“Federal Policy Updates”

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Interesting Finding on Oil
In WM but not in Boxer-Kerry

• **SEC. 127. OPEN FUEL STANDARD.**

• **17 (a) FINDINGS.**— “The Congress finds that—(1) the status of oil as a strategic commodity, which derives from its domination of the transportation sector, presents a clear and present danger to the United States”;

• Final version language on page 120. Language found on page 117 of June 19th HR 2454 this language also found on page 115 of the “Amendment in the Nature of a Substitute” 946 page version of HR 2454 not in the May 21, 932 page version but also on page 33 in the Committee report June 5th.

• Note: “Clear and present danger” was used by Ronald Reagan in Policy Memorandum No.3 “Foreign Policy and National Security” to convey his feelings about the threat from Russia and its nuclear weapons. Fall of 1979 while running for President. Effectively set the stage for the “Star Wars” initiative – the rest is history....
What’s Ahead for CCS

• 2010 Sen. Kerry and Lieberman introduce “American Power Act” May 12, 2010 many similar components of WM per CCS-melds energy and climate includes sectorial cap & trade

• 2009 House passed HR 2454 their climate change & energy bill-cap & trade, geologic sequestration and large incentives for early CCS movers, expanded EPA role

• EPA (WH) aggressively pushing parallel process

• Senate may run energy centric bill (ACELA-S.1462) with some limited carbon pricing element

• President states he wants between 5-10 CCS projects up and running by 2016
Current DOE Funded Large Scale CCS

- Hydrogen Energy California (HECA) Kern County, CA IGCC CCPI
- Mississippi Power Kemper County, MS IGCC CCPI
- Basin Electric Antelope Basin, ND CCS CCPI
- NRG Ft. Bend, TX CCS CCPI
- Summit Energy Pennwell TX IGCC CCPI
- AEP Mountaineer WV CCS CCPI
- FutureGen Matoon, IL IGCC
- Archer Daniels Midland Corp Decatur, IL ICCS
- Air Products & Chemicals Inc and Denbury Onshore LLC Port Arthur, TX ICCS
- Leucadia Energy LLC and Denbury Onshore LLC Lake Charles, LA ICCS
Congress

- Murkowski resolution to strip EPA CAA GHG authority defeated 47-53
- Kerry-Lieberman-removes EPA/CAA
- Lugar leaves EPA/CAA intact
- Collin-Cantwell “Cap and Tax”

- Responding to Deepwater Horizon
- Federal deficit looming over current actions
- Mid-term elections
- Energy climate change price on carbon
- Would have to conference with House (WM)
EPA

- **UIC Codes/Geologic Sequestration Well Protocols** - EPA proposes adding Class VI
- Expect finalized and out September 2010
- Geologic sequestration provisional RCRA exemption

- **Mandatory GHG Reporting** - EPA has proposed a rule that requires mandatory reporting of greenhouse gas (GHG) emissions from large sources (>25,000 tns) in the United States.
- Expect finalized March 2011 see tailoring rule.
- CO₂-EOR Sequestration opt in
- [http://www.epa.gov/climatechange/emissions/ghgrulemaking.html](http://www.epa.gov/climatechange/emissions/ghgrulemaking.html)

- **Endangerment Finding** - issued December 7 and published Dec 15, 2009, under Section 202(a)(1) of the Clean Air Act.
- The Administrator found that the current and projected atmospheric concentrations of the six, key, well-mixed GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—threaten the public health and welfare of current and future generations.

- **Tailoring Rule** - On April 1, 2010, EPA finalized the light duty vehicle rule controlling GHG emissions this trigger s CAA permitting requirements for stationary sources on January 2, 2011. “tailors” the requirements of these CAA permitting programs to limit which facilities will be required to obtain PSD and title V permits.
- Facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources covered. Is the nation’s largest GHG emitters—power plants, refineries, and cement production facilities.
- GHG increases of 75,000 tpy or more of total GHG, on a CO₂e basis, would need to determine the Best Available Control Technology (BACT)

- PSD permitting requirements will cover for the first time new construction projects that emit GHG emissions of at least 100,000 tpy even if they do not exceed the permitting thresholds for any other pollutant.
- Facilities that emit at least 100,000 tpy CO₂e will be subject to title V permitting requirements.
- [http://www.epa.gov/nsr/actions.html](http://www.epa.gov/nsr/actions.html)
Issues for CCS

- Stewardship and liability
- Land aggregation
- Public acceptance
- Funding
- Scale

- Regulatory-Federal and State
- Infrastructure
- Water use and access
- Environmental
- Human resources
- Geographic
- Geologic
- Energy consumption
- CO₂ quality
Stewardship-Long Term Liability

• AEP-Peabody Model
• Duke-Southern-NRDC-EDF-Zurich Model
• Senate Bingaman-Murkowski (S.1013)
• Senate Casey-Enzi (S.1502)
President’s Interagency Carbon Capture and Storage Task Force
http://www.whitehouse.gov/administration/eop/ceq/initiatives/ccs

• Announced: February 3. 2010
• To propose a plan to overcome barriers for widespread, cost-effective deployment of CCS within 10 years, with a goal for five to 10 commercial demonstration projects online by 2016
• First public meeting May 6th, 2010
• Many sub-task force meetings underway
• Findings to President due: August 2010
• Co-Chaired by DOE and EPA
• CEQ, DOI, DOJ, EPA, DOE, USGS, FERC.....
States with Geologic Sequestration Legislation and Regulation—Current or Pending

- Texas
- Wyoming
- Kansas
- New Mexico
- Oklahoma
- Montana
- Pennsylvania
- Indiana
- Kentucky
- New York
- Washington
- Louisiana
- Michigan
- Mississippi
- North Dakota
- West Virginia
- Illinois
- Ohio
- Alabama
- South Carolina
480,000 Miles of Natural Gas and HL Pipelines
~400 Lower 48 Gas Storage Facilities

Source: Energy Information Administration (EIA), EIA GasTran Geographic Information System Underground Storage Data Base.
Interesting Twist on CO$_2$

• Section 722 pg 324-330 Kerry Lieberman “Prohibitive Excess Emissions”
  
  “(1) IN GENERAL.—Except as provided in sub7 section (c), effective beginning January 1, 2013, each covered entity shall be prohibited from emitting greenhouse gases, and having attributable greenhouse gas emissions, in combination, in excess of the allowable emission level of the covered entity.

• “(12) EXPORT EXEMPTION.—This section shall not apply to any petroleum-based or coal-based liquid fuel, natural gas liquid, fossil fuel-based carbon dioxide, nitrous oxide, or fluorinated gas that is exported for sale or use.
What Does this Mean?

- 5-10 commercial scale demonstration projects online by 2016
- Compliance and monetary opportunity big drivers
- Process, control and monitoring services will be in great demand
- Traditional oil and gas producing states can value pore space, enhanced hydrocarbon production and create safe havens for their industries as a resource management issue not an environmental penalty
- Carbon legislation could push CO₂ towards mature oil fields in states with favorable regulations from inside and outside those states
- CO₂ Infrastructure requirements being explored and developed will be substantial

- Long term stewardship/indemnification issues being addressed for sequestration
- Rules and regulations are being crafted to support CO₂-EOR-Sequestration
- Land use issues are looming on the horizon but again the issue is being worked on commercially and legally-natgas storage developers already know the process

- First movers will be motivated to push changes that favor their position
No CO₂ Waste - Citizens Against CO₂ Sequestration
http://sites.google.com/site/noco2wasteindarke/
Photo by Jason Aslinger
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