

Regulatory Challenges to Scientific Drilling in the Offshore Continental Shelf

“The Federal Government administers the submerged lands, subsoil, and seabed, lying between the seaward extent of the States' jurisdiction and the seaward extent of Federal jurisdiction”.
<https://www.boem.gov/Outer-Continental-Shelf/>

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Charge: ‘specific agency actions that should be altered or eliminated’.

To inform the work of the Task Force, DOE published in the Federal Register a request for information seeking input from the public and those significantly affected by DOE regulations. DOE sought the public’s views on specific agency actions that should be altered or eliminated because knowledge about the full effects of rules is widely dispersed in society, and members of the public are likely to have useful information and perspectives on the benefits and burdens of existing requirements and how regulatory obligations may be reformed to achieve regulatory objectives while minimizing regulatory burdens.

DOE understands that its many advisory committees, formed pursuant to the *Federal Advisory Committee Act* (FACA) can also provide valuable input to guide DOE’s regulatory reform efforts. DOE’s FACA committees are charged with providing advice and recommendations on a wide variety of issues that span the full breadth of work undertaken in support of DOE’s mission: to ensure America’s security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions.

Excerpt from Secretary document

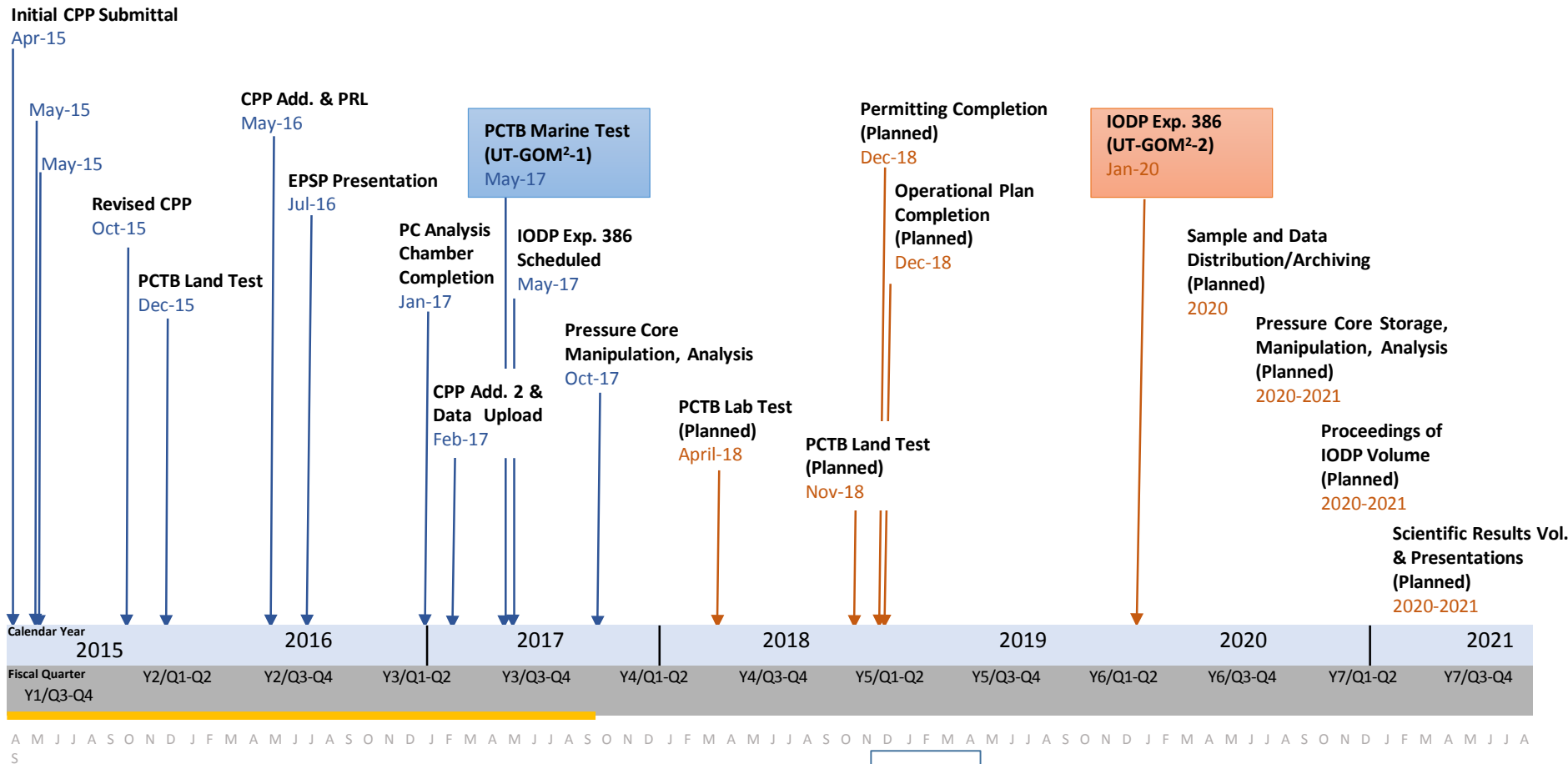


Preview

- No obvious DOE regulatory limitation that is a critical path item.
- There are regulations for drilling on the offshore continental shelf that might be considered for modification that would reduce the burden on methane hydrate projects. Most will be under the Department of Interior (e.g. BSEE and BOEM) but there is interaction with DOE and USCG.



GOM² Project Timeline



← 2 yrs →



Methane Hydrate Marine Test Permitting Review

Required Permits & Approvals

1. Qualified Operator
2. G&G Permit
3. Right of Use and Easement (RUE)
4. Exploration Plan (EP) / Coastal Zone Management (CZM)
5. Application for Permit to Drill (APD)
6. Application to Modify (APM)
7. NPDES Discharge Permit
8. NEPA Categorical Exclusion
9. USCG Letter of Determination (LOD)

We need identify/confirm vessel to be used before submitting G&G permit



Methane Hydrate Marine Test Permitting Review

Regulatory Agencies

1. Qualified Operator - **BOEM**
2. RUE - **BOEM**
3. Exploration Plan / CZM – **BOEM** / State Agencies
4. G&G Permit - **BOEM**
5. APD - **BSEE**
6. APM - **BSEE**
7. NPDES Discharge Permit - **EPA**
8. NEPA Categorical Exclusion - **DOE**
9. USCG Letter of Determination - **USCG**



Permit Submissions- Sequence

After qualifying as an Operator....

Sequence of submission:

1. Submit G&G permit
2. Submit RUE Request & Exploration Plan together
3. Submit APD(s) after RUE & EP approved
4. Submit NPDES NOI after RUE & EP approved
5. Submit NEPA questionnaire any time
6. Submit USCG LOD for project team any time
7. Submit APMs during execution as required in CFRs



Permit Submissions- Lead Time for Review & Approval

1. Qualified Operator – 1 to 2 months
2. G&G permit – 6 months
3. RUE Request – 12 weeks
4. Exploration Plan – 12 weeks
5. APD – 8 weeks
6. NPDES NOI – 3 weeks
7. NEPA questionnaire – 3 weeks
8. USCG LOD – 10 business days

NOTE: Longer submission lead times are recommended for methane hydrate projects due to the uniqueness of projects.

Recommend beginning permitting submission process no later than 1 year prior to project execution start-date.



Regulatory Overview

Sponsor Mtg

Does the JR meet the regulatory requirements for vessel equipment for conducting operations in the OCS of the Gulf of Mexico?

- Regulatory framework for conducting the 2020 Coring Expedition: Title 30-Mineral Resources (BOEM/BSEE)
 - Within Title 30, there are 12 vessel equipment-specific regs; all in 30 CFR 250 (BSEE)
 - Most significant: Requirement to hold a current Certificate of Compliance & Certificate of Classification
- For understanding the requirements for Certificate of Compliance: Title 46-Shipping & Title 33-Navigation & Navigable Waters (USCG)



Methane Hydrate Marine Test Permitting Review

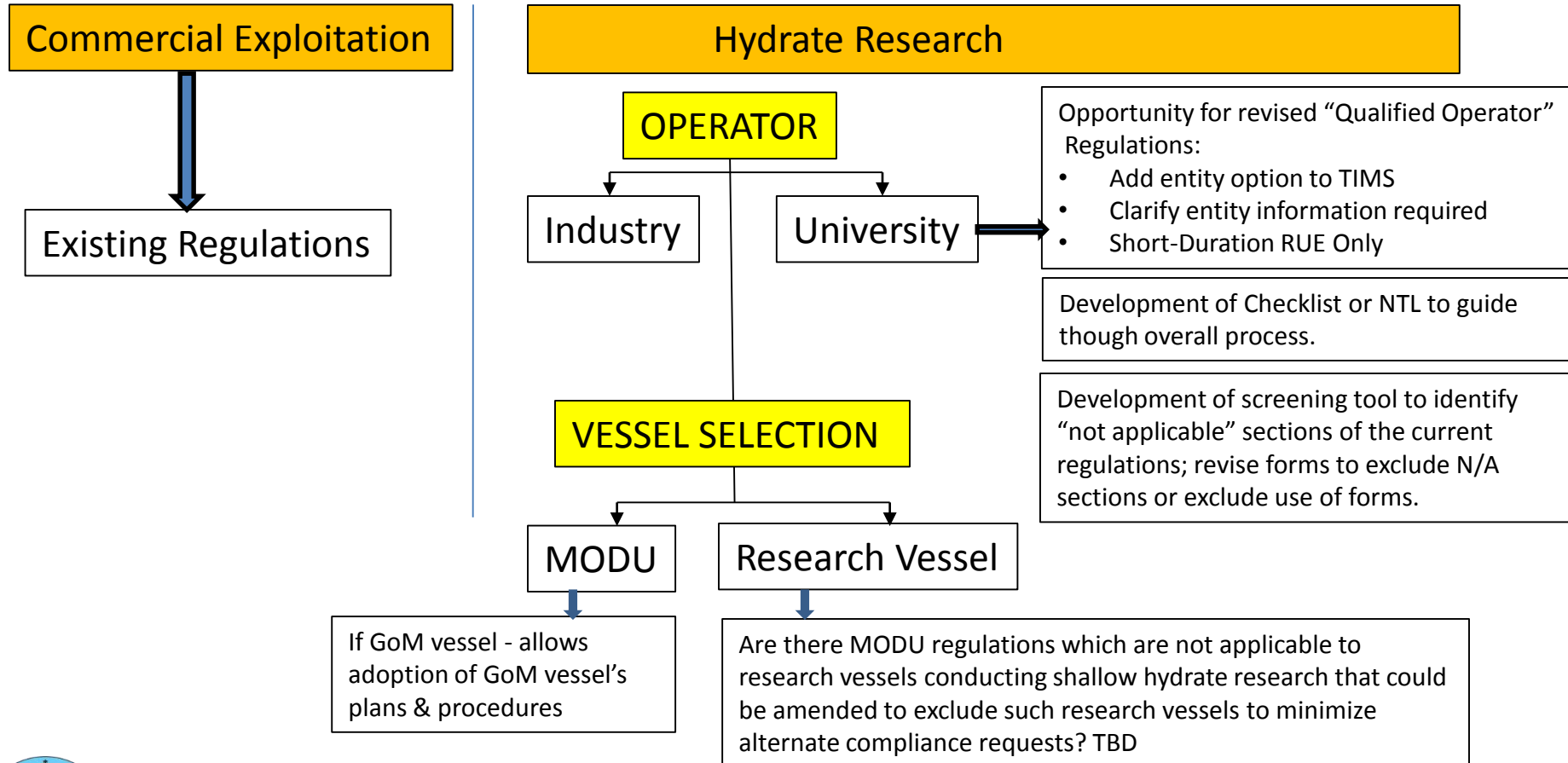
Challenges

1. Regulatory agencies compartmentalized.
2. Gaps in current regulations for research activities.
3. Electronic systems not set-up for entities or projects such as the coring expedition
4. Need to allow extra time to resolve anything unique to the 2020 expedition
5. In general, cannot expect to get guidance up-front. More of a submit, then respond situation.
6. The vessel will have its own set of required permits & regulatory requirements.



Things that would help

1. Streamlined Operator Qualification process
2. Guidelines for research projects
3. Consolidated requests for environmental assessment input
4. Codify common methane hydrate 'alternative compliance' requests
5. Relaxation of some of the requirements in regulatory-required plans & programs



Regulatory Reform

Reduction of regulatory burden on methane-hydrate research in the GoM

- Purpose and focus of Title 30 - Mineral Resources regulations
- Methane-hydrate research differs from commercial hydrocarbon exploitation
 1. Temporary use of location
 2. May drill / core a number of shallow wells within close proximity (<500 ft surface separation)
 3. Drilled riserless without a BOP system installed
 4. Does not target or penetrate highly-productive oil & gas intervals
 5. Highest hydrocarbon discharge potential most likely from ruptured vessel tanks, not the formations penetrated
 6. No facilities or seabed equipment to decommission
 7. Research may be limited to a single event or many years between coring projects
 8. Research may be led by Universities (in lieu of corporate industry entities)
 9. International research vessels may be used (in lieu of oil-industry vessels)



Regulatory Reform

Amendment Opportunities – Methane Hydrate Research Projects

1. Qualified Operator
2. Development of guidance note (NTL)
3. “Alternate compliance’ requests
4. Environmental assessment inputs
5. Regulatory-required plans & programs
6. Oil spill financial responsibility (OSFR)
7. Exploration Plan
8. Decommissioning bonding requirements
9. USCG LOD requirements
10. Fisherman’s Contingency Fund



Regulatory Reform

Amendment Opportunities - Methane Hydrate Research Projects

1. Qualified Operator
 - Add 'Universities' as one of the accepted entities or perhaps broader category of "Researchers"
 - Develop University/Researcher-specific set of required qualification documents
 - Update TIMS to include Universities/Researchers as an entity
 - Consider a Qualified Operator category limited to 'RUE holder' with risk-appropriate requirements for qualification
2. Development of guidance note (NTL) for entities conducting methane hydrate research guiding them through the entire regulatory process, indicating aspects of regulations which are not applicable to methane hydrate research when conducted within specified criteria.
3. Codify likely 'alternate compliance' requests
 - Placement-location of methane hydrate permanent abandonment plug
 - Use of weighted mud in lieu of surface plug
 - Test-requirements for P&A plugs
 - Frequency of inclination surveys
 - Update 'Permanent Well Plugging Requirements' table in 30 CFR 250.1715 to include requirements for setting surface plugs in open hole



Regulatory Reform

Amendment Opportunities – Methane Hydrate Research Projects

4. Reduction/consolidation of environmental assessment inputs
5. Regulatory-required plans & programs (i.e. SEMS Program, Subpart O, Emergency Evacuation Plan, Oil Spill Response Plan, Oil Spill Financial Responsibility (OSFR), H2S Contingency Plan, Environmental Impact Analysis of GoM area of interest, and Welding Plan)
6. Oil spill financial responsibility (OSFR)
7. Exploration Plan
 - Alter Deepwater Well Control Statement to exclude requirement for relief well
 - Add requirement for Wellbore Temperature & Hydrate Stability Field curve
 - Oil Spill Response Planning & Discussion – vessel information or N/A?
 - Form BOEM-0137 OCS Plan – N/A?
8. Decommissioning activities & associated bonding requirements
9. LOD requirements for foreign-flagged research vessel
10. Contribution to Fisherman's Contingency Fund – conflict in regulations whether required for G&G research project



End Slides

