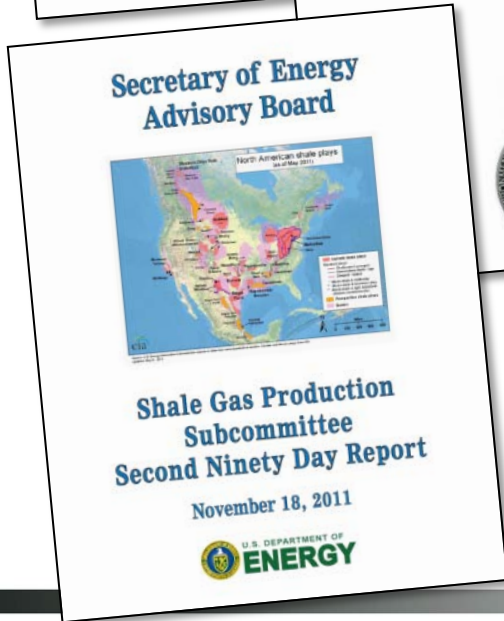
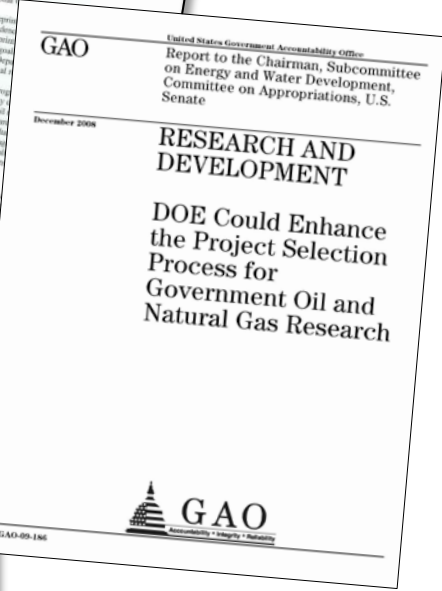
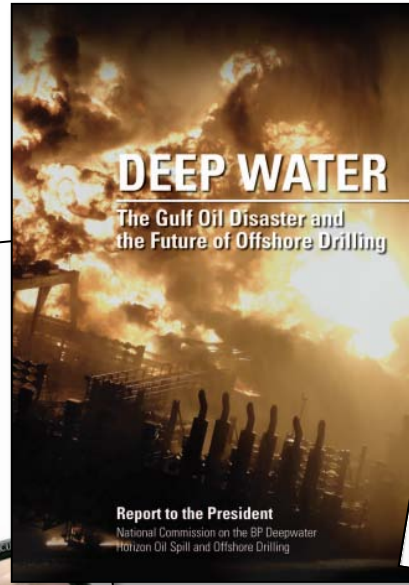
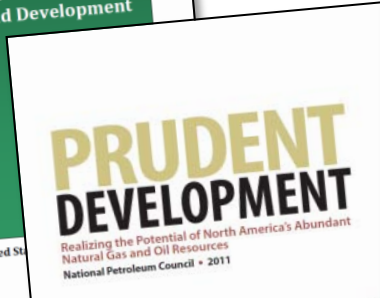


“Must Have” Resources



“Headliners”

- **Induced seismicity/wastewater injection**
- **[Potential] impacts to GW**
- **Water treatment/management**
- **Water sourcing**
- **Disclosure**
- **Air quality**
- **GHG footprint**
- **BMPs**
- **Surface disturbance**
- **Baselines**
- **Information dissemination**

Opportunities

- **Funding Opportunity Announcement**
 - (now open)
- **Request for Proposal**
 - (RE: FY12 Annual Plan)
- **CRADA**

Opportunities (Cont'd)

- **Unconventional Gas and Oil Technologies FOA**
 - [DE-FOA0000724](#)
 - **Closing date of June 28, 2012**
 - **Reservoir Characterization and Development Optimization for Liquid-Rich Shale Reservoirs**
 - **Improved Horizontal Drilling and Hydraulic Fracturing Effectiveness for Unconventional (Liquid-Rich or Gas) Shale Plays**
 - **“Next-Generation” CO₂-EOR**

Attributes

- **Strategic partnerships**
- **Field based verification**
- **Solve a real problem (RE: context)**
- **“Federal” overlay**
- **Clear path (research to meet goals)**

“Must Have” Resources

- NPC study <http://www.npc.org/>
- SEAB final report http://www.shalegas.energy.gov/resources/111811_final_report.pdf
- Draft 2012 Annual Plan (Section 999)
<http://www.netl.doe.gov/technologies/oil-gas/publications/EPact/2012-draft-annual-plan.pdf>
- GAO report <http://www.gao.gov/assets/290/284648.pdf>
- Executive Order (interagency coop on shale gas)
<http://www.whitehouse.gov/the-press-office/2012/04/13/executive-order-supporting-safe-and-responsible-development-unconvention>
- Three agency cooperative research
<http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=289759>
- Deepwater Horizon Commission final report
<http://www.oilspillcommission.gov/final-report>