

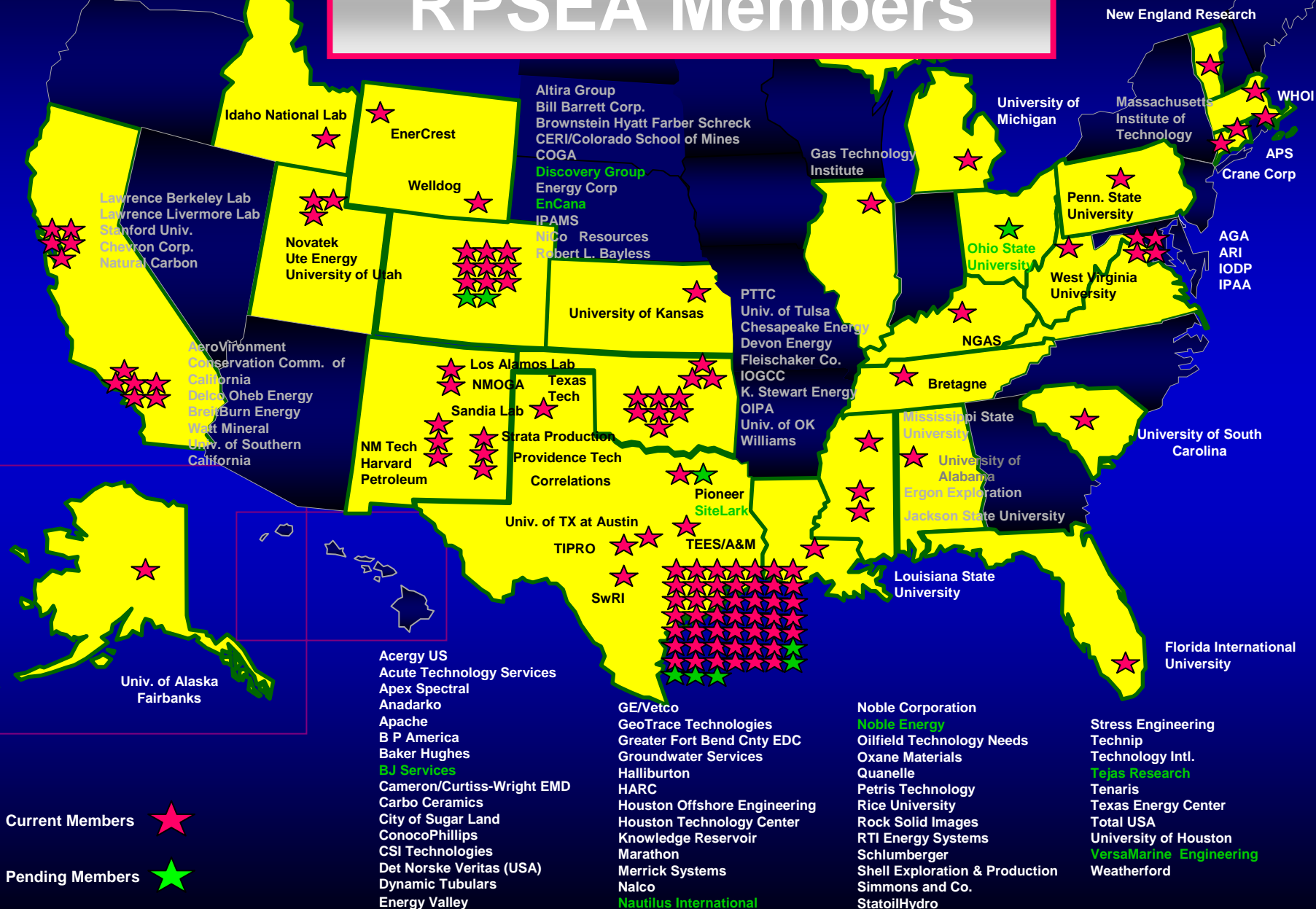


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**Research
Partnership to
Secure Energy
for America**

Unconventional Onshore & Small Producer FACA Meeting

C. Michael Ming
Robert W. Siegfried
January 29, 2008
Houston, TX

RPSEA Members





- Acergy US
- Acute Technology Services
- Apex Spectral
- Anadarko
- Apache
- B P America
- Baker Hughes
- BJ Services
- Cameron/Curtiss-Wright EMD
- Carbo Ceramics
- City of Sugar Land
- ConocoPhillips
- CSI Technologies
- Det Norske Veritas (USA)
- Dynamic Tubulars
- Energy Valley

- GE/Vetco
- GeoTrace Technologies
- Greater Fort Bend Cnty EDC
- Groundwater Services
- Halliburton
- HARC
- Houston Offshore Engineering
- Houston Technology Center
- Knowledge Reservoir
- Marathon
- Merrick Systems
- Nalco
- Nautilus International

- Noble Corporation
- Noble Energy
- Oilfield Technology Needs
- Oxane Materials
- Quanelle
- Petris Technology
- Rice University
- Rock Solid Images
- RTI Energy Systems
- Schlumberger
- Shell Exploration & Production
- Simmons and Co.
- StatoilHydro

- Stress Engineering
- Technip
- Technology Intl.
- Tejas Research
- Tenaris
- Texas Energy Center
- Total USA
- University of Houston
- VersaMarine Engineering
- Weatherford

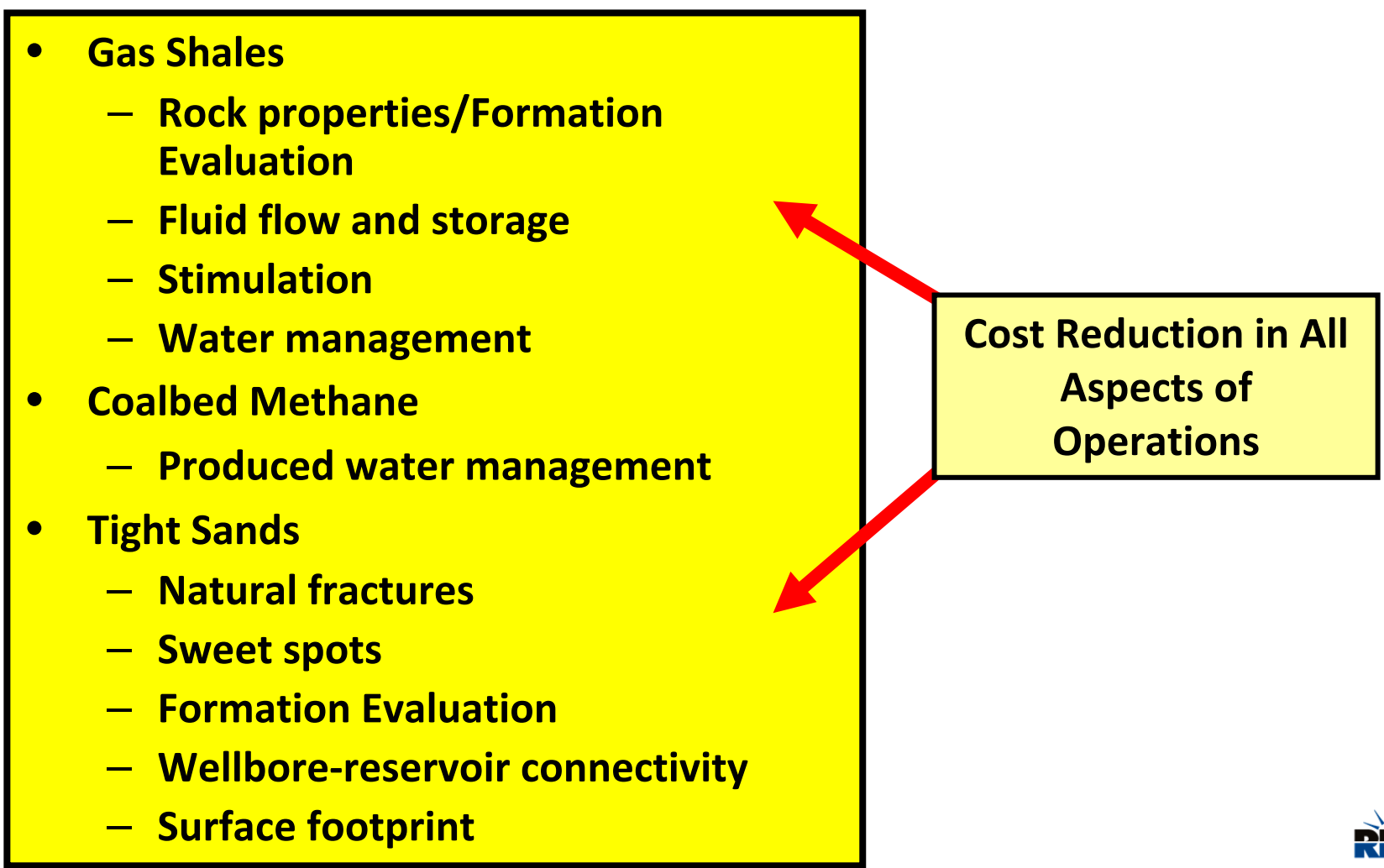
Current Members 

Pending Members 



Unconventional Onshore Themes

- **Gas Shales**
 - Rock properties/Formation Evaluation
 - Fluid flow and storage
 - Stimulation
 - Water management
- **Coalbed Methane**
 - Produced water management
- **Tight Sands**
 - Natural fractures
 - Sweet spots
 - Formation Evaluation
 - Wellbore-reservoir connectivity
 - Surface footprint



**Cost Reduction in All
Aspects of
Operations**



2007 Onshore Solicitation Timeline

- **Solicitations issued October 17, 2007**
- **Proposals due December 3, 2007**
- **Proposal review process began in early December**
 - OCI disclosure
 - Distribution of proposals
 - Target date for reviews January 8, 2008
- **Small Producer Regional Advisory Committee (RAG) selection meeting January 11, 2008.**
- **Unconventional Onshore Program Advisory Committee (PAC) selection meeting January 23, 2008.**

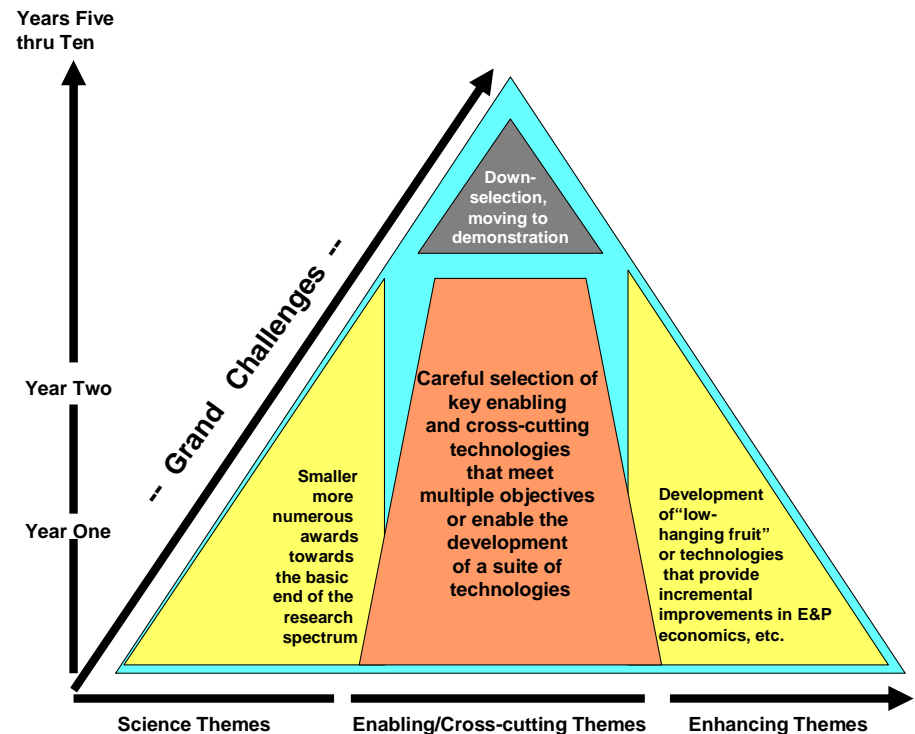


Project Review and Selection Support

- **Small Producer Program Element**
 - 8 RAG members
 - Each of 13 proposals reviewed by 4 members
 - 52 total reviews
- **Unconventional Onshore Program Element**
 - 16 PAC members
 - 64 TAC volunteers
 - 23 TAC members reviewed 47 proposals
 - 110 total reviews

Onshore Review and Selection

- **Technical Reviews**
 - Grouped proposals by topic
 - Each group of 4 to 6 proposals given to a generally common set of reviewers
- **Selection Meetings (PAC and RAG)**
 - Set overall program priorities
 - Selected proposals for funding
 - Technical Reviews
 - Program priorities
 - Budget constraints
 - Potential contribution to an integrated, balanced program



Onshore Program

	Unconventional		Small Producer	
	<i>Submitted</i>	<i>Selected*</i>	<i>Submitted</i>	<i>Selected*</i>
Total Cost (\$MM)	\$102.0	\$34.3	\$12.6	\$6.0
RPSEA Share (\$MM)	\$49.5	\$19.6	\$6.3	\$3.2
Number of Proposals	47	19	13	7
University	25	13	7	6
Research Institution	2	1		
National Lab	3	2	2	1
Industry	13	1	3	
State Organization	4	2	1	

*Selections subject to approval and negotiation

Onshore Program Distribution

Resource	Unconventional		Small Producer	
	<i>Submitted</i>	<i>Selected</i>	<i>Submitted</i>	<i>Selected</i>
Existing	30	11	13	7
Emerging	13	6	*	*
Frontier	4	2	*	*
CBM	17	5	**	**
Shale	28	10	**	**
Tight Gas	25	12	**	**
Time Scale				
Enhancing (Near term)	19	8	6	3
Enabling (Mid term)	14	4	4	3
Science (Longer term)	14	7	3	1

* Advancing Technology for Mature Fields

** Resource focus areas for unconventional program

Onshore Program Distribution

Technology Areas	Unconventional		Small Producer	
	<i>Submitted</i>	<i>Selected</i>	<i>Submitted</i>	<i>Selected</i>
Produced Water Treatment	6	1	1	1
PW Use and Control	4			
Fracturing	6	5	1	
Drilling & Completion	6	1	4	3
Resource Assessment	6	3		
Basin Analysis	4	2		
Reservoir Engineering	6	4	1	1
Reservoir Description	6	2	3	
Miscellaneous	3	1	3	2

Questions?

