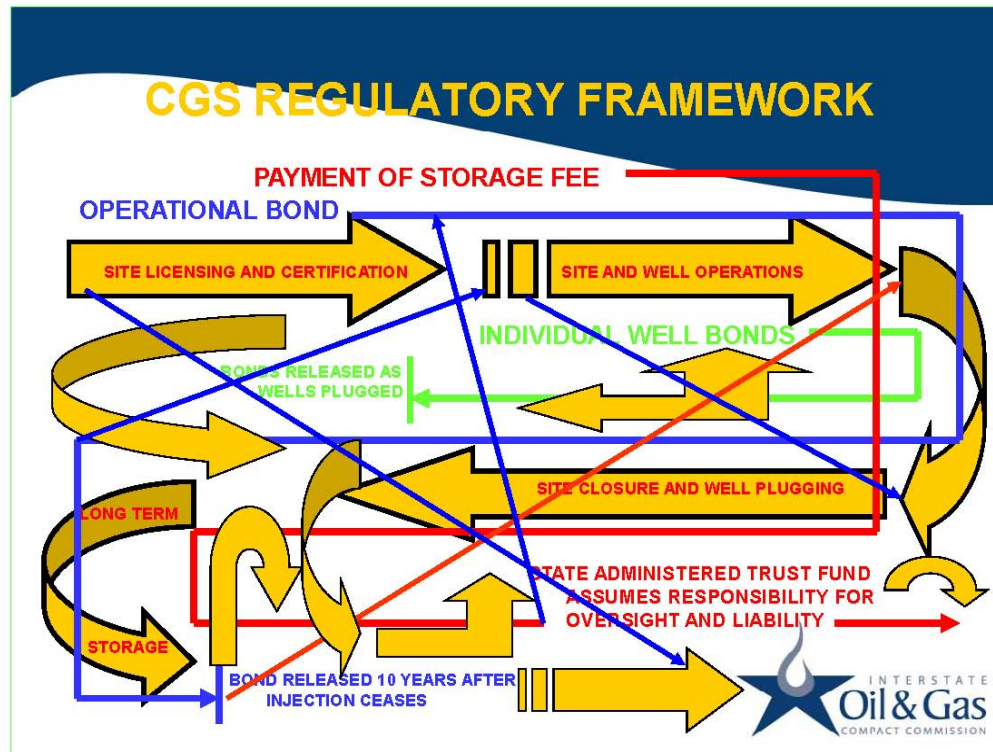


Regulatory Framework





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



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