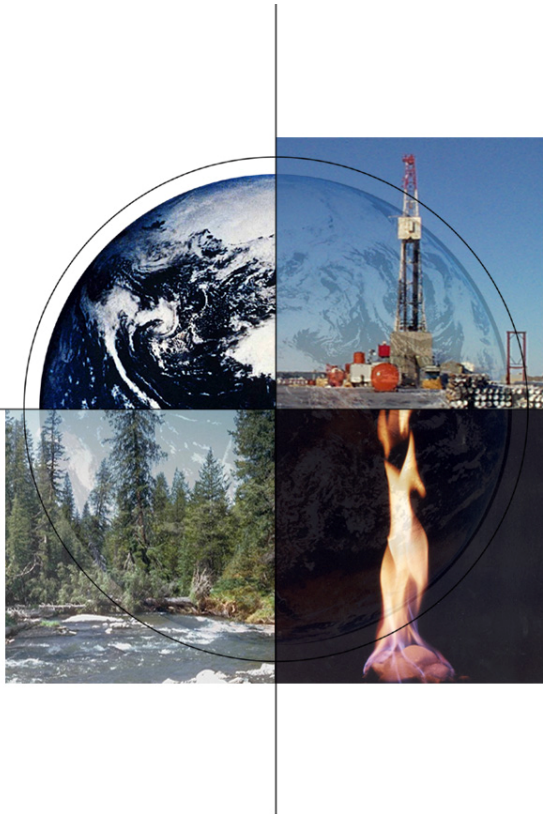


US Dept of Energy Oil & Gas Research



*Unconventional Resources
Technology Advisory Committee
Recommendations - 2007 Annual
Plan*

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& Oil*

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National Energy Technology Laboratory

Office of Fossil Energy



Federal Advisory Committee Recommendations for 2007 Draft Plan

- **All recommendations were accepted**
 - Incorporated into the final 2007 Annual Plan
 - Addressed in an otherwise appropriate manner
- **This review is designed to briefly re-state summarized recommendations and DOE's response. Detailed discussions should be deferred until later in the day.**



Unconventional Resources Technology Advisory Committee Sub-Groups

- **Technology Transfer**
- **Regulations**
- **Water and Environmental Management**
- **Production Research Themes**
- **Exploration Research Themes**
- **Metrics and Funding**
- **Inter-Agency and Other Stakeholder Coordination**



URTAC Recommendations for 2007 Plan

- **Technology Transfer**

- Better formalize technology transfer component of plan (An entire technology transfer section has been added in the 2008 Plan)
- Establish and maintain a Knowledge Management Database (Centralized activity to be funded by DOE; evaluation of alternatives to be carried out during 2008)
- Tech transfer funding should effectively leverage all aspects of program (Centralized activity to be funded by DOE)
- Given limited funds, Small Producer component should increase focus on technology transfer (All project results will be widely disseminated. DOE has funded PTTC and SWC.)



URTAC Recommendations for 2007 Plan

- **Regulations**

- Regulatory barriers should themselves be subject for research as well as considerations in process (NETL's Center for Environmental Impacts will focus on this area)
- Organize key stakeholders for brainstorming to identify regulatory barriers/issues (Will be conducted by RPSEA's Environmental Advisory Group)
- Catalogue regulatory barriers/issues relating to unconventional gas development (NETL's Center for Environmental Impacts will review existing studies.)
- Identify and recommend regulatory "best practices" to serve as flexible models for development of regulations (Will be included as part of NETL's Center for Environmental Impacts focus)
- Suggest additional research to address regulatory barriers, including research related to unconventional petroleum resources (Addressed in Complementary Plan)



URTAC Recommendations for 2007 Plan

- **Water and Environmental Mgmt.**

- Include minimization of environmental impacts and sustainability of biodiversity as considerations in project selection criteria (Included in the RPSEA RFP evaluation criteria)
- Focus on technologies to minimize fresh water usage and encourage recycle of fluids (Included in 2007 Solicitations and addressed under traditional DOE R&D plan)
- Catalogue existing technology solutions for treating produced waters (Being addressed by NETL's Center for Environmental Impacts)
- Develop new or improved technologies to treat and reuse produced water (Included in 2007 Solicitations and under traditional DOE R&D plan)
- Develop fracturing and drilling fluids capable of tolerating treated produced water/recycled fracturing fluids as a base fluid (Included in 2007 Solicitations)



URTAC Recommendations for 2007 Plan

- **Production Research Themes**

- Focus on extending life of existing wellbores (Included in 2007 Solicitations)
- Focus on advanced cementing practices and technology (Covered under “Extending life of commercial wells” in 2007 Solicitations)
- Focus on integration of CO₂ sequestration/EOR (Currently addressed under other DOE R&D programs and in traditional oil and gas program)
- Develop plans for future activities regarding unconventional oil (To be addressed in future annual plans and in traditional oil and gas program)
- Emphasize solicitations for comprehensive characterization of the geological, geophysical and geochemical framework of unconventional resource plays (Included in 2007 Solicitations)



URTAC Recommendations for 2007 Plan

- **Exploration Research Themes**

- Focus on technology to more effectively explore in emerging and or frontier basins, with emphasis on characterization of shale gas reservoir systems (Included in 2007 Solicitation)
- Focus on improving the strategic planning process for exploration R&D (Will be addressed in future planning processes)
- Focus on minimizing the exploration footprint (All projects will be evaluated based on minimizing environmental footprint)



URTAC Recommendations for 2007 Plan

- **Metrics and Funding**

- Establish metrics to measure the success of the program; establish a committee of industry and other stakeholders to implement (NETL and RPSEA will work together; committee will be considered in future)
- Extend program to all oil and gas producing regions of the U.S. (Priorities given to specific basins due to limits on available funds, however all regions are given consideration in 2007 Plan. Will also be addressed in future plans)
- Full \$50 MM per year funding of program must continue (Addressed in 2007 Plan)
- Increase future funding (This is an inherent Federal role and will be considered by DOE-FE HQ. Existing program can be expanded to incorporate additional funding)



URTAC Recommendations for 2007 Plan

- **Inter-Agency and Other Stakeholder Coordination**
 - Coordinate with Federal and State resource entities such as U.S. Fish and Wildlife Service, BLM, U.S. Forest Service, State environmental agencies, and State resource agencies **(This is an inherent Federal role and will be pursued by DOE-FE HQ)**

