<table>
<thead>
<tr>
<th>TIME</th>
<th>TOPIC</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>8:15 a.m. – 9:15 a.m.</td>
<td>Registration and Continental Breakfast</td>
<td>Picasso 2</td>
</tr>
<tr>
<td>9:15 a.m. – 9:30 a.m.</td>
<td>Opening Remarks</td>
<td>Picasso 3</td>
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<tr>
<td>9:30 a.m. – 10:30 a.m.</td>
<td>Common contractual and legal issues arising under EPC contracts for onshore and offshore oil &amp; gas projects, including force majeure, performance-related issues, indemnity insurance provisions, regimes, change orders, and termination</td>
<td>Picasso 3</td>
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<tr>
<td>Jason L. Richey, Beth W. Petronio, and Randel R. Young, K&amp;L Gates</td>
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<tr>
<td>10:30 a.m. – 10:45 a.m.</td>
<td>Break</td>
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<tr>
<td>10:45 a.m. – 11:45 a.m.</td>
<td>Successfully resolving disputes under EPC contracts, including international arbitration and other forms of dispute resolution and associated insurance coverage</td>
<td>Picasso 3</td>
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<tr>
<td>Richard F. Paciaroni and Matthew Smith, K&amp;L Gates and John Cunningham, Marsh</td>
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<tr>
<td>11:45 a.m. – 1:00 p.m.</td>
<td>Lunch: A Shifting Paradigm: Evaluating Emerging Global Risks for Mega Oil and Gas Projects</td>
<td>Picasso 3</td>
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<tr>
<td>Robert Peterson, Senior Partner, Oliver Wyman, Oil &amp; Energy</td>
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<tr>
<td>1:00 p.m. – 2:00 p.m.</td>
<td>EPC contracting issues specific to the LNG industry</td>
<td>Picasso 3</td>
</tr>
<tr>
<td>Matthew Smith and Steven C. Sparling, K&amp;L Gates and John Cunningham, Marsh</td>
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<tr>
<td>2:00 p.m. – 2:15 p.m.</td>
<td>Break</td>
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<tr>
<td>2:15 p.m. – 3:15 p.m.</td>
<td>Modular construction: Insurance challenges</td>
<td>Picasso 3</td>
</tr>
<tr>
<td>Ali Rizvi, Paul Nicholson, and Kevin Sparks, Marsh and Jackie Celender, K&amp;L Gates</td>
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<tr>
<td>3:15 p.m. – 4:30 p.m.</td>
<td>Industry Roundtable Review</td>
<td>Picasso 3</td>
</tr>
<tr>
<td>4:30 p.m. – 5:30 p.m.</td>
<td>Reception</td>
<td>Picasso 2</td>
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</tbody>
</table>
Seminar Materials
EPC Contracting Issues in the Oil & Gas Industry

SEMINARY AGENDA

- Common contractual and legal issues arising under EPC contracts for onshore and offshore oil & gas projects including force majeure, performance related issues, indemnity insurance provisions, regimes, change orders, and termination
- Successfully resolving disputes under EPC contracts including international arbitration and other forms of dispute resolution and associated insurance coverage
- A Shifting Paradigm: Evaluating Emerging Global Risks for Mega Oil and Gas Projects
- EPC contracting issues specific to the LNG Industry
- Modular Construction: Insurance Challenges
- Industry Roundtable Review

GENERAL REMINDERS

- Two 15 minute breaks from 10:30 a.m. to 10:45 a.m. and from 2:00 p.m. to 2:15 p.m. will be observed.
- Coffee and water are available for you throughout the day.
- Lunch will be served to you in this conference room.
- Please switch your cellphones to vibrate or silent to avoid interruption during today’s presentations.
- Please join us for drinks, hors d'oeuvres, and conversation following today’s program.
QUESTION & ANSWER

- Many of today’s sessions include time for Q&A at the end of each presentation.

- To submit questions for Q&A during the Industry Roundtable Review, please submit your questions via the cards found with your seminar materials or email ale.simmons@klgates.com by 2:00 p.m.

- Please note that time is limited so we may not be able to address all questions.

ANTI-TRUST AND COMPETITION LAW REMINDER

- Meeting participants are reminded that many of the companies represented at this meeting, either by counsel or by company representatives, are competitors and are subject to antitrust and competition laws.

- Meeting participants should avoid any discussions or comments involving competitively sensitive information, and should strive to avoid even the appearance of any impropriety in that regard.

- In order to not run afoul of antitrust and competition laws, in both formal presentations and information discussions, meeting participants should not, in fact or appearance, discuss or exchange information that could be construed as being anti-competitive or otherwise competitively sensitive, including by way of example:
  - Pricing strategies or current or anticipated profit margins or changes/trends in any of them
  - Marketing strategies; division of markets or components
  - Supply and demand forecasts or changes/trends in them
  - Process of bidding on current projects; open season bids or changes/trends in any of them
  - Terms of pending or anticipated business transactions
  - Commercial information related to business relationships with specific suppliers and/or customers

Please be respectful of the fact that competition law discussion boundaries apply equally to discussions that may occur during roundtable reviews, breaks, meals, and social activities.

All meeting participants are encouraged to promptly object to any material, presentation, comment or question that they do not believe is legally appropriate for the meeting.
INTRODUCTION

Our goals for this part of seminar are:

- To help you better understand the contractual risk profile associated with EPC contracts
- To enhance your contract drafting and negotiating skills
- To help you better protect your company’s interests
FIRST CONSIDERATION for EPC Projects: Why do this project?

- Business considerations are the primary driver:
  - Strategic advantage?
  - Opening a new market?
  - Potential for profit?
  - Appropriate risk/reward profile
- Legal considerations:
  - Illegal activity
  - Against corporate policy
- Risk Committee
  - Review business and legal risks before approving a project
  - Approve projects where the risks are appropriately identified and are balanced with a proper reward

SECOND CONSIDERATION for design-build: Your relationship with your partner

- Joint venture
  - Jointly share risks and rewards
- Consortium
  - Each party responsible for its own performance and payment
- Teaming agreements
- Subcontract
THIRD CONSIDERATION for design-build: Can you negotiate terms and conditions?

- Some terms may not be negotiable with the counter-party
- Objective is to recognize problem terms and try to soften them or remove them in their entirety


- Flow Down Clauses
- Dispute Resolution
- Payment Provisions
- Termination and Suspension
- Limitation of Liability
- Disclaimer of Consequential Damages
- Warranty
- Lien Rights and Waivers
- Force Majeure
- Differing Site Conditions
- Licensing
- Local Content Requirements
- Indemnity
- Standard of Care for Professionals
- Changes
- Claim Bars
- Delay/Time of Performance
- Liquidated Damages
- No Damage for Delay
- Environmental Liability
- Scope of Work
FLOW DOWN CLAUSES

- Typically found in EPC and design/build contracts, likely not negotiable or avoidable for subcontractors
- The clause incorporates some or all of the provisions of the owner’s contract with the prime contractor and “flows” them down the line
- May need to flow down provisions to your subcontractors and sub-designers

DISPUTE RESOLUTION

- Critical clause, negotiate carefully considering likely end of project disputes
- Forum selection – affects cost and outcome
  - Litigation
  - Arbitration – preferred by MBI
  - Dispute boards
- Venue – hearing location, can be anywhere that is convenient
- Choice of law – critical to know if protections are valid and enforceable
- Language – English is the preferred language
- Recovery of attorney’s fees and costs – Loser pays?
- Conditions precedent
  - Timely notice of a dispute
  - Escalating management meetings
  - Mediation
PAYMENT PROVISIONS

- "Pay when paid" clause
  - Typically reads like "X will pay Y within Z days after receiving payment from the owner"
  - Deemed to be a timing mechanism and does not excuse X’s payment obligation

- "Pay if paid" clause
  - Typically reads like "X will pay Y if, and only if, X is first paid by the owner"
  - Deemed to be a “condition precedent” and may excuse X’s payment obligation
  - Viewed with disfavor by courts, may not be enforceable

PAYMENT PROVISIONS CONTINUED

- Milestone payments and Final Payment
- The right to stop work if payment is not timely made
- Retainage
  - Amount, decreasing percentage over time or at a milestone
  - Length of time the D/B contractor can hold
  - Interest due
  - Substitution of a bond for cash retainage
TERMINATION AND SUSPENSION

- Termination for Convenience by Owner
  - Terminated contractor is typically entitled to compensation for close-out expenses vis the design subcontract
- Termination for Cause by Owner
  - Material breach
    - No compensation
  - Notice and cure period
- Owner remedies in case of contractor default and termination
  - Stop payment
  - Call on bonds or LC’s
  - Hire a replacement contractor and recover all costs
- Suspension is different than termination

LIMITATION OF LIABILITY

- Typically accepted in construction contracts, otherwise risky projects are “bet the company” propositions
- The cap is typically a percentage of the contract price
- Some exceptions may be carved out, typically for “gross negligence,” willful misconduct and/or violation of law
DISCLAIMER OF CONSEQUENTIAL DAMAGES

- Typical in construction contracts, usually goes both ways
- Important risk mitigation clause – removes lost profits, loss of use and other unquantifiable and uncontrollable damages and costs from recoverable damages
- May only apply to collateral contracts

WARRANTY PROVISIONS

- Express warranties v. Implied warranties
- Disclaimer of all other express and implied warranties
- “Sole and exclusive” remedy provisions
- “Re-perform the service” remedy provisions
LIEN RIGHTS AND WAIVERS

- Most owners will require contractors to waive their mechanics' lien rights
- Requirements differ from state to state – research needed
- Watch out for release of lien/claim language in monthly payment forms/requests

FORCE MAJEURE

- Protects both parties
- Wording is the key, what’s included and what is excluded must be negotiated
- Typically covers “acts of God,” natural disasters, etc.
- Typically excludes unforeseen rise in raw material costs, shortage of labor, normal bad weather, etc.
DIFFERING SITE CONDITIONS

- Different than represented in the bid/contract documents
- Different than typically encountered
- Right to rely on Owner’s site information
- Duty to investigate
- Impossibility of performance/owner concealment
- Trend is for sophisticated owners to take this risk so as to keep bid prices lower

PROFESSIONAL LICENSING CONSIDERATIONS

- Most states have licensing requirements for contractors and engineers
- Know who holds the license for design and who holds the license for construction
- Failure to hold a valid contractor’s license can be fatal to a contractor’s right to payment
- May need to partner with another firm to get the required license
LOCAL CONTENT REQUIREMENTS

- Most international EPC contracts contain a provision requiring the contractor to incorporate into the work some specified percentage of “local content”
- Could be materials and fabrication
- Could be local labor content
- Deep understanding of the local conditions at the job site and in the country is needed to assess this risk

INDEMNITY

- Contractual provision that provides for indemnification of the owner by contractor for a variety of losses
- Can be for losses associated with third-party bodily injury and property damage
- Anti-indemnity statutes
  - Engineers cannot be indemnified for their own negligence, against public policy
- Insurability
  - Professional negligence – the E&O policy
  - Performance deficiency – maybe not insurable
  - Make sure the indemnity obligation matches-up exactly with your insurance policy language – “back to back”
- Be sure to work with your broker to ensure there is coverage for indemnity obligations
STANDARD OF CARE FOR PROFESSIONALS

- “Reasonable care exercised by other engineers working in the profession”
- “Highest care” – avoid this
- “Sole satisfaction” – avoid this

CHANGES

- Actual
- Constructive
- Cardinal Change
- No additional work without a written change order
- Integration clause
- Pricing mechanisms
  - Direct cost plus mark-up
  - Mutual agreement
CLAIM BARS
- Contractual notice bars
- Statute of Limitations
- Discovery Rule – relief from statute of limitations
- Statute of Repose

DELAY/TIME IS OF THE ESSENCE
- Time is of the Essence Clause
- Excused vs. non-excused
- Compensable vs. non-compensable
- Concurrent delay – get time, no money
LIQUIDATED DAMAGES

- Almost always see this in EPC contracts
- Can be for delay or performance shortfalls
- Typically provides for a per-day payment if completion milestone is missed
- Can't be a “penalty,” must be a pre-negotiated, reasonable expectation of the counter-party’s losses and damages for failure to deliver on time
- Usually capped at some percentage of the contract price

NO DAMAGE FOR DELAY

- Provision permits the contractor to recover time for owner-caused delays, no monetary claims
- Not always enforceable, especially where the owner has actively interfered with the work
ENVIRONMENTAL LIABILITY

- Unknown and unlimited risk for contractors—how do they price this in the proposal?
- Place responsibility for discovered above-ground/under-ground pollution on the owner; it is in the best position to remediate it
- Placing the risk on the owner will result in lower project bids for the project

SCOPE OF WORK

- “In scope” or “out of scope” is the most frequent dispute on a construction project
- Be clear on what is included
- Be especially clear on what is NOT included
- Pay attention to the exhibits, addenda and incorporation by reference in the specifications and other bid documents
- Try hard to avoid ambiguity
CONCLUSION

- Choose sound projects to participate in, use the Risk Committee to evaluate project risks and rewards and make go/no-go decisions
- Adequately vet your partner; experience and capability are key
- Study and understand the various contractual provisions that can either help or hurt you
- Begin early with contract negotiations – during the proposal phase make known to your counter-party what types of clauses are not going to be acceptable
- Take the time necessary to draft a quality contract—don’t draft or accept ambiguous clauses
- Have counsel review unusual clauses or amendments in draft contracts
- Have counsel review all major contracts before signing them
SUCCESSFULLY RESOLVING DISPUTES UNDER OIL AND GAS EPC CONTRACTS

WHAT THIS PRESENTATION WILL COVER:

- International Arbitration
- Other mechanisms for resolving disputes under Oil and Gas EPC contracts
INTERNATIONAL ARBITRATION

DISPUTE RESOLUTION STRATEGIES

- International Arbitration is the ‘front runner’ as a final forum for dispute resolution in oil and gas contracts
- Queen Mary’s College 2013 International Arbitration Survey of energy companies:
  - International Arbitration (56%)
  - Litigation (22%)
  - Expert determination/adjudication (17%)
  - Mediation (5%)
DRAFTING THE ARBITRATION CLAUSE

- Essential requirements
  - Choice of arbitrators
  - Seat of arbitration
  - Language of the arbitration
  - Substantive law

DRAFTING THE ARBITRATION CLAUSE CONTINUED

- Additional Provisions
  - Discovery and evidence
  - Preliminary or interim relief
  - Technical expertise to resolve dispute
  - Multi-step ADR provisions
  - Dispositive motions
  - Legal fees and costs
  - Expanded judicial review
  - Confidentiality
  - Waiver of state immunity
  - Multi-party agreements
Other popular international arbitral institutions include:

- American Arbitration Association (AAA)/International Center for Dispute Resolution (ICDR)
- London Court of International Arbitration (LCIA)
- China International Economic and Trade Arbitration Commission (CIETAC)

**WHAT IS THE ICC?**

- International Chamber of Commerce
  - Headquartered in Paris
  - Established 1919
  - Promotes international commerce
  - Over 150 country members
  - Provides alternative dispute services through Court of Arbitration (ICA)
WHAT IS THE ICA?

- Arbitral body attached to ICC that administers/oversees arbitral process
- Established 1923
- Leading international arbitral organization
- Has handled more than 16,000 cases
- Specifically, assists in arbitrator selection, reviews draft awards, etc.

WHERE IN THE WORLD IS THE ICA?

Various ICA office locations:
- New York
- Panama
- Singapore
- Tunisia
- Hong Kong
HOW DOES THE ICC/ICA WORK?

- Hands-on organization
- Traditionally, very French but less so now

LEADING SEATS OF ICC ARBITRATION

- London
- Geneva
- Paris
- Tokyo
- Singapore
- New York
2012 ICC RULES OF ARBITRATION

- Applies to arbitrations commenced as of Jan. 1
- Highlights/changes to old Rules include:
  - New "Emergency Arbitrator" procedure (Art. 29)
  - New provisions on joinder of additional parties, claims between multiple parties, claims arising out of multiple contracts and consolidation (Arts. 7 to 10)
  - Requirement that arbitrators are impartial and independent of parties (Art. 11)
  - Techniques increasing speed (Art. 22)
  - Tribunal can rule on confidentiality (Art. 22)

IMPORTANT QUESTIONS

- How Much Does It Cost?
  - Fee structure for ICC and arbitrators
  - Based on amount in dispute
  - Can be quite expensive

- How Long Does It Take?
  - Award supposed to be handed down six months after hearing
  - Usually takes longer
THE UPSIDE OF ICC ARBITRATION

Advantages to ICC arbitration include:

- Well-recognized organization
- No procedural surprises, i.e., consistency
- Higher chance of enforcing award in less sophisticated regions
- Confidentiality
- Speed (potentially)

BEGINNING AN ICC ARBITRATION

First, the Five Ds:

- Develop Claims
- Define the Dispute
- Determine What Law Will Apply
- Determine What Language Will Apply
- Determine the Seat of Arbitration
BEGINNING AN ICC ARBITRATION

Not too different from beginning lawsuit

- Research applicable law
- Prepare and file Request for Arbitration with the ICC Secretariat; provide copy to Respondent (Art. 4)
- Within 30 days of receiving Request for Arbitration, Respondent must file an Answer with Secretariat and serve copy on Claimant (Art. 5.1)
- Answer should contain counterclaims (Art. 5.5)

ARBITRATOR SELECTION

- Usually one or three arbitrators
  - Three arbitrators have two “wings” and a “chair”
  - When three arbitrators, usually each party picks an arbitrator and they pick the third
- Should be independent and impartial
- Knowledge and experience with arbitrator candidates is essential
DETERMINING JURISDICTION OF THE TRIBUNAL

- Any question of jurisdiction shall be decided directly by the arbitral tribunal, unless the Secretary General refers the matter to the ICA (Art. 6.3)
- If ICA makes decision about the jurisdiction of the arbitral tribunal, it will be taken by arbitral tribunal (Art. 6.5)
- Arbitral tribunal continues to have jurisdiction, even if the contract is non-existent or null and void. As long as tribunal upholds the validity of the arbitration agreement, it has jurisdiction (Art. 6.9)

PROCEDURAL MATTERS AND ORDERS

- For effective case management, the arbitral tribunal can adopt procedural measures that it considers appropriate (Art. 22.2)
- Arbitral tribunal may make orders concerning:
  - The confidentiality of the proceedings,
  - Protection of trade secrets and confidential information
  - Other matters (Art. 22.3)
ANTI-SUIT INJUNCTIONS

- A party trying to avoid arbitration might file suit in a foreign court, causing “parallel proceedings.”
- To stop this from happening, the other party can go to a court in the seat of arbitration to ask that the first party be enjoined.
- The court’s order, forcing the first party to stop litigating, interferes with a foreign court’s jurisdiction; however, it is necessary to maintain the authority of the arbitral tribunal.

AVAILABILITY OF PRELIMINARY RELIEF

- Tribunal may order any interim or conservatory measure it deems appropriate. The measure shall take the form of a reasoned order or of an award (Art. 28.1).
- Before file is transmitted to the tribunal, and in some cases afterwards, parties can apply to competent court for interim or conservatory measures. This shall not affect the powers of the tribunal. (Art. 28.2)
TERMS OF REFERENCE

- As soon as the tribunal receives the file, it will draw up the Terms of Reference (Art. 23.1)
- Terms of reference sets out:
  - Parties' claims
  - Issues to be determined
  - Applicable procedural rules
- Signed Terms of Reference are to be transmitted to the ICA within two months after the file was transmitted to the tribunal (Art. 23.2)

INITIAL PROCEDURAL HEARING

- Tribunal holds case management conference with parties (Art. 24.1)
- Purpose is for tribunal to establish a procedural timetable (Art. 24.3)
- Timetable usually lists:
  - Dates for final hearing
  - Timing for statements of case to be served
  - Timing for Respondent to serve response
  - Date for production of documentary evidence
  - Preparation and service of witness and expert statements
  - Exchange of pre-hearing written submissions
DOCUMENTARY EVIDENCE

- Attached initially to written submissions
- Tribunal may summon any party to provide additional evidence at any time (Art. 25.5)
- However, there is no right to document production in ICC arbitrations
- Tribunal decides whether production is necessary and if so, the scope of disclosure
- Disclosure often follows Article 3 of the International Bar Association (IBA) Rules on the Taking of Evidence in International Arbitration

IBA ARTICLE 3 ON DOCUMENTARY EVIDENCE

- First, each side produces all documents available to it on which it relies, including public documents
- A party may then submit a Request to Produce additional documents
- The other party may object
- If the parties do not reach a resolution among themselves, the tribunal may rule on the objection
- Documents are to be kept confidential, unless otherwise already in the public domain
USE OF WITNESSES AND EXPERTS

- Tribunal may hear witnesses, party-appointed experts or any other person (Art. 25.3)
- Often witnesses provide a witness statement setting out their evidence, which is submitted along with party’s written submission
- Experts submit expert reports
- Typically, witnesses and experts are required to attend a hearing for cross-examination by the other party and questioning by the tribunal.
- There is also a specific power for the tribunal to appoint experts (Art. 25(4))

DIFFERENCES BETWEEN EXPERT WITNESSES AND FACT WITNESSES

- Independent v. Advocate
- Opinion v. Fact
- High standard of care for experts—Daubert Test
- Standard prompts credible opinions
USING EXPERTS

- Discuss in advance your counsel’s preferences to use them
- Influences choice of arbitrators
- May increase or decrease the claim metrics

INSURANCE ISSUES AND USE OF EXPERTS

- Technical Opinions to help decide applicability of exclusions
- Standard of Care Proofs
- Damage Quantum
- Subject Matter Experts
COMMON DUTIES

- Gathers and coordinates factual documentation
- Identifies fact witnesses needed
- Prepares expert report
- Prepares a report answering opposing expert’s report

COMMON DUTIES CONTINUED

- Makes a presentation at hearing
- Stands cross-examination
- Helps counsel prepare to cross-examine opposing experts
- Responds to orders of the tribunal
IBA ARTICLE 5 ON PARTY-APPOINTED EXPERTS

- Expert’s report shall contain:
  - Name, address, relationship, description of background and qualifications
  - Description of his/her instructions
  - Statement of independence
  - Statement of facts that are basis of opinions/conclusions
  - Opinions/conclusions and methodology
  - Affirmation, signature, date, and place
- If expert fails to appear at requested evidentiary hearing, the tribunal will disregard statement

IBA ARTICLE 4 ON FACT WITNESSES

- Witness statements include:
  - Name, address, relationship to the party, description of background and qualifications
  - Detailed description of relevant facts
  - Statement as to language the witness statement was prepared in and what language the witness anticipates giving testimony
  - Affirmation of truth, signature, date, and place
- If the witness fails to appear at a requested evidentiary hearing, the tribunal will disregard that witness’s statement
HEARINGS

- Tribunal may decide the case solely on documents submitted, unless a party requests a hearing (Art. 25.6)
- Documents-only hearing very rare
- Location and date of hearing fixed by tribunal (Art. 26.1)
- Presentation of Evidence (IBA Rules on the Taking of Evidence)

IBA ARTICLE 8 ON EVIDENTIARY HEARINGS

- Each witness shall appear to testify if requested
- Tribunal may limit or exclude any question
- Direct and re-direct questions may not be leading
- Claimant and then Respondent presents direct witness testimony.
- Then, Claimant and Respondent each present direct expert testimony
- Tribunal may ask questions whenever and may call witnesses who can then be questioned by the parties
AT LAST! THE ARBITRAL AWARD

- Scrutiny of draft award by ICA
- Final and binding
- Limited grounds to challenge
- Loser pays
- Reasoned vs. non-reasoned award

ENFORCEMENT CONSIDERATIONS

- NY Convention
  - 145 member countries
  - Predominant arbitration Convention
- Requirements for enforcement
  - Scope of applicability of Convention
    - In many other countries, only awards rendered in foreign state qualify for enforcement
    - Permitted reservations
  - Jurisdiction and forum non conveniens
  - Procedures for enforcement
    - Required documents
    - Limit on fees
ENFORCEMENT CONSIDERATIONS

Grounds for non-enforcement under Convention

- Incapacity of a party or invalidity of agreement
- Lack of notice or fairness
- Arbitrator acting in excess of authority
- Tribunal or procedure not in accord with agreement
- Award not yet binding or has been set aside
- Non-arbitrable subject matter
- Public policy

OTHER MECHANISMS FOR RESOLVING DISPUTES UNDER OIL AND GAS EPC CONTRACTS
OTHER MECHANISMS—GENERAL PRINCIPLES

- The starting point for avoiding and successfully resolving disputes is contract drafting stage
- No standard approach to Oil and Gas EPC Contracts
- Stand-alone bespoke EPC contracts are norm, often based on oil company in-house forms
- FIDIC (e.g. FIDIC Silver Book EPC Turnkey Contract) may be used as a base but usually heavily amended

OTHER MECHANISMS—GENERAL PRINCIPLES CONTINUED

- Consider staged dispute resolution procedure incorporating different dispute resolution processes as a condition precedent to arbitration/litigation
  - Approach in LOGIC contracts
  - Provisions must be clear and enforceable
- There may be an express requirement for the EPC Contractor to execute works pending resolution of the dispute – may be qualified in relation to disputed Change Orders on a value basis
OTHER MECHANISMS—GENERAL PRINCIPLES CONTINUED

- The EPC contract may restrict referral to ‘final’ dispute resolution (arbitration/litigation/expert determination) until after handover and operation of the oil and gas facility;
- ‘Interim’ dispute resolution provisions
- Provisions for consolidation with other disputes under other related contracts
- Split EPC contracts and bridging agreements
- Other project participants (e.g. co-venturers/shareholders in the project company)

‘INTERIM’ MECHANISMS

- Dispute Boards and Dispute Adjudication Boards
- Mediation
- Early Neutral Evaluation
- Negotiations between Senior Representatives or CEOs
DISPUTE BOARDS AND DISPUTE ADJUDICATION BOARDS

- A board (usually three individuals) empowered to make decisions
- Standing or ad hoc
- Dispute Review Boards: Non-binding
- Dispute Adjudication Boards: ‘Binding but not Final’
- Issues as to enforceability: *CRW Joint Operation v PT Perusahaan Gas Negara (Persero)* [2011] SGCA

DISPUTE BOARDS AND DISPUTE ADJUDICATION BOARDS CONTINUED

Dr Cyril Chern, member of the advisory panel of the Dispute Board Federation:

“The statistics show that if there is an operational Dispute Board in existence on a project, close to 99% of all disputes referred to it will be successfully resolved within less than 90 days…”
MEDIATION

- Common in oil and gas EPC contracts to have a requirement to mediate as a condition precedent
- Key features:
  - Third party facilitating discussions
  - Without prejudice
  - Confidential statements not communicated to other party without consent
  - Tri-party agreement
  - Authority to settle

MEDIATION CONTINUED

- Mediator/conciliator tactics:
  - “Carrot and stick” approach
  - Cost estimates to final determination
  - Parties can “have their say”
  - Choice of mediator – detailed knowledge of subject matter or interpersonal skills
EARLY NEUTRAL EVALUATION

- Neutral third party makes non-binding decision
- Parties agree that submissions and the decision cannot be relied upon subsequently
- Usually no oral submissions
- No expert or factual evidence
- Often suitable for discrete issues
A SHIFTING PARADIGM: EVALUATING EMERGING GLOBAL RISKS FOR MEGA OIL AND GAS PROJECTS

Robert Peterson
Partner, Energy
November 2015
Agenda

- Pricing Overview
- Activity Overview
- Trends, Learnings & Thoughts

1 Price Overview
EPC Contracting Issues in the Oil & Gas Industry

Oliver Wyman – Price Overview

OPEC’s decision in late 2014, to compete on price, ended a 5 year run of strong supply management.

Historical & forward curves for crude oil prices

$USD / barrel

2010-2014 Crude Trading Range

“Lower for Longer”

Historical & forward curves for natural gas prices

$USD / MMBtu

2010-2014 ICE (UK) Trading Range

“Lower for Longer”

Oil price collapse: Drivers

1986, 2014: Supply Side

- OPEC had managed market for years at relatively high prices
- New entrants had moved in, taking share, with threat of losing further share
- OPEC responds by increasing production and competing on price


- Unforeseen stock market collapse drives near term demand reset (Asian Flu, Dot Com bubble, Sub-Prime bubble)
- Little lasting impact on supply/demand fundamentals
- Short term by nature

The oil markets are now anticipating a long ‘Price Winter’, with forward curves suggesting ~ 6 more years of fairly low pricing.

… but we think there is some real uncertainty as to how this might resolve.
The lower crude prices are having the predictable impact of reducing upstream capital expenditures, in marginal cost/high risk areas. We see two ways for this the pricing winter to resolve - a supply side change that is either a ‘hard’ or ‘soft’ landing.

**‘Hard’ Landing**
- A large and sudden downward change in crude market supply, typically a result of large state and/or corporate collapse, or strategic failure on OPEC’s part.

**Attributes**
- Difficult to forecast
- Potentially large negative consequences for those who capitulate, depending on the circumstance
- Rapid return to much higher pricing
- If its going to happen, its going to occur prior to a soft landing

**‘Soft’ Landing**
- A slow rebalancing of the crude market, to an equilibrium where supply and demand are relatively balanced. No large corporate or state failures.

**Attributes**
- Can be forecasted
- Magnitude of outcomes less negative but more broadly shared
- Slower return to higher pricing, as inventories get worked out. The market will have visibility to the return of equilibrium
However, even our most conservative view of the ‘soft landing’ suggests that it will start to take hold as we exit 2016.

**Forecast Crude Market Balance**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td>92.5</td>
<td>93.6</td>
<td>94.5</td>
</tr>
<tr>
<td>Excess Supply</td>
<td>2.0</td>
<td>1.0</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**Observations**

- The near term data, either forward or backward, is poor and subject to debate.
- Conservative (high) estimates of OPEC excess capacity put it at 2.0 Million barrels/day.
- On a base of 92-93 Million barrels/day, it doesn’t take long for the combination of decline rates and incremental demand to soak up this excess capacity.
- Our conservative case suggests that we will be drawing down on inventories to balance the market as we exit 2016.

… and its possible we ‘overshoot’ and drive the market short in 2017!

**Oliver Wyman – Price Overview**

The ‘big question’ is to what price will the markets return – Our view is that 2017 looks much better, relative to the forward curves.

**Historical & forward curves for crude oil prices**

$USD / barrel

**Historical & forward curves for natural gas prices**

$USD / MMBtu

Sources: Bloomberg, Oliver Wyman
Prior to the 2014 price collapse, the Oil & Gas sector could be characterized as over-exuberant.

- Capacity had been added in excess of supply
- Costs were escalating sharply
- Industry was adding debt to overinvest in the growth agenda

Oil Supply/Demand Figures (MM bbl/d)

<table>
<thead>
<tr>
<th>Year</th>
<th>Global Demand Growth</th>
<th>NA Supply Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Marginal Cost of Supply ($USD/bbl)

- 8.6% CAGR

Industry Reinvestment Rate (% of cashflow)
EPC Contracting Issues in the Oil & Gas Industry

Oliver Wyman – Activity Overview
We were examining how to realize the 'next wave' of projects at the margins, with all-in costs of $100-120/bbl

Global oil supply cost curve
$USD/barrel vs 2020 Est. liquids production volume (MM bbl/d)

Sources: Rystad, Oliver Wyman
© Oliver Wyman

Oliver Wyman – Activity Overview
Instead, the 2015 low price environment has paused the exuberance – Offshore spending has retrenched to 2007/08 levels …

Comments
• Consensus suggests that offshore projects require $90/bbl oil prices to meet economic hurdles
• To the degree possible, operators are deferring project FID and/or releasing rigs
• Where not possible, operators are trying to establish renegotiated day rates and materials costs, and in some extreme cases paying rig release penalties
• NOC operators are leveraging relationships to obtain better terms than IOC operators

Sources: Morgan Stanley, Oliver Wyman
© Oliver Wyman
Oliver Wyman – Activity Overview
North American shale production is now shrinking for the first time in 4 years

- Shale oil and gas production almost exclusively centered in North America
  - Capital
  - Infrastructure
  - Expertise
  - Market access
- With significantly fewer rigs and much less investment, North American producers have maintained production levels for about 6 months
- Currently, US liquids production has peaked and is likely to begin a steep decline until sufficient capital reinvestment is made

Oliver Wyman – Activity Overview
The Canadian Oil Sands development has slowed down significantly

- With record high cost escalation through 2010-2014, the rate of development of Oil Sands projects had begun to slow. Further, the lack of transport pipeline capacity & the rise of US based shale oil put significant pressure on the light heavy price spread
- Accordingly, with the 2014 price collapse, with the exception of select mining projects, almost all Oil Sands brown or greenfield expansions have been either deferred indefinitely or outright cancelled
Oliver Wyman – Activity Overview

... and global LNG has ground to a halt, simply completing projects which were already in progress

LNG Liquefaction Project Capex ($USD, Billion)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capex ($USD, Billion)</td>
<td>42.4</td>
<td>48.7</td>
<td>45.1</td>
<td>29.3</td>
<td>18.1</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Comments:
- Unprecedented investment in planning, developing and building new projects
- With oil price benchmarks falling, the natural gas price reset has stalled most FID’s on projects not already under construction
- Projects under construction will more than satisfy forecast demand at reasonable load factors (low 80%’s)
- There are another 49 MMtpa of potential and ~150 MMtpa of speculative LNG projects which, if built, would push average utilization into the 57-59% range, unsustainable for all parties

LNG Liquefaction Capacity: Supply/Demand (MMtpta)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>160</td>
<td>122</td>
<td>120</td>
<td>119</td>
<td>117</td>
<td>109</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand</td>
<td>109</td>
<td>100</td>
<td>117</td>
<td>120</td>
<td>122</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bank of America, Oliver Wyman

Oliver Wyman – Activity Overview

The Midstream, as represented by total pipeline construction, has cooled off

Global Pipeline Construction: Planned & Actual

Thousands of Miles

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under construction</td>
<td>160</td>
<td>122</td>
<td>120</td>
<td>119</td>
<td>117</td>
<td>109</td>
<td>100</td>
</tr>
<tr>
<td>Planned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments

2014 - 2015
- NA: Despite media on notable delays, steady delivery of capacity, augmented by rail peaking services
- Slow Down in projects related to lower buildout in both Asia & South America

2016
- Planned projects showing weakness as needs for future capacity uncertain in current market, notably in North America

Source: Pipeline & Gas Journal, Oliver Wyman

© Oliver Wyman
Oliver Wyman – Activity Overview

Downstream, as represented by Refining – an oil and gas buyer – has taken off

Global Forecast Refinery Construction

$USD Billion

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>2016E</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Comments

**Near term: 2015 - 2016**

- Significant investment in new refining capacity in Africa, Asia & the Middle East
- North American refineries continue to modify their footprint to accept different crude slates, but little true capacity addition
- Strong investment in petrochemical capabilities

**2017-2020**

- Strong project backlog, which only ‘tails off’ as time moves beyond current planning horizons

Source: Global Data, Oliver Wyman
© Oliver Wyman

3 | Trends, Learnings, & Thoughts
Oliver Wyman – Trends & Learnings
The oil price collapse has allowed the industry as a whole to take a breath and re-examine the growth agenda

<table>
<thead>
<tr>
<th>Macro trends through September, 2014</th>
<th>Learnings since September 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upstream</strong></td>
<td><strong>Upstream</strong></td>
</tr>
<tr>
<td>- All play types were growing, with NA shale being dominant</td>
<td>- Larger than expected differentiation between play types, with Offshore &amp; LNG less able to adjust their cost basis</td>
</tr>
<tr>
<td>- Large change in product flows, as NA begins to self-supply and EU/ME/Asia pursue buyer/supplier diversification</td>
<td>- Significant 'hidden' credit default risk in NA shale drillers</td>
</tr>
<tr>
<td>- Significant 'hidden' credit default risk in NA shale drillers</td>
<td>- OPEC spare capacity about to 'disappear'</td>
</tr>
<tr>
<td><strong>Midstream</strong></td>
<td><strong>Midstream</strong></td>
</tr>
<tr>
<td>- Struggling to support large geographic supply shifts (NA Shale, FSU to China)</td>
<td>- Potential NA overcapacity?</td>
</tr>
<tr>
<td><strong>Downstream</strong></td>
<td><strong>Downstream</strong></td>
</tr>
<tr>
<td>- NA: Adjustments to new supply slate (Shale Oil versus CDN/VEN Heavy)</td>
<td>- A focus on new petrochemical capacity, slowing of global projects, and continued uncertainty about input slates</td>
</tr>
<tr>
<td>- Asia: Continuing to build capacity to meet incremental demand for liquids fuels</td>
<td></td>
</tr>
<tr>
<td><strong>Demand</strong></td>
<td><strong>Demand</strong></td>
</tr>
<tr>
<td>- Strong, driven by maturing Asian markets</td>
<td>- Relatively inelastic</td>
</tr>
<tr>
<td>- GHG issues 'muted'</td>
<td>- US/UK/CDA governments beginning to revive GHG priorities</td>
</tr>
</tbody>
</table>

Looking ahead, as the energy market evolves, we believe there are a few key trends that affect the relative risk inherent in capital projects

<table>
<thead>
<tr>
<th>Key Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Increased pricing volatility</td>
</tr>
<tr>
<td>- The future impact of shale and its capability to 'swing' or not</td>
</tr>
<tr>
<td>- Major operators reducing their operated positions</td>
</tr>
<tr>
<td>- The complexity of new market entry (e.g. Mexico)</td>
</tr>
<tr>
<td>- Carbon policy</td>
</tr>
<tr>
<td>- The restructuring of oilfield services</td>
</tr>
<tr>
<td>- The increased role of Private Equity</td>
</tr>
</tbody>
</table>
EPC Contracting Issues in the Oil & Gas Industry

Oliver Wyman – Thoughts: Market Volatility
By 2016, OPEC’s spare capacity will be consumed, and market prices will be much more volatile – significantly challenging projects ‘at the margin’

OPEC Production Adjustment Targets
Million barrels/day

Comments
• By managing supply, OPEC provided a measure of price stability
• By the end of 2016, OPEC’s spare capacity will have been deployed against incremental demand, and unlike in 1986, they will not be able to withdraw it, without creating a massive price spike, which would
  – Destabilize the oil & gas markets
  – Create demand destruction
• The oil markets have shown that even with small capacity excess or shortfalls (~0.5 Million bbl/d), prices will swing between total and marginal cost ($40-60/bbl variance)
• Marginally economic projects may have learn how to cope with frequent, large price swings

Sources: OPEC Monthlies, Oliver Wyman
© Oliver Wyman

Oliver Wyman – Thoughts: Can Shale ‘Swing’?
Instead of being the ‘swing’ producer, NA Shale projects might simply just fail due to economics and the loss of OFS delivery capacity

NA Shale ‘breakeven’ price, by region
SUSD/barrel

How would price sensitive production help these projects?

Why would these projects ever reduce volumes?

Sources: Wood Mackenzie, UBS, Credit Suisse, Robert W. Baird equity, Oliver Wyman
© Oliver Wyman
Oliver Wyman – Thoughts: Operating Model
The IOC’s, the largest project developers, are re-thinking their position on the value of operating assets

Comments
• In today’s low price environment, IOC’s are questioning the value of asset operatorship
• Given that increased returns are unlikely, due to the low price environment, they are predominantly seeking to reduce risk
  – NOC’s may have to ‘step up’ into more responsible role
  – EPC’s (Supply Chain) may also have to accept greater responsibility, or step up into operating roles

Risk/Return Balance (no units)

<table>
<thead>
<tr>
<th>Risk</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficient Frontier</td>
<td>Increase Returns</td>
</tr>
<tr>
<td>Reduce Risks</td>
<td>Asset Operatorship</td>
</tr>
</tbody>
</table>

Supermajor Non-Equity Production (% of total)

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>100%</td>
<td>80%</td>
<td>70%</td>
<td>60%</td>
<td>50%</td>
<td>40%</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Downward Trend

Sources: Company Annual Reports, Oliver Wyman
© Oliver Wyman

Oliver Wyman – Thoughts: ‘Revitalized’ Exporters
NOC exporters are actively seeking increased capital project investments and execution capabilities

Comments
The on-going privatization of Pemex offers some insights into ‘revitalization’ risks
• Rounds 1.1 and 1.2 have only been moderately successful due to fiscal terms and asset potential
• National content requirement for projects is high, ranging from 25% to 35% over time
• Participants can choose between licensing, cost recovery, service provider contracts, with differing cost/benefits over time
• Four Mexican entities have a hand in bidding decisions- Pemex, SENER, the Finance Ministry, and Pemex

NOC Exporters are looking for ‘Revitalization’

Sources: OPEC Monthlies, Oliver Wyman
© Oliver Wyman

klgates.com
Oliver Wyman – Thoughts: Does climate change return?
What are the project implications if the US’s strong support for a climate agreement at COP21 produce actionable results?

COP21, Paris - Nov. 30 – Dec. 11, 2015

Comments

• Any agreement on enforcing carbon restrictions or tax structures would effectively re-order project priorities
  – Natural gas clear leader
  – High API oil preferred
  – Low API oil (Oil Sands, Heavy) at risk

• Potential to drive natural gas substitution of coal for generating power

• Potential to accelerate electric substitution and/or natural gas replacement for liquids fuels in motor transport

Sources: COP21, www.obama.com

Oliver Wyman – Thoughts: M&A in OFS
It’s likely that we will begin to see M&A activity in OFS pick up this fall and extend into 2016, as companies begin to fail

Canadian Q2, 2015 Rig Utilization
% of available rigs*days, by company (n=32)

Comments

• North America currently has significant and unsustainable over capacity, across the board, in Oil Field Services

• The lack of customers, lower unit pricing, and financial leverage will create M&A opportunities this fall and into 2016

• Project proponents and participants need to stress test their OFS relationships to avoid interruptions and/or consequences related to bankruptcy/ change of control

Source: COP21, www.obama.com
Oliver Wyman – Thoughts: PE playing a larger role
With other channels unavailable, Private Equity is likely to be the major source of refinancing upstream operators and suppliers

<table>
<thead>
<tr>
<th>Source</th>
<th>Access</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>⬜️</td>
<td>Most upstream operators are struggling to achieve cash flow neutrality in 2016</td>
</tr>
<tr>
<td>Long term debt</td>
<td>⬜️</td>
<td>Lenders are currently revising credit arrangements – expectations are ~20% less available debt</td>
</tr>
<tr>
<td>Short term debt</td>
<td>⬜️</td>
<td>Lenders are currently revising credit arrangements – expectations are ~20% less available debt</td>
</tr>
<tr>
<td>Equity – capital markets</td>
<td>⬜️</td>
<td>Share prices are off between 25-90% and there is a lack of buyers for new shares</td>
</tr>
<tr>
<td>Equity – Peers via M&amp;A</td>
<td>⬜️</td>
<td>A few large, integrated players have the balance sheet strength to engage in selective M&amp;A</td>
</tr>
<tr>
<td>Equity – Private</td>
<td>⬜️</td>
<td>A universe of potential funders with $10's Billions, prospectively allocated to energy, is patiently waiting</td>
</tr>
</tbody>
</table>

Select Firms

Questions & Discussion
Thank you

November 2015

Robert Peterson
Partner – Energy
Oliver Wyman
469-406-8184
500 Dallas Street, Suite 1500, Houston TX
robert.petersen@oliverwyman.com

Tim Thompson
Principal – Energy
Oliver Wyman
403-479-9088
Suite 1100 – 222 3rd Avenue SW, Calgary AB
tim.thompson@oliverwyman.com

EPC CONTRACTING ISSUES SPECIFIC TO THE LNG INDUSTRY
SESSION COVERAGE

- Extent and Cost of LNG EPC Projects
- Key Features
- Selecting an EPC Contractor and approaches to procurement
- Key LNG EPC Provisions and Issues to Address
- Common Mistakes and Pitfalls to Avoid

COST OF LNG PROJECTS

- Typical LNG “greenfield”
  - Capex $10-$15 billion +
  - 6-8,000 people
  - 4-5 years
- Huge increase in costs in recent years
- IHS Upstream Capital Costs Index Report:
  - “The index showed over a doubling of the costs of EPC liquefaction plant costs in the period 2003-2013 period. Based on this comparison liquefaction plant costs have increased at twice the rate of other upstream oil and gas facilities during that period.”
LNG COST ESCALATION

“Liquefaction unit costs appeared, on the face of it, to treble or even quadruple in [the 2000s].”

LNG COST ESCALATION CONTINUED

- $400/tpa – 1990 to 2008
- increased to $1200/tpa – 2011 to 2015
- 300% increase over the period 2000-2012
- 100% increase over the same period in the upstream oil and gas industry generally
LIQUEFACTION COSTS BREAKDOWN

Cost Breakdown by Plant Area

- Site Preparation: 1%
- Gas Treatment: 7%
- Fractionation: 27%
- Liquefaction: 28%
- Refrigeration: 3%
- Utilities: 14%
- Offsites (Storage, Jetty, Flare): 20%

Source: Oxford Institute for Energy Studies Feb 2014

LIQUEFACTION COSTS BREAKDOWN CONTINUED

Cost Breakdown by Category

- Owner’s Costs: 32%
- Engineering & Project Management: 10%
- Equipment: 30%
- Bulk Materials: 8%
- Construction: 20%

Source: Oxford Institute for Energy Studies Feb 2014
LIQUEFACTION COSTS BREAKDOWN CONTINUED

- Cost drivers for liquefaction plants
  - Project scope
  - Project complexity
  - Location (infrastructure and construction costs)
  - Equipment and materials
  - Engineering and project management
  - Contractor profit and risk
  - Owner’s costs
  - Contract strategy
  - Currency exchange risk

PROJECT SCOPE – NOT ALL DESIGNS ARE CREATED EQUAL

- Processes vary
  - Complexity: Refrigeration cycles, types of refrigerants
- Costs vary
- Designs change dynamically
  - Technical Bulletins
PROJECT SCOPE – NOT ALL PLANTS ARE CREATED EQUAL

- **Scope A** – repeat liquefaction train with minimal gas treatment. Example: Idku

![Repeat Train](image1)

- **Scope B** – Single Train Full Scope Plant. Example: EG LNG

![Single Train Plant](image2)
PROJECT SCOPE

- **Scope C** – Two Trains plus full infrastructure. Example: Tangguh

![Tangguh](image)

- **Scope D** – As Scope C plus major gas gathering and transmission facilities. Example: APLNG Curtis Island (Queensland)

![APLNG Curtis Island](image)
OTHER PROJECT COMPLEXITIES AND RISKS

- Evolving project developer’s vision and/or needs
- Changing feedstock composition (can trigger big change orders)
- Proportions of foreign and domestic content (adds costs and parties to contracts)
- Customs (not readily predictable behavior produces schedule and cost impacts)
- Labor (productivity and availability issues impact cost and schedule)
- Political risk (insurance – currency inconvertibility, expropriation, political violence)
- Exchange rates
- Commodity prices

MANAGEMENT ISSUES

- Sheer magnitude of costs elevates consequences of standard practices
  - Progress payments
  - Change orders, mega-sized
- Schedule
  - EPC structure limits accessibility to detail
  - Multiple parties complicates causation
- Limited recourse to terminate and replace parties
EPC Contracting Issues in the Oil & Gas Industry

MAIN SUPPLY CHAIN CONTRACTS

- Construction contract (EPC or other)
- Feed gas supply contracts
- O&M contracts
- Associated infrastructure contracts
- JV/SPV/Shareholders agreements
- Funding agreements
- Offtake agreements

EPC CONTRACTS: KEY FEATURES

- Standard form contracts
  - FIDIC – “Silver Book”
  - Infrastructure Conditions of Contract (formerly the ICE)
    - ICC Model Turnkey Supply of an Industrial Plant Contract
    - ICC Model Major Project Turnkey Contract
- Adapted to the project and parties’ needs
- Fully bespoke EPC contracts
EPC CONTRACTS: KEY FEATURES CONTINUED

- Key provisions
  - Identifying the risk profile and allocating risk
  - Price and payment
  - Time and delay LDs
  - Performance guarantees and performance LDs
  - Variations
  - Defects
  - Caps on liabilities

SPLIT EPC CONTRACTS

- Reasons
  - Tax effectiveness
  - Different risk profile (e.g., contractor not willing to take full EPC risk)
  - Influence of local restrictions
  - Onshore contract for construction and local procurement
  - Offshore contract for head office design, plant supply
  - Onshore and offshore contractors often part of the same corporate group
  - Need for a cooperation agreement or bridging agreement to create single point responsibility
SELECTING AN EPC CONTRACTOR

- Key criteria
  - Expertise
  - Proven track record in delivering successful LNG projects
  - Financial strength to carry the risks involved

- Key players
  - Bechtel
  - Technip
  - CB&I
  - JGC
  - Chiyoda
  - KBR
  - Foster Wheeler

- Importance of “human capital” to a project’s success – “A” Team bound into the project for duration

FEED CONTRACT ISSUES

- Use of front end engineering design (FEED) contracts in selection of EPC contractor
- Competitive bidding
  - Traditional single FEED – bids from 2-3 tenderers
  - Multiple FEEDs “design competition”
- Sole source negotiation of EPC contract
- Pros and cons of different approaches
KEY LNG EPC PROVISIONS/ISSUES

- Key milestones
- Performance guarantees
- Performance testing
- Design, Materials and Workmanship Guarantees and Defects Liability
- Interface Issues
- Liquidated damages

KEY MILESTONES

- Typical timescales

<table>
<thead>
<tr>
<th>Phase</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>1 year</td>
</tr>
<tr>
<td>Feasibility</td>
<td>2 years</td>
</tr>
<tr>
<td>Appraisal &amp; Optimisation</td>
<td>2 years</td>
</tr>
<tr>
<td>Development</td>
<td>5 years (including FE and bidding 1 year and EPC 4 years)</td>
</tr>
</tbody>
</table>

- Key milestones can include
  - Mechanical completion (plant start up)
  - Operational acceptance
  - Make LNG or First LNG Cargo
  - Final acceptance or takeover
PERFORMANCE GUARANTEE

- Performance guarantees usually fall into three broad categories
  - Output
  - Efficiency
  - Reliability

<table>
<thead>
<tr>
<th>Guarantee</th>
<th>Description</th>
<th>Testing process</th>
<th>Typical remedy/incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG Production</td>
<td>That the LNG Train will produce and process LNG in sufficient quantities (tons per hour) at an agreed rate</td>
<td>Usually a continuous test run over a period of time as a condition to Final Acceptance/Takeover</td>
<td>Will always be a condition to Takeover. Typically, the EPC contract provides for PLDs down to, say, 95% production and, potentially, bonuses above 100%. These may be payable at the election of the ProjectCo.</td>
</tr>
<tr>
<td>LNG specification</td>
<td>That the LNG Train produces LNG meeting the agreed specification</td>
<td>As above</td>
<td>Likely to be absolute (i.e. passing the test or remedying the defect is a condition to Takeover</td>
</tr>
<tr>
<td>Domestic gas production/specification</td>
<td>The contract may provide for production of gas destined for the local domestic market and provide for minimum levels of production/specification</td>
<td>As above</td>
<td>May be covered by PLDs in addition to being a condition to FC</td>
</tr>
<tr>
<td>Guarantee</td>
<td>Description</td>
<td>Testing process</td>
<td>Typical remedy/incentive</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Autoconsumption</td>
<td>That the LNG Train will consume no more fuel gas during processing than at the agreed rate</td>
<td>As above</td>
<td>May be covered by PLDs in addition to being a condition to FC</td>
</tr>
<tr>
<td>NGLs extraction</td>
<td>That the facilities for extraction and fractionation of Natural Gas Liquids shall be capable of extracting the specified minimum % of NGLs in the ‘wet’ gas</td>
<td>As above</td>
<td>May be covered by PLDs in addition to being a condition to FC</td>
</tr>
<tr>
<td>NGLs specification</td>
<td>That NGLs will be produced to meet specifications</td>
<td>As above</td>
<td>Likely to be absolute</td>
</tr>
<tr>
<td>Condensate specification</td>
<td>That condensate will be produced to meet specifications</td>
<td>As above</td>
<td>Likely to be absolute</td>
</tr>
<tr>
<td>Emissions</td>
<td>That emissions from the Facility meet specified minimum standards (e.g. World Bank guidelines for NO2, CO2)</td>
<td>Could be addressed by tests on emissions before or after Mechanical Completion or Takeover</td>
<td>Will be an absolute requirement</td>
</tr>
<tr>
<td>Loading rate</td>
<td>Loading rate for LNG and NGLs</td>
<td>The contract may provided for ship loading tests</td>
<td>May be a condition to FC</td>
</tr>
</tbody>
</table>
PERFORMANCE TESTING

- Performance testing is key to any EPC LNG contract
- Contractor usually only provides limited performance guarantee warranty
- Reasons for the tests
  - To verify compliance with the performance guarantees,
  - Project Co. will not want to take over unless the plant has been comprehensively tested; and
  - Entitlement to delay damages if the performance guarantees are not met and take over is not achieved

PERFORMANCE TESTING

- Some LNG EPC contracts are extremely prescriptive as to the nature of the tests to be carried out
- Project Co’s obligation to provide feed gas for testing: it is important that this is available and meets the specification
- “Off spec gas” can disrupt testing or in extreme cases undermine the performance guarantees
TESTING AND COMMISSIONING ISSUES

- The Facility is likely to produce LNG during the testing and commissioning period
- This means the Contractor is effectively operating the Facility (albeit not at a commercial level)
- Project Co will want some level of control during this key period, maximise number of cargoes
  - Need clear communications between Contractor and Project Co
- Contractor will want to achieve takeover as soon as possible
- Advisable for the LNG EPC contract to provide for coordination of the parties’ respective requirements

DESIGN, MATERIALS AND WORKMANSHIP GUARANTEES AND DEFECTS LIABILITY

- Guarantee of the completed works
  - Defect rectification obligation
  - “Guarantee Period” typically 12-24 months
- Period to run from mechanical completion or takeover?
- Exclusive remedy for latent defects?
- Extension of the Guarantee Period
INTERFACE ISSUES
- The EPC Contract is one of a number of contracts necessary to develop an LNG Facility
- Consistency between contracts is crucial

ADDITIONAL LNG – SPECIFIC ISSUES
- Feed gas specification issues – liability under the GSAs
- Interface between government agencies/operating company and EPC Contractor
- Change in law provisions
- Consistency of testing and commissioning regulations
- Site infrastructure provisions
LIQUIDATED DAMAGES

- Careful drafting – interaction of LD clauses with exclusive remedies provisions
- Types of LDs typically found in LNG EPC contracts
  - LDs for delay
  - LDs for low performance
- Important that these are kept separate

LIQUIDATED DAMAGES

- Performance LDS
  - For permanent under-performance, even if Facility completed on time
  - Project Co has option to accept performance LDs or insist on 100% compliance with performance guarantees
  - Avoid claims of over-compensation/penalty: e.g., need to separate LNG production and NGL extraction PLDs
OTHER TYPES OF LDS

- Local Content – incentive regime
- Key personnel

COMMON MISTAKES AND PITFALLS TO AVOID

- DNV study (2011) – 50% of recent LNG liquefaction facility projects suffered significant delays of 3-18 months
- Poorest performing projects
  - Hammerfest LNG Norway
  - Sakhalin II Russia
  - Qatargas II
  - Yemen LNG
  - Tangguh LNG Indonesia
COMMON MISTAKES AND PITFALLS TO AVOID

- Main causes of delay
  - Design issues
  - Political/regulatory issues
  - Management failings
  - Interface issues and lack of communication
  - Technology issues
  - Failure to manage the interface risks and/or lack of communication between the key project participants

SESSION PRESENTERS

MATTHEW E. SMITH
Partner
K&L Gates, London
+44.020.7360.8246
matthew.smith@klgates.com

JOHN R. CUNNINGHAM
Senior Vice President
Marsh Risk Consulting, Houston
+1.713.276.8681
john.r.cunningham@marsh.com

STEVEN C. SPARLING
Partner
K&L Gates, Washington D.C./Houston
+1.202.778.9085
steven.sparling@klgates.com
OVERVIEW OF PRESENTATION

- Introduction
- Application
- Risk Issues
- Legal Perspectives
- Insurance Issues
  - Physical Damage
  - Delay In Start-Up (DSU)
  - Third Party Liability
INTRODUCTION

- After years of growth/expansion for onshore energy construction centered near cheap sources of raw materials (Middle East, Asia, etc.), US shale activity has changed the dynamic; US construction is extremely active to support the abundance of indigenous oil and gas. Global construction insurers are aggressively chasing US opportunities.
- Insurers have added/expanded their construction underwriting teams to take advantage of the numerous construction opportunities in the US, creating pressure on rates.
- Insurance rates continue to soften and the onshore construction insurance market remains soft with little likelihood of rate increases for 2016.
INTRODUCTION

- New capacity has entered the global market while incumbent markets have increased their capacity.
- Estimated onshore market capacity (security rating of A- or better) circa US$4 billion on an EML basis.
- Additional US$1 billion of capacity is available, however, these insurers either do not carry acceptable security ratings or they participate as excess insurers only.
- Named windstorm capacity.
  - Historically, circa US$200 million.
  - Some recent placements have purchased up to US$500 million.
  - Capacity is per occurrence and aggregated for the project/policy term.

INTRODUCTION

- Cover for faulty workmanship/defective design
  - LEG 3 on oil and gas business is generally standard as technology used tends to be well proven
- More oil and gas business over the last 5 years has DSU associated to the project
- DSU limits are not causing any major issues for insurers
- Traditional "onshore" construction insurers need to address new trends in the energy industry, e.g. dockside LNG/floating LNG by covering both onshore and offshore exposures via one panel of insurers under one, contiguous policy
- Insureds should partner with insurers who can handle project delays in an equitable manner as a significant number of projects are delayed
APPLICATIONS OF MODULAR CONSTRUCTION

- Historically – offshore platforms and FPSO
- Current – Remote LNG liquefaction (Australia), Floating LNG, and now USA gas utilization projects onshore:
  - LNG (both large scale and small scale LNG)
  - Petrochemical
  - Small scale Floating LNG
  - GTL/Methanol/ Fertilisers
WHY IS MODULAR CONSTRUCTION CONSIDERED?

- Reduced project cost
- Attractive labor cost profile at shipyards or offshore fabrication yards
- Lack of Availability of Contract labor at main site
- Remoteness or difficult climate at main site
- Managing timeline
- Mitigating execution risk

TYPICAL AREAS

- Pipe rack modules – multiple applications, most common
- Utility skids and vendor packages – Air separation units etc.
- Sub Process modules – gas treatment etc.
- Process machinery modules –
- Whole process modules (onshore) – small scale LNG, fully assembled HRSGs for power-plants
- Whole process units – FPSO and FLNG offshore applications
EPC Contracting Issues in the Oil & Gas Industry
RISK ISSUES

MODULAR CONSTRUCTION RISKS

Enhanced risk
- Transportation and load out – barge transits
- Docking and jetty receipt logistics
- SPMTs
- Decentralised QA/QC
- Integration and final positioning
- Congestion at the site
  - Physical damage - higher explosion risk
  - Time Element/DSU - longer repair periods
- Increased DSU/BI
- Transport liabilities

Risk reduction
- Cost
- Schedule
- Reduced Nat Cat site construction risk (or increased risk)
- Modules are stronger than stick build
- Pre-commissioning off-site
INSURANCE RISK ANALYSIS

<table>
<thead>
<tr>
<th>Assets - project modules</th>
<th>Maximum values at yard/accumulation and transport risk accumulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project revenue/delay</td>
<td>EAR and Cargo DSU strategy</td>
</tr>
<tr>
<td>Project liabilities</td>
<td>Route risk and people risk</td>
</tr>
</tbody>
</table>

TRANSPORT OF MODULES

- Location of modular yards
- Types of modules – includes critical items, or pipe-racks etc.
- Barge transits
  - Loading/off-loading
  - Stowage
  - Barge securing
  - Tug and tow approval
- Final positioning risk
WHAT COULD GO WRONG?
NEAR-SHORE FLNG/OFFSHORE

- Issues to be managed/explored
  - Yard construction
  - Sea trial
  - FLSO transport - wet tow/dry tow
- Challenges related to tying up various aspects of construction activities
RISK MITIGATION - OCEAN BARGE TRANSITS

- Extensive research for vessel selection
- Suitability condition surveys
- Cargo size, overhang, draught restrictions
- Stowage plan and deck loadings
- Sea-fastening calculations
- Stability and ballast requirements for RORO
- Passage planning and reporting
- Load and discharge surveys conducted by warranty surveyor
- Strict controls
INLAND TRANSIT - TRAILER TRANSPORTATION RISK MITIGATION

- Specialist Multi Axle Hydraulic trailers or Self Propelled Modular Transporter (SPMT)
- Loading details and trailer configuration
- Hydraulic pooling (cross flow/stability)
- Stability calculations
- Trailer strength/bending moment calculations
- Securing details and calculations
- Inland route survey
- Temporary lay down requirements
- Offload arrangements
LEGAL PERSPECTIVES

- Applicable Law
- Risk of Loss
- Insurance Apportionment
- Additional Insured Issues
- Case Examples
APPLICABLE LAW

Which law applies?

- U.S. state and federal law, Outer Continental Shelf Lands Act (OCSLA), admiralty/maritime law
- Complexities raised by off-shore projects
- U.S. – potential applicability of Uniform Commercial Code (UCC), depending on characterization of “goods” versus “services”

RISK OF LOSS

Potential claims:

- Products liability
- Breach of contract
- Negligence
- Professional negligence
- Subrogation

Driven by the contractual indemnities between the parties

Possible shifting of risks from the builder/developer to the module fabricator
RISK OF LOSS

Module Fabricator → I N S U R A N C E
Barge Operator/Owner →
Crane Manufacturer →
Contractor →
Owner/Developer →

INSURANCE APPORTIONMENT

- One loss could potentially implicate several policies of several persons.
- Traditional insurance policies:
  - Builder’s risk
  - Professional liability
  - Commercial general liability
  - Pollution liability/time element coverage
  - Loss of Production Income/Business Interruption
  - OCIP/CCIP
**BUILDER’S RISK**

- Form of property insurance. Focused on covering risks at the project site.
- May (by endorsement) extend to:
  - material stored on site; and
  - material in transit.
- May not cover damage to modules while at the fabricator’s facility.

**PROFESSIONAL LIABILITY**

- Needed where design elements are present.
- Claims may be more expensive.
- Smaller tolerance for errors. Heightened requirement for precise design.
- Modules and component parts are already fixed.

**COMMERCIAL GENERAL LIABILITY**

- “Property damage”
- “Your product” and “your work” exclusions
ADDITIONAL INSURED COVERAGE

- Multiple Parties Often Involved
  - Operator/Developer
  - Contractor
  - Manufacturer/Fabricator of modules
  - Equipment manufacturer
  - Vessel owner/operator

- Indemnification Provisions
  - Knock-for-knock

- Insurance Provisions

---

ADDITIONAL INSURED COVERAGE

- Most general liability policies include a blanket “additional insured” endorsement that defines “Insured” to include:

  All persons or organizations that you agree in a written contract for insurance to add as additional protected persons only for covered bodily injury or property damage that results from [arises out of] your work, to which the written contract for insurance applies, for any of those persons or organizations.
LESSONS FROM CASE LAW

- *Texaco Exploration & Prod., Inc. v. AmClyde Engineered Products Co.*, 448 F.3d 760 (5th Cir. 2006) amended on reh’g, 453 F.3d 652 (5th Cir. 2006)
  - Choice of law
  - Builder’s risk coverage
  - Additional insured issues

FACTS

- US$400 million deepwater drilling and production project for the development of approximately 80 to 100 million barrels of oil equivalent.
- Construction of the project included the making of several deck modules, which were prefabricated off-site.
- North Deck Module successfully transported and installed.
- Crane line failure caused the deck section that was suspended (the South Deck Module) to fall into the Gulf of Mexico.
PLAYERS

- Texaco/Marathon Oil Company ("Texaco") = lessees of offshore federal lease on the Outer Continental Shelf
- McDermott = engineering design, drafting, fabrication, installation and construction of tower platform and components; chartered and operated DB-50 barge
- JRMIV = owner of DB-50 barge
- AmClyde = successor to manufacturer of crane
- Underwriters = issued builder’s risk policy (Texaco as principal, named insured)

CONSOLIDATED LAWSUITS

- **Product liability/negligence action:** Texaco sues AmClyde for losses arising from the crane failure.

- **Subrogation action:** Underwriters sues AmClyde, JRMIV, and the DB-50 *in rem* seeking subrogation for amounts paid to Texaco under builder’s risk policy.
**Texaco**
*(Subject Matter Jurisdiction)*

- Outer Continental Shelf Lands Act ("OCSLA"), federal subject matter jurisdiction, was properly invoked.
- Admiralty jurisdiction was **not** properly invoked.
  - (1) location
    - must occur on navigable water
  - (2) connection with maritime activity
    - (i) potential to disrupt maritime commerce; and
    - (ii) activity giving rise to the incident shows a substantial relationship to traditional maritime activity.


---

**Texaco**
*(Subject Matter Jurisdiction)*

- "Texaco’s complaint . . . arises not from traditionally maritime activities but from the development of the resources of the Outer Continental Shelf . . . To the extent that maritime activities surround the construction work underlying the complaint, any connection to maritime law is eclipsed by the construction’s connection to the development of the Outer Continental Shelf."

- "[T]he relationship of the alleged wrong to traditional maritime activity is insufficient to permit the application of maritime law."
EPC Contracting Issues in the Oil & Gas Industry

**Texaco (Choice of Law)**

- OCSLA’s choice of law provision (43 U.S.C. § 1333) determined applicable law.
- Substantive law applicable is the law of the adjacent state. 43 U.S.C. § 1333(a)(2)(A); *Union Texas Petroleum Corp. v. PLT Engineering, Inc.*, 895 F.2d 1043 (5th Cir. 1990).
- OCSLA does not permit the application of substantive maritime law, even though the parties’ contract contained a choice of law provision identifying the General Maritime Law of the United States as the applicable law.
  - “[U]nder OCSLA, the Contract’s choice of law provision is of no moment because the parties’ choice of law will not trump the choice of laws scheme provided by Congress.”

**Texaco (Additional Insured Issues)**

- Underwriters’ subrogation action
- **Issue**: were AmClyde and JRMIV “Other Assured[s]” entitled to waiver of subrogation?
- “other assured” provision:
  
  “... and/or other contractors and/or sub-contractors and/or suppliers and any other company, firm, person or party with whom the Assured(s) in (1), (2) or (3) of this Clause have, or in the past had, entered into written agreement(s) in connection with the subject matters of Insurance, and/or any works, activities, preparations etc. connected therewith.”
Texaco
(Additional Insured Issues)

- (1) AmClyde is an "Other Assured" under the builder's risk policy; and
- (2) JRMIV is an "Other Assured" under the builder's risk policy.

Therefore, Underwriters could not proceed in subrogation against AmClyde or JRMIV.

- "Under the unambiguous language of the Builder's Risk Policy, a contractor or subcontractor may be an other assured, irrespective of the written agreement qualification."
- "The policy provides for waiver of subrogation against any assured and any entity or person ‘whose interests are covered by this Policy.’"


- 11 Fatalities
- Millions of Barrels of Crude Oil Released into Gulf of Mexico
- Thousands of lawsuits filed against BP, Transocean and other companies involved
In re Deepwater Horizon

- BP: Self-Insured
- Transocean: $750 million liability program
- BP seeks coverage under Transocean policies as additional insured
- Transocean’s insurers file declaratory judgment action against BP

In re Deepwater Horizon

- Drilling Contract provided that Transocean would be responsible for pollution originating on or above the surface of the water, while BP would be responsible for subsurface pollution.
- Drilling Contract also required Transocean to maintain certain specified insurance coverage and stated:

  [BP], its subsidiaries and affiliated companies, co-owners, and joint venturers, if any, and their employees, officers and agents shall be named as additional insureds in each of [Transocean’s] policies, except Workers’ Compensation[,] for liabilities assumed by [Transocean] under the terms of this Contract.
**In re Deepwater Horizon**

- Transocean’s policies define “Insured” to include:
  
  *Any person or entity to whom the “Insured” is obliged by oral or written “Insured Contract” entered into before any relevant “Occurrence”, to provide insurance such as is afforded by this Policy.*

- The policies define “Insured Contract” as follows:
  
  *The words “Insured Contract” shall mean any written or oral contract or agreement entered into by the “Insured” and pertaining to business under which the “Insured” assumes the tort liability of another party to pay for “Bodily Injury”, “Property Damage”, “Personal Injury”, or “Advertising Injury” to a “Third Party” or organization.*

---

**In re Deepwater Horizon**

- Key Issue: Is “Additional Insured” coverage limited by language in Drilling Contract?

- District Court: “Yes”

- Fifth Circuit: “No”

- Fifth Circuit: “On second thought, let’s ask the Texas Supreme Court.”

- Texas Supreme Court: “Yes”
**In re Deepwater Horizon**

1. Transocean insurance policies include language that necessitates consulting the Drilling Contract to determine BP’s status as an “additional insured.”

2. BP’s status as an additional insured is limited to the liabilities Transocean assumed in the drilling contract.

3. BP is not entitled to coverage under the Transocean insurance policies for damages arising from subsurface pollution because BP, not Transocean, assumed liability for such claims.

**KEY TAKEAWAYS**

1. Do not assume your contractual choice of law provision applies.

2. Know the risk of loss at all stages, and make sure you have adequate coverage.

3. Understand your additional insured status and how the language of your contract may limit additional insured status.
INSURANCE ISSUES

DOVETAILED CARGO AND ONSHORE CONSTRUCTION INSURANCE STRATEGY

Proposed Insurance Scheme

<table>
<thead>
<tr>
<th>Project Equipment Cargo to yards</th>
<th>Modular fabrication yards inc precommissioning</th>
<th>Modular Transportation</th>
<th>Construction and commissioning</th>
<th>12 months maintenance per section</th>
</tr>
</thead>
</table>

Project Third Party Liability

<table>
<thead>
<tr>
<th>Project Cargo policy</th>
<th>Construction All Risks inc Primary TPL</th>
<th>Excess Third Party Liability in Jurisdiction dropped</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 250M</td>
<td>USD 600M</td>
<td>USD 50M</td>
</tr>
</tbody>
</table>

Notes:
- Inc module transportation to site set down
- Phased handover - Train 2 gas, Rig, Water treatment
- Inc Cargo Legal Liability
EPC Contracting Issues in the Oil & Gas Industry

ONSHORE PROJECTS
- MODULE FABRICATION YARD INSURANCE

- Covered by offsite fabrication clause in main CAR/DSU policy
- Declaration issue
- Jurisdiction and Compliance
- May be sub limited in value?
- Handover/Hand back point to cargo – cargo policy will typically take transportation risk from yard load out to final destination at site
- DSU indemnity period should take into account extra time for module construction if any versus stick build

OFFSHORE PROJECTS – WELCAR FORM

PHYSICAL DAMAGE
- Procurement Transits and Intermediate Storage Risks
- Construction at onshore fabrication yards
- Transportation to Offshore Site
- Installation at Offshore site, Hook-up and Commissioning
- Physical loss / damage resulting from faulty design, material or workmanship – excluding the faulty part itself (available in addition)
- War & Terrorism – but War restricted to offshore transits
- Deliberate damage due to pollution hazards
- Removal of Wreck / Debris
- Sue & Labour expenses
- General Average and Salvage Charges

THIRD PARTY LIABILITIES
- Third Party Exposures– Loss of or damage to third parties onshore and offshore – property damage, bodily injury / death, pollution, loss of use and business interruption
- Legal & Contractual Liability to third parties onshore / offshore for:
  - bodily injury / death
  - property damage
  - loss of use
  - business interruption
  - Pollution
- Limit of Indemnity – per occurrence limits as may be agreed

COVERAGE EXTENSIONS
- Offshore Cancellation Costs
- Stand-by charges
- Expediting expenses
- Forwarding charges
- Test, Leak and Damage search
- Evacuation expenses
- Defective Part Buy-Back
- Liabilities - Damage to Existing Property; Loss / damage to existing structures at sites
MODULAR TRANSPORTATION – LIABILITY INSURANCE

- Cargo Owners Legal Liability
- Charters Legal Liability
DOVETAIL CLAUSES – CARGO POLICY

- 50/50 Clause – Deductible & Limits
- Final Positioning – Termination of Transit & CAR Policy Wording
- Storage Wording – Number of Days
OTHER INSURANCE ISSUES

- Cargo
  - Loss Control Warranty – Paramount Condition
  - Piracy
  - Terrorism
  - War

- CAR
  - Terrorism Excluded (Exception WELCAR Wording)
  - War Excluded (WELCAR May Not Exclude for Transit)
  - SRCC Mostly Included
  - Sub-Limits for CAT Exposure

SESSION PRESENTERS

KEVIN SPARKS
Managing Director
Marsh, Houston
+1.713.276.8760
kevin.sparks@marsh.com

ALI RIZVI
Senior Vice President
Marsh, Houston
+1.713.276.8646
ali.rizvi@marsh.com

PAUL T. NICHOLSON
Managing Director
Marsh, London
+44 (0) 207.357.5579
paul.t.nicholson@marsh.com

JACQUELYN S. CELENDER
Associate
K&L Gates, Pittsburgh
+1.412.355.8078
jackie.celender@klgates.com
EPC Contracting Issues in the Oil & Gas Industry

INDUSTRY ROUNDTABLE REVIEW

Richard Pettigrew, ExxonMobil Development Company
Manny Walters, Phillips 66 Company
Shane P. Willoughby, CB&I
Stephen R. Sanford, Fluor Corporation
Barbara Thompson, Aker Solutions Inc.

Moderated by John F. Sullivan III, K&L Gates
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Austin, Texas

2015 Oil & Gas Law Update

John F. Sullivan III
Devin Wagner
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INTRODUCTION

The authors have chosen to address and opine on four topics that Texas oil and gas industry participants, legislators, special interest groups and legal commentators have spent much of the last year analyzing and debating. They hope this content will provide the reader with a basic understanding of some of the most controversial and widely discussed legal issues currently affecting Texas’ most important industry, and how litigation is shaping those issues. The authors have not endeavored to conduct a survey and address all court decisions and legislative actions affecting the Texas oil and gas industry over the previous calendar year, as such a global summary is beyond the scope of this presentation. The topics of interest the authors address are: 1) deduction of postproduction expenses from oil and gas royalty interests, 2) state legislative action to preempt local government bans on hydraulic fracturing projects, 3) subsurface trespass upon the mineral estate, and 4) inducement of seismic activity or earthquakes by injection wells.
CHESAPEAKE V. HYDER: ADDING CLARITY OR CONFUSION TO THE DEDUCTIBILITY OF POSTPRODUCTION COSTS?

In a 5-4 decision released last June, the Texas Supreme Court in Chesapeake Exploration, L.L.C. v. Hyder, held that an oil and gas lessee is prohibited from deducting postproduction costs from an “overriding royalty interest” described in a lease. The majority noted that while overriding royalty interests are generally subject to postproduction costs, the language used in the lease creating the overriding royalty shifted the burden of paying these costs to the lessee alone. The court’s decision, widely anticipated by the oil and gas industry, has been celebrated by lessors and mineral interest owners. But for oil and gas companies, their shareholders and employees, the Hyder opinion injects additional uncertainty and confusion into an industry forecast that is already unclear.

1. Background: Postproduction Costs under Texas Law

Under Texas law, an overriding royalty on oil and gas production is free of production costs but must bear its share of postproduction costs unless the parties agree otherwise. “Whatever costs are incurred after production of the gas or minerals are normally proportionately borne by both the operator and the royalty interest owners.” The Texas Supreme Court’s decision in Heritage Resources, Inc. v. NationsBank is recognized as the preeminent authority applying this rule.

The court in Heritage Resources examined whether certain postproduction costs were properly borne by the operator alone or shared proportionately with the royalty owner. In concluding that royalty owners must share the costs, the court narrowed its focus on two provisions in the underlying lease: (1) the point of valuation of the royalty interest (at the well); and (2) the express requirement that “there shall be no deductions from the value of the Lessor’s royalty by reason of” postproduction costs. “Applying the trade meaning of royalty and market value at the well,” the court held that the restriction against deducting postproduction costs was surplusage as a matter of law. The court reasoned that the value of gas “at the well” represents its value in the marketplace at any given point of sale, less the reasonable cost to get the gas to that point.


4 939 S.W.2d 118, 121–22 (Tex. 1996).

5 See id. at 121-23.

6 Id. at 121.
of sale, including compression, transportation, and processing costs. In other words, the calculation of “market value at the well” necessarily includes subtracting the postproduction costs required to prepare the gas for market. Once these costs are netted back from the market price, there are no additional postproduction expenses left to deduct from the value of gas “at the well.” As a matter of logic, therefore, there can be no meaning to language that prohibits the deduction of “postproduction costs” from royalties valued “at the well.” The royalty is already net of these expenses. Upon explaining this rationale, the court in Heritage Resources held the proviso at issue added nothing to the royalty clause and did not prevent the lessee from deducting postproduction costs when calculating the lessor’s royalty payments.

2. The Dispute in Chesapeake v. Hyder

With its decision in Hyder, the Supreme Court attempted to clarify when and how oil and gas leases can exempt postproduction costs from overriding royalty interests. The royalty owners in Hyder sued Chesapeake Exploration, LLC (“Chesapeake”), alleging that the company breached an oil and gas lease by deducting postproduction costs from their overriding royalty payments. The parties’ lease contained three royalty provisions, but only one was in dispute. The contested clause granted the Hyders a “cost-free (except only its portion of production taxes) overriding royalty of five percent (5.0%) of gross production obtained” from the lease. The Hyders argued that “cost-free” could only refer to postproduction costs because the royalty is by its nature free of production costs without any language stating as much. Chesapeake, on the other hand, argued that “cost-free overriding royalty” simply referred to the default principle that royalty interests do not incur production costs. Following a bench trial, the trial court awarded the Hyders more than $570,000 in postproduction costs Chesapeake withheld from their overriding royalty payments. The San Antonio Court of Appeals affirmed the decision and Chesapeake appealed.

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7 Id. at 122.
8 See id.
9 See id. at 122-23.
10 2015 WL 3653446 at *1.
11 Id.
12 Id. at *3.
13 Id.
14 Id. at *2.
a. **The court’s holding and analysis.**

In a convoluted (if not confounding) analysis, the court independently examined both parties’ interpretations of the overriding royalty provision. As for the Hyders’ position, the court disagreed that “cost-free” could not refer to production costs because “drafters frequently specify that an overriding royalty does not bear production costs even though an overriding royalty is already free of” such costs. However, the court also rejected Chesapeake’s contention that “cost-free overriding royalty” is merely a synonym for overriding royalty interest. Pointing to the clause’s “exception for production taxes, which are postproduction expenses,” the court explained that “[i]t would make no sense to state that the royalty is free of production costs, except for postproduction taxes (no dogs allowed, except for cats).” But the court also noted that a “taxes exception to freedom from production costs is not uncommon in leases.” Seemingly struggling with converging arguments of equal force, the court—without explanation—placed the burden on Chesapeake to show that the overriding royalty’s cost-free language “cannot refer to postproduction costs.”

Chesapeake presented two points to satisfy its burden. It first argued that because the overriding royalty was paid on “gross production,” the royalty should be valued at the wellhead before postproduction costs are ever incurred. Disagreeing, the court expressed its view that “gross production” only described the amount of production for which payment was due. And “specifying that the volume on which a royalty is due must be determined at the wellhead says nothing about whether the overriding royalty must bear postproduction costs.”

Chesapeake’s second point relied on language found in another royalty provision contained in the lease. In addition to the overriding royalty clause, the lease granted a royalty for 25% “of the price actually received by [Chesapeake]” for gas sold to an affiliate entity (“Gas Royalty”). The parties made the Gas Royalty “free and clear of all
production and post-production costs and expenses.”\(^{23}\) According to Chesapeake, this language showed that when the parties wanted a postproduction-cost-free royalty, they used concise, specific statements to express their intent.\(^{24}\)

Not persuaded, the court explained that the Gas Royalty “does not bear postproduction costs because it is based on the price Chesapeake actually receives for the gas through its affiliate.”\(^{25}\) Describing the Gas Royalty as a “proceeds lease,” the court added that “the price-received basis for payment is sufficient in itself to excuse the lessors from bearing postproduction costs.”\(^{26}\) Therefore, the court held that the Gas Royalty language forbidding the deduction of postproduction costs only emphasized the royalty’s “cost-free nature.”\(^{27}\) In other words, the restriction was simply surplusage.

Having rejected both of Chesapeake’s primary arguments, the court determined that Chesapeake failed to satisfy its burden to show that the “cost-free” language used in the overriding royalty clause could not refer to postproduction costs.\(^{28}\) Thus, the court affirmed the decision to award the Hyders more than $570,000 in postproduction costs that Chesapeake had previously withheld.\(^{29}\)

b. **Noteworthy dicta**

1. *Different valuations may apply when royalties are taken “in kind” instead of “in cash.”*

In what appears to be *dicta*, the court addressed a clause in the lease providing that “each Lessor has the continuing right and option to take its royalty share in kind.”\(^{30}\) Chesapeake noted that had the Hyders taken their overriding royalty in kind instead of in cash, they would have incurred some form of postproduction costs before they could market the raw minerals for a subsequent sale.\(^{31}\) However, the majority

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\(^{23}\) *Id.*

\(^{24}\) *Id.* at *4.*

\(^{25}\) *Id.* at *2* (emphasis added).

\(^{26}\) *Id.*

\(^{27}\) *Id.* at *4.*

\(^{28}\) *Id.*

\(^{29}\) *Id.*

\(^{30}\) *Id.* at *1.*

\(^{31}\) See *id.* at *4.*
explained that the Hyders were not required to take their royalty in kind, and concluded that “[t]he fact that the Hyders might or might not be subject to postproduction costs by taking the gas in kind does not suggest that they must be subject to those costs when the royalty is paid in cash.” As discussed infra, readers might construe this statement to hold that a royalty based on “gross production” can have a different value depending on whether the lessor elects to take that royalty in the form of a cash payment, rather than an in kind share of production.

2. The court clarifies the import of Heritage Resources.

After announcing its holding and supporting rationale, the court examined yet another provision in the underlying lease. This clause purported to disclaim the Heritage Resources opinion, stating that “Lessors and Lessee agree that the holding in the case of Heritage Resources, Inc. v. NationsBank, 939 S.W.2d 118 (Tex. 1996) shall have no application to the terms and provisions of this lease.” In the Hyders’ view, the Heritage Resources disclaimer further revealed the parties’ intent to free the overriding royalty from postproduction costs. The court disagreed, reasoning that:

Heritage Resources does not suggest, much less hold, that a royalty cannot be made free of postproduction costs. Heritage Resources holds only that the effect of a lease is governed by a fair reading of its text. A disclaimer of that holding, like the one in this case, cannot free a royalty of postproduction costs when the text of the lease itself does not do so. Here, the lease text clearly frees the gas royalty of postproduction costs, and reasonably interpreted, we conclude, does the same for the overriding royalty. The disclaimer of Heritage Resources’ holding does not influence our conclusion.

The court’s discussion of Heritage Resources is perhaps the least controversial portion of the Hyder opinion. Lessors are well-advised to note that disclaimers of Heritage Resources alone are insufficient to free royalty interests from postproduction costs.

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32 Id.
33 Id.
34 Id. at *5.
3. What’s the Big Deal?

The decision in Hyder has been met with much consternation in the oil and gas industry. The most widely discussed concerns involve (1) the court’s opinion that “gross production” as used in the overriding royalty clause is purely a volumetric reference and not a reference to the manner in which the royalty must be valued; and (2) the court’s assessment of the amount “actually received” by Chesapeake under the Gas Royalty’s “proceeds lease.” These issues are thoroughly discussed in Chesapeake’s motion for rehearing and the amicus briefs filed by industry leaders. Some of the salient points are discussed below.

a. Gross production refers to production at the well.

The oil and gas industry contends the Hyder court failed to recognize that an overriding royalty paid on “gross production” is the same as a royalty paid “on the value of the minerals at the well.” Royalties based on the value of minerals “at the well” are calculated by deducting the lessee’s postproduction costs in order to “net back” to the value of minerals at the well.\(^{35}\) Accordingly, if a royalty paid on “gross production” means a royalty valued “at the well,” then Chesapeake was entitled to deduct its postproduction costs from the Hyders’ overriding royalty payments. Because value “at the well” necessarily excludes postproduction costs, a provision barring the deduction of postproduction costs is meaningless as a matter of law.\(^{36}\)

The industry’s position primarily relies on the court’s ambiguous—and frankly, incomplete—discussion of the “in kind” royalty payment permitted by the lease. A royalty is paid “in kind” when the lessor takes possession of his proportionate share of production before the minerals are marketed for sale.\(^{37}\) Consequently, a royalty based on “gross production” that is taken “in kind” is necessarily taken before postproduction costs are invested to make the gas marketable. With this understanding seemingly in mind, the Hyder court recognized that had the lessors elected to take their royalty in kind—instead of in cash—the valuation would occur at the well, or before any postproduction costs are incurred.\(^{38}\)

The industry uses the court’s observation to support its overarching point: “[b]ecause the overriding royalty, if taken in kind at the well, equals five percent of

\(^{35}\) French v. Occidental Permian Ltd., 440 S.W.3d 1, 3 (Tex. 2014).

\(^{36}\) Heritage Resources, 939 S.W.2d at 122.


\(^{38}\) Hyder, 2015 WL 3653446 at *4 (noting that the “Hyders might or might not incur postproduction costs” by taking their royalty in kind instead of in cash).
gross production, then the overriding royalty, if taken in cash, must also equal five percent of gross production at the well.” The Hyder court took the opposite approach, stating “[t]he fact that the Hyders might or might not incur postproduction costs by taking the gas in kind does not suggest that they must be subject to those costs when the royalty is paid in cash.” The industry complains the court’s pronouncement ignores the longstanding rule that in kind royalties based on a percentage at the well “necessarily have the same value[s] as the cash royalties.” Notably, there is case law suggesting that when a royalty owner takes an in kind royalty in cash, he is entitled to receive only the monetary equivalent of the in kind payment. This would seem to support the industry’s contention that the value of the Hyders’ overriding royalty should not fluctuate depending on whether it is take in kind or in cash.

In urging the court to grant Chesapeake’s motion for rehearing, the industry predicts that a flurry of new litigation is likely to follow the court’s decision, to the detriment of shareholders and employees of oil and gas companies. “Relying on this Court’s opinion,” the industry warns, “lessors who previously took their royalty in kind will have a motivation to take their royalty as cash in an attempt to burden their lessee with all the post-production costs.” In addition, “lessors who have already taken their royalty in the form of a cash payment will be incentivized to file lawsuits alleging underpayments due to post-production costs.”

b. Confusion concerning the meaning of “proceeds leases.”

The industry’s second concern involves the court’s statements in *dicta* relating to the deduction of postproduction costs from a “proceeds lease.” Before addressing the disputed overriding royalty clause, the court examined the provision granting the Hyders’ Gas Royalty, described it as a “proceeds lease,” and held that the Gas Royalty “does not bear postproduction costs because it is based on the price Chesapeake actually receives for the gas through its affiliate, [Chesapeake Energy] Marketing, after postproduction costs.”

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39 Brief of *Amicus Curiae* Texas Oil & Gas Association, at 8 (emphasis included).


41 Brief of *Amicus Curiae* Texas Oil & Gas Association, at 11.

42 See, *e.g.*, *Martin v. Glass*, 571 F. Supp. 1406, 1410 (N.D. Tex. 1983), aff’d, 736 F.2d 1524 (5th Cir. 1984); *Wilson v. United Tex. Transmission Co.*, 797 S.W.2d 231, 233 (Tex. App.—Corpus Christi 1990, no pet.) (royalty owner receiving his royalty “in kind” is entitled to a share of the oil or gas as produced whereas a royalty owner receiving his royalty “in money” is entitled to cash for the value or market price of his share of the product).

43 Brief of *Amicus Curiae* Texas Oil & Gas Association, at 22-23 (emphasis added).

44 *Id.*

costs have been paid.\textsuperscript{45} The court’s statements are problematic because they imply that when a lessee under a proceeds lease sells at the wellhead to its affiliate, royalty payments must be based on the gross proceeds the affiliate receives on its downstream sales, rather than on the proceeds actually received by the lessee.

Under a traditional “proceeds” lease, royalties are paid based on the amounts actually received by the lessee in a sale of oil or gas.\textsuperscript{46} The price negotiated by the lessee is the price on which proceeds are based. This is true without regard to the proceeds a third-party buyer receives in transactions downstream. For example, when a lessee completes a sale of gas at the wellhead, the proceeds of that sale are used to calculate the royalty under a “proceeds” lease, not the proceeds the buyer receives when it later sells the gas at a downstream market. The industry contends the court’s decision uproots this scheme by shifting the point of valuation in a proceeds lease from the place the lessee completes the sale to the later location at which its buyer transacts with third-parties.

As indicated in the quote above, Chesapeake sold all the gas produced on the lease to its affiliate, Chesapeake Energy Marketing (“Marketing”).\textsuperscript{47} The parties did not dispute, and the court recognized, that Marketing paid Chesapeake a wellhead price based on a formula.\textsuperscript{48} More specifically, Marketing paid Chesapeake a weighted average sales price (derived from downstream sales to third-parties), less Marketing’s costs for gathering and transporting the gas, which were reflected by a three percent marketing fee.\textsuperscript{49} In other words, the price Marketing paid to Chesapeake, i.e., the proceeds it received, totaled ninety-seven percent of Marketing’s weighted average resale price adjusted for its costs in gathering and transporting the gas.

The industry argues the court’s opinion erroneously implies that the “actual price received” by Chesapeake was not the wellhead price paid by Marketing, but rather the resale price paid to Marketing in transactions downstream.\textsuperscript{50} When comparing the overriding royalty clause with the lease’s Gas Royalty clause, the court noted the latter interest “does not bear postproduction costs . . . because the amount is based on the price actually received by [Chesapeake], not the market value at the well.”\textsuperscript{51} But the price

\textsuperscript{45} Hyder, 2015 WL 3653446 at * 2.


\textsuperscript{47} Id.

\textsuperscript{48} Id.

\textsuperscript{49} Id. at n. 7.

\textsuperscript{50} Brief of Amicus Curiae BP America Production et al. at 3.

\textsuperscript{51} Hyder, 2015 WL 3653446 at *4.
actually received by Chesapeake was based at the wellhead; and is therefore net of Marketing’s postproduction costs as well its downstream profit. The industry argues the court’s conclusion improperly conflates the “price actually received” by Chesapeake with the price actually received by Marketing in a way that suggests a lessee must pay royalties on its buyer’s proceeds instead of its own. This would naturally result in royalty owners receiving more than what they are entitled to under the traditional proceeds lease formula.

To redress this confusion, the industry requests that the court modify its opinion to include two crucial details it failed to address: (1) the Gas Royalty clause prohibited Chesapeake from performing affiliate sales without the Hyders’ consent; and (2) the Gas Royalty clause prohibited Chesapeake from deducting postproduction costs prior to the delivery or sale to an unaffiliated third-party. In light of these restrictions, the lower courts held that Chesapeake could not deduct any postproduction costs incurred prior to the sale of gas downstream to a third-party (which necessarily occurred after it sold the gas to Marketing). Chesapeake did not dispute this finding. But in its motion for rehearing, it argues that “[i]f it were not for the special lease language purportedly prohibiting post-production costs between the wellhead and lessee’s point of delivery or sale to a third-party, the Hyders would have no basis to argue that royalty should not be computed based on proceeds received by” Chesapeake at the point of sale at the well. Therefore, Chesapeake and the industry have jointly requested the court to clarify that the price received on sales to affiliates may, absent contrary language in the lease, constitute proceeds for purposes of a proceeds royalty clause.

52 Brief of Amicus Curiae BP America Production et al. at 3-4.

53 Brief of Amicus Curiae Texas Oil & Gas Association, at 20.

54 Id.

55 Chesapeake’s Motion for Rehearing, at 18.
TEXAS OUTLAWS LOCAL FRACKING BANS

1. The Denton Fracking Ban and House Bill 40

Last November the City of Denton passed an ordinance banning hydraulic fracturing operations within the city’s limits. Citing concerns about water and air pollution, and the possibility that fracking causes earthquakes, voters elected to ban fracking by a margin of 59 to 41. The city’s decision, unprecedented in the state of Texas, launched a national debate concerning the appropriate balance between community health, local control, and the protection of mineral interest rights.

In the immediate hours following the vote, the Texas Oil and Gas Association (“TXOGA”) and the Texas General Land Office (“Land Office”) filed petitions for temporary injunctions against the City of Denton, alleging the ordinance exceeded the limited authority of home-rule cities and impermissibly intruded on the authority of several state agencies, including the Texas Railroad Commission. Shortly thereafter, the Texas Legislature moved to outlaw the ban. In April 2015, it passed House Bill 40, which grants the state exclusive jurisdiction over oil and gas regulation and generally preempts local ordinances related to oil and gas operations. Signed by Governor Abbott in May, the newly enacted code section, Natural Resources Code § 81.0523, provides that “an oil and gas operation is subject to the exclusive jurisdiction of this state,” and that in most cases, “the authority of a municipality or other political subdivision to regulate an oil and gas operation is expressly preempted.” The bill does not preempt all local regulations of oil and gas operations. Municipalities may still enact, amend or enforce ordinances that regulate surface activity incident to oil and gas operations, so long as the regulation is "commercially reasonable," does not effectively prohibit an oil and gas operation and is not otherwise preempted.

After waiting a couple weeks to consider its options, the Denton City Council voted to repeal the ban in hopes of reducing legal costs, a day after the TXOGA and the Land Office amended their lawsuits in the wake of House Bill 40’s passing. The claims have since been dismissed.


58 TEX. NAT. RES. CODE ANN. §81.0523(b)-(c).

59 Id.

2. **Supporters and Critics of House Bill 40 Remain Sharply Divided**

Supporters argue that House Bill 40 ensures that Texas avoids a “patchwork quilt of regulations that differ from region to region, differ from county to county or city to city.”

Upon signing the bill, Governor Abbott said the new law “strikes a meaningful and correct balance between local control and preserving the state’s authority to ensure that regulations are even-handed and do not hamper job creation.” Similarly, the Texas Oil and Gas Association praised the measure “as balanced legislation that will build upon a 100-year history of cooperation between Texans, their communities and oil and natural gas operators.”

But opponents claim House Bill 40 ignores the state’s tradition of respecting local control, while protecting the oil and gas industry to the detriment of community health. “HB 40 was written by the oil and gas industry, for the oil and gas industry, to prevent voters from holding the oil and gas industry accountable for its impacts,” said one leader from an environmental law group. In condemning the bill, a leading environmental lawyer argued that “[t]he Texas courts have upheld a long tradition of local control, so the Governor and the Legislature took matters into their own hands. Now, they have capitulated to the greedy but powerful oil and gas industry at the expense of their own constituents’ health, well-being, and property rights.”

Critics have also latched onto the bill’s “commercially reasonable” language, which is defined as a regulation that allows a "reasonably prudent operator" to operate. “As it is currently written, it would be a gold mine for lawyers,” said Rep. Sylvester Turner, a Democrat from Houston, adding that “commercially reasonable” standards for oil and gas ordinances would be a “legal haven” for lawyers to challenge.

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61 Anna Driver and Terry Wade, *Texas governor signs law to prohibit local oil well fracking bans*, Reuters (May 18, 2015), http://www.reuters.com/article/2015/05/18/fracking-texas-idUSL1N0Y922Q20150518.


63 Id.


65 Id.

66 TEX. NAT. RES. CODE ANN. §81.0523(a)(1).

3. Other States Weigh-In

The debate over fracking bans has spilled into a number of states. In February the Ohio Supreme Court ruled that the state has “exclusive authority” over fracking bans, and in January a federal judge in New Mexico overturned one of the nation’s earliest fracking bans, imposed in 2013. In response to conflicting appellate court opinions, the Colorado Supreme Court announced last month that it too will decide whether local fracking bans are preempted by state law.

On the legislative front, Oklahoma recently enacted a bill similar in substance to House Bill 40. Like its Texas analogue, Senate Bill 809 prohibits local fracking bans but allows municipalities to enforce “reasonable” surface regulations relating to oil and gas operations. Oklahoma joins Texas as the only two states to adopt legislation prohibiting the bans.

On the other end of the spectrum, several states have banned fracking altogether, with Vermont being the first in 2012, followed by New York and Maryland earlier this year. New Jersey passed a temporary moratorium on fracking in 2011, but it has not been renewed. In California, cities such as Beverly Hills and Oakland have enacted local fracking bans, but Governor Jerry Brown has resisted calls for a permanent end to fracking in the Golden State.

As the debate over fracking bans wages on, no clear consensus has emerged. States boasting rich shale deposits are more likely to ward off efforts designed to disrupt fracking operations. Conversely, jurisdictions less dependent on the energy

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68 State ex rel. Morrison v. Beck Energy Corp, 143 Ohio St.3d 271 (Ohio 2015).


sector are more likely to proscribe fracking based on the reported harms it allegedly inflicts.
TEXAS SUPREME COURT DECLINES TO SETTLE SUBSURFACE TRESPASS DEBATE

The fracking boom has sparked renewed interest in landowner subsurface property rights. At the center of much debate and litigation is whether fracking projects can, or should, lead to actionable subsurface trespass claims. Not only do fracture treatments extend across property boundaries, but millions of gallons of wastewater containing salt and chemicals are often disposed of by being injected deep underground. No one disputes that these materials can and do migrate across lease lines. But the legal consequences of subsurface fluid migration (including the viability of subsurface trespass claims) remain unclear. Landowners and energy companies expected a final resolution when the Texas Supreme Court released its opinion in *FPL Farming Ltd. v. Environmental Processing Systems* last June. Unfortunately, however, the court avoided subsurface trespass altogether, opting instead to decide the case on a narrow procedural ground. As a result, the subsurface trespass debate wages to this day.

1. **Overview: Subsurface Trespass Law in Texas**

   a. **No subsurface trespass when fluids are used to stimulate production.**

   The Texas Supreme Court has generally held that subsurface fluids used in connection with oil and gas recovery efforts do not give rise to an action for trespass when they cross underneath adjacent property lines. The state’s highest court first addressed the issue more than fifty years ago in *Railroad Commission of Texas v. Manziel.* In that case, the Railroad Commission issued a permit for a water-flood operation as part of a secondary recovery effort. The plaintiffs owned property adjacent to the injection site and sued to invalidate the permit. In asserting claims for subsurface trespass, the plaintiffs argued that the water-flood operation would cause a premature demise of a producing well on their land.

   In examining the case, the court emphasized that the pressure on the mineral reservoir had dropped significantly, so that the remaining oil was "dead," and that water-flooding offered the best chance of increasing pressure on the reservoir to allow for continued recovery. The court further noted that once the water-flood began, there was no way to stop fluids from migrating across lease lines. While acknowledging the Commission possessed broad authority to issue water-flooding permits to reduce waste

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74 361 S.W.2d 560 (Tex. 1962).
75 *Id.* at 561.
76 *Id.*
77 *Id.* at 562.
78 *Id.* at 564.
and protect correlative rights, the plaintiffs argued that the Commission did not have the authority to enable a physical trespass of water underneath their land, so as to result in the premature destruction of their own producing well.\textsuperscript{79}

The court implicitly recognized that the encroachment of water into an adjoining subsurface estate presumptively satisfies the basic elements of a trespass claim.\textsuperscript{80} But in holding against the plaintiffs, the court cited the sound policy considerations for allowing water-flooding projects, explaining that “such operations should be encouraged" to increase production levels, and that "secondary recovery programs could not and would not be conducted if any adjoining operator could stop the project on the ground of subsurface trespass.”\textsuperscript{81} The court went on to conclude that where the Commission authorizes a secondary recovery project to prevent waste or protect correlative rights, "a trespass does not occur when the injected, secondary recovery fluids move across lease lines.”\textsuperscript{82}

Importantly, the court in \textit{Manziel} did not address whether the subsurface invasion of adjoining mineral estates by injected fluids could potentially give rise to other tort liability.\textsuperscript{83} The court was only concerned with deciding "whether a trespass is committed when secondary recovery waters from an authorized secondary recovery project cross lease lines.”\textsuperscript{84} The opinion in \textit{Manziel}, therefore, does not insulate operators from alternative forms of liability for actual damages caused by secondary recovery projects.

b. \underline{No subsurface trespass when fracking drains minerals from neighboring lands.}

More than forty years after its decision in \textit{Manziel}, the Texas Supreme Court revisited subsurface trespass in \textit{Coastal Oil & Gas Corp. v. Garza Energy Trust.}\textsuperscript{85} In that case, royalty owners filed suit to recover the value of hydrocarbons allegedly drained by a fracking operation conducted on adjacent lands. The plaintiffs included a claim for subsurface trespass and sought $1 million in lost royalty payments stemming from the drained minerals. In deciding the case, the court relied on the same policy considerations

\textsuperscript{79} Id. at 565.

\textsuperscript{80} See id. at 567.

\textsuperscript{81} Id. at 568.

\textsuperscript{82} Id.

\textsuperscript{83} Id. at 566.

\textsuperscript{84} Id. at 566-67.

\textsuperscript{85} 268 S.W.3d 1 (Tex. 2008).
discussed in *Manziel*. It noted that the laws of trespass are not absolute and that what constitutes a surface trespass might not constitute a trespass deep underground. Ultimately, however, the court declined to definitively answer whether fracking in and of itself is a trespass. Instead, the court invoked the rule of capture to conclude the plaintiffs had no claim:

[A]ctionable trespass requires injury, and [plaintiffs'] only claim of injury—that [the defendant’s] fracing operation made it possible for gas to flow from beneath [plaintiffs' land] to the Share 12 wells—is precluded by the rule of capture. That rule gives a mineral rights owner title to the oil and gas produced from a lawful well bottomed on the property, even if the gas flowed to the well from beneath another owner's tract.87

Importantly, the court in *Coastal* did not suggest that fracking operators are never subject to liability under a theory of subsurface trespass. In fact, it expressly held that similarly situated royalty holders “have standing to bring an action for subsurface trespass causing actual injury” to the value of their interests.88 The *Coastal* plaintiffs lost, not because they asserted invalid claims, but because the drainage caused by the defendant’s fracking operations did not constitute “actual injury” under the rule of capture.89


In *FPL Farming Ltd. v. Environmental Processing Systems*, a landowner sued its neighbor, the operator of an adjacent wastewater disposal facility, on the theory that deep subsurface wastewater trespassed beneath the landowner's property.90 The facility operated its wastewater injection wells under a permit obtained from the Texas Commission on Environmental Quality.91 Following a jury verdict in favor of the facility, the trial court entered a take-nothing judgment. The court of appeals affirmed, holding that “under the common law, when a state agency has authorized deep subsurface injections, no trespass occurs when fluids that were injected at deep levels are then

86 *Id.* at 3.
87 See *id.* at 13-15.
88 *Id.* at 4.
89 *Id.*
91 *Id.* at 417.
alleged to have later migrated at those deep levels into the deep subsurface of nearby tracts.”

The Texas Supreme Court reversed and remanded, holding that injection well permits “do not shield permit holders from civil tort liability that may result from actions governed by the permit.” The court, however, reserved judgment on “whether subsurface wastewater migration can constitute a trespass, or whether it did so in this case.” On remand, the court of appeals reversed the trial court’s take-nothing judgment, holding (1) that Texas recognizes a common law trespass cause of action for subsurface water migration, and (2) the jury charge improperly placed the burden of consent to trespass on the landowners.

Both parties petitioned the Texas Supreme Court, which agreed to hear the case, and again reversed the court of appeals’ ruling. Instead of deciding whether the plaintiffs brought a viable claim for subsurface trespass, however, the court resolved the case on the procedural ground that there was no charge error because the burden of proving lack of consent in a trespass case belongs to the plaintiff. The Court declined to address whether wastewater that migrates under adjoining land constitutes a trespass and stated that because the jury found no liability for deep subsurface trespass, there was no need to address whether it is a viable cause of action in Texas.

In light of the continuing uncertainty in the law of deep subsurface trespass, oil and gas producers are well-advised to take proactive measures to prevent or mitigate potential liability. Such measures include, but are not limited to, addressing subsurface migration issues with adjoining landowners via contract where feasible, and reviewing insurance coverage and indemnity provisions that may apply to these types of claims.

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92 Id. at 417-18.
93 Id. at 418.
94 Id.
95 Id.
96 Id. at 419.
97 Id.
TEXAS APPELLATE COURT RULES THAT MINERAL LESSEES CAN DRILL THROUGH COMPETITOR’S LEASEHOLD ESTATE

Under a recent Texas appellate court decision, mineral lessees in Texas might find that their subsurface rights are not as exclusive or expansive as once thought. In August the Fourth Court of Appeals held in Lightning Oil Co. v. Anadarko E&P Onshore LLC that, under an agreement executed by the surface owner, Anadarko had the right to drill through Lightning Oil Co.’s leasehold estate to retrieve the oil and gas under an adjacent property.98

1. Background

Lightning held an oil and gas lease covering the severed minerals underlying a portion of the Briscoe Ranch.99 Anadarko leased a mineral estate beneath an adjacent property which was being operated as a wildlife sanctuary by the Texas Parks and Wildlife Department.100 In a separate surface use and subsurface agreement, Anadarko obtained permission from the Briscoe Ranch to place wells on the surface estate and drill through the mineral estate leased by Lightning, in order to access the hydrocarbons underlying the TPWD surface acreage.101 Lightning sued Anadarko alleging that drilling would constitute a trespass through its mineral estate. It argued that Anadarko needed its permission, not the surface owner, to drill through the subsurface terrain underlying the Briscoe Ranch. Anadarko filed a motion for summary judgment, which the trial court granted. Lightning then appealed the trial court’s decision.102

2. Court’s Holding and Analysis

In affirming the lower court’s ruling, the court of appeals held that “the surface estate owner controls the earth beneath the surface estate,” and that “absent the grant of a right to control the subterranean structures in which the oil and gas molecules are held,” the mineral estate owner has no right to exclude another from accessing those structures.103 Therefore, “as the surface estate owner, Briscoe Ranch could grant Anadarko permission to site wells on the surface above the [Lightning lease] and drill through the earth within the boundaries of [Lightning’s lease] to reach Anadarko’s

99 Id. at *1.
100 Id.
101 Id.
102 Id. at *2.
103 Id. at *6.
adjacent mineral estate.”104 Because Anadarko obtained Briscoe Ranch’s permission, the court held that Anadarko did not commit a trespass by drilling through Lightning’s leasehold estate.105

3. The Upshot

Lightning Oil is significant for drilling operators and mineral owners who deal with the increasingly common phenomenon of offsite drill pads. The case holds that mineral lessees have no right to exclude others from the subsurface structures within the boundaries of their leaseholds. Instead, the right to control the earth beneath the surface estate belongs to the surface estate owner. In exercising this right, surface owners may allow drilling operators to site wells on the surface above another’s mineral lease, in order to access the oil and gas of an adjacent mineral formation. Under Lightning Oil, if mineral lessees want to prevent competitors from drilling through their leasehold estates, they must obtain an exclusive right to control the subterranean structures encasing the oil and gas molecules found in the lease.

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104 Id. at *7.
105 Id.
UPDATE ON EARTHQUAKES INDUCED BY ACTIVITIES RELATED TO OIL & GAS PRODUCTION

According to the United States Geological Survey (“USGS”), the central and eastern United States has experienced a dramatic increase in the number of earthquakes over the past few years. The USGS reports that between the years 1973–2008, there was an average of 21 earthquakes of magnitude three and larger in the central and eastern United States.106 This rate spiked to an average of nearly 200 per year in 2009–2014, and the rate continues to rise with 688 occurring in 2014 alone.107 Most of these earthquakes are large enough to have been felt by many people, yet small enough to rarely cause damage.

Whether the increased seismic activity is man-made or not has been the focus of rigorous study and debate. Scientists and environmentalists have focused their efforts on identifying a causal link between hydraulic fracturing operations and the spike in seismicity in the areas in question. Scores of national studies have been published as a result. These reports generally conclude that fracking itself is not responsible for the increase in documented earthquakes, but that the disposal of wastewater fluids generated in oil and gas production can, in certain instances, induce seismic events.

1. **Overview: How Fracking-Related Activities Induce or Trigger Earthquakes**

While the vast majority of earthquakes that occur in the world each year have natural causes, some earthquakes and other seismic events are related to human activities and are called “induced seismic events” or “induced earthquakes.”108 Induced seismicity has been documented since the 1920s and has been attributed to a range of human activities including the impoundment of water in reservoirs, surface and underground mining, withdrawal of fluids and gas from the subsurface, and injection of fluids into underground formations.109 With respect to fracking-related operations, however, the most recent, credible publications generally conclude that (1) the process of hydraulic fracturing as presently implemented does not pose a high risk for inducing seismic events; while (2) the disposal of fracking wastewater by deep subsurface injection does.110

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109 See id.; see also Matthew J. Hornbach et al., *Causal factors for seismicity near Azle, Texas*, Nature Communications at 1 (April 21, 2015).

Earthquakes result from slip movement along a pre-existing fault line. A slip is triggered when the stress acting along the fault exceeds the frictional resistance to sliding. Human activity can modify the stress conditions surrounding a fault line, thereby increasing the likelihood of slippage. Researchers argue the most common form of human induced seismic activity involves the disposal of wastewater generated in oil and gas production. When wastewater is injected into a disposal well, the fluid pressure in the well reservoir naturally rises. Sometimes the pressure migrates toward a fault line, which raises the fluid pressure within the fault. The increased pressure has the effect of “prying” the fault apart, leaving less frictional resistance to slippage, which increases the chances of seismic activity in the form of an earthquake.

2. The Texas Railroad Commission Has Its Doubts

Last spring a team of researchers at Southern Methodist University found that high volumes of wastewater injection combined with saltwater extraction from natural gas wells “most likely” caused a burst of earthquakes occurring near Azle, Texas, from late 2013 through spring 2014. The team used advanced 3-D imaging to map the changing fluid pressure in the vicinity of the earthquakes, where two wastewater injection wells and more than 70 production wells drill for natural gas. “When we ran the model over a 10-year period through a wide range of parameters, it predicted pressure changes significant enough to trigger earthquakes on faults that are already stressed,” explained Matthew Hornbach, SMU associate professor of geophysics and the report’s lead author. Consistent with research published from around the country, Hornbach was adamant that fracking itself is not the culprit. “We’re not talking at all about fracking,” he said.

111 See id.
112 Rubinstein, supra note 107, at 5; see also National Research Council, supra note 108, at 38.
113 Rubinstein, supra note 107, at 5.
114 See id.
115 Matthew J. Hornbach et al., Causal factors for seismicity near Azle, Texas, Nature Communications at 1 (April 21, 2015).
116 Id.
118 Id.
In response to the report, the Texas Railroad Commission arranged a series of show-cause hearings during which the operators of the injection wells in question were required to appear and rebut the study’s findings.\(^{119}\) The SMU research team was invited to participate in the proceedings, but it declined, saying it did not want to wade into policy decisions and that its research speaks for itself.\(^{120}\) Following the hearings, the commission cleared the operators of any responsibility for the Azle earthquakes. It ruled that the SMU study is a “commendable first-order investigation” of the issue, but “presents data indicating a weak temporal correlation between injection and seismic activities — too small, however, to imply a causal relationship without further corroborating evidence.”\(^{121}\) The findings of the SMU-led study were “not sufficient to reach a conclusion,” the commission added, but rather “a start toward understanding the issue” of injection wells and seismic activity.\(^{122}\)

3. Litigation Outlook

A body of litigation has emerged from allegations linking fracking-related activities with earthquakes. In Arkansas, for example, more than ten class action lawsuits have been filed since 2011 following an unprecedented number of seismic events in the state’s central region.\(^{123}\) The pleaded claims include public and private nuisance,

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\(^{120}\) *Id.*


\(^{122}\) *Id.*

\(^{123}\) Frey v. BHP Billiton Petroleum (Arkansas) Inc., et al., Case No. 23CV-11-488, In the Circuit Court of Faulkner County, Arkansas, 2nd Division (May 23, 2011), removed to the U.S. District Court for the Eastern District of Arkansas, Western Division, Case No. 4:11-cv-0475-JLH, on June 9, 2011; closed August 31, 2011; Sheatsley v. Chesapeake Operating, Inc. and Clarita Operating, LLC, Cause No. 2011-28, In the Circuit Court of Perry County, Arkansas 16th Division, removed to the U.S. District Court for the Eastern District of Arkansas, Western Division, Case No. 4:11-cv-00353-JLH, on April 4, 2011; closed on July 13, 2011; Hearn v. BHP Billiton Petroleum (Arkansas) Inc., et al, Case No. 23CV-11-492, In the Circuit Court of Faulkner County, Arkansas, 2nd Division (May 24, 2011), removed to the U.S. District Court for the Eastern District of Arkansas, Western Division, Case No. 4:11-cv-00474-JLH, on June 9, 2011; closed on August 29, 2013. Lane v. BHP Billiton Petroleum (Arkansas) Inc., et al, Case No. 23CV-11-482, In the Circuit Court of Faulkner County, Arkansas, 2nd Division (May 24, 2011), removed to the U.S. District Court for the Eastern District of Arkansas, Western Division, Case No. 4:11-cv-00477-JLH, on June 9, 2011, closed August 31, 2011. Palmer v. BHP Billiton Petroleum (Arkansas) Inc., et al, Case No. 23CV-11-491, In the Circuit Court of Faulkner County, Arkansas, 3rd Division, Case No. 4:11-cv-00476-JLH, on June 9, 2011, closed on August 31, 2011.
negligence, trespass, and deceptive trade practices. Plaintiffs have also asserted strict liability claims, arguing the defendants' disposal well operations and actions “are ultra-hazardous activities that necessarily involve a risk of serious harm to a person or the chattels of others that cannot be eliminated by the exercise of the utmost care and is not a matter of common usage.” The parties consolidated the lawsuits before jointly requesting a dismissal in the spring of 2013.

Oklahoma has seen its share of litigation as well. In February, an Oklahoma woman filed a class action petition alleging two energy companies are responsible for property damage from earthquakes occurring in November of 2011. A different woman sued more than twenty oil and gas producers for personal injuries she sustained during the same flurry of seismic events. The district court dismissed her claims for lack of jurisdiction, concluding the Oklahoma Corporation Commission had exclusive jurisdiction over tort actions involving regulated oil and gas operations. In June, the Oklahoma Supreme Court reversed and remanded, holding that "whether Appellees are negligent or absolutely liable is a matter to be determined by a district court." The case remains pending.

In Texas, it appears that only one case has been filed in which the plaintiffs seek damages for injuries allegedly caused by earthquakes induced by the disposal of fracking wastewater. In July of 2013, four residents of Alvarado, Johnson County, Texas filed a class action lawsuit alleging that their homes were damaged by earthquakes caused by the fracking and injection well operations of four energy companies. The plaintiffs primarily argue that injected wastewater can enter a fault, causing slippage and earthquakes. Asserting causes of action for negligence, nuisance, and strict liability,

124 See id.
129 Id.
130 Finn v. EOG Resources, Inc., et al, Cause No. C2013-00343, In the 18th Judicial District Court of Johnson County, Texas.
131 See id.
the plaintiffs seek actual and exemplary damages in undisclosed amounts. The case is currently in the discovery stage, and no filings have been submitted since December of last year.

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132 See id.
The basic FIDIC regime in relation to dispute resolution is well known.

Typically, the contractor gives notice of a claim under Clause 20.1, and the Engineer determines that claim under Clause 3.5. If the contractor does not like that determination, he or she refers the “dispute” to the DAB. The DAB then makes a decision. If the DAB decides the employer should make additional payment to the contractor, Clause 20.4 requires the employer to “promptly give effect to [the DAB’s decision] unless and until it shall be revised in an amicable settlement or an arbitral award”.

If the employer is “dissatisfied” with the DAB’s decision, it can give notice of its dissatisfaction within 28 days of the decision. The parties then try to settle the dispute amicably. If that is not possible, the parties can proceed to arbitration.

At this stage, assuming a notice of dissatisfaction has been issued, the DAB decision is binding, but not final, and should be honoured by the employer.

One of the following scenarios could then arise:

- The employer will comply with the decision of the DAB and pay the sums awarded;
- The employer disagrees with the DAB’s decision, deciding not to give a notice of dissatisfaction and simply refusing to pay the sums awarded by the DAB. In such circumstances, Clause 20.7 allows the contractor to refer such failure to arbitration; or
- The employer may issue a notice of dissatisfaction but, despite its contractual obligations to honour the DAB’s decision, still not pay the sums awarded.

The latter scenario gives rise to the FIDIC “gap”. In such a situation, the contractor could include the additional payment due as a result of the DAB decision in an interim payment application. However, given that the employer has served a notice of dissatisfaction, the Engineer may take the view that no amount is actually due to the contractor. If this is the case, the contractor could refer this separate dispute to the DAB. The DAB would almost certainly confirm that the employer is required to pay the monies owed, but the employer would inevitably give another notice of dissatisfaction and then fail to pay. The contractor would, therefore, be back to where it started.

In terms of other options, it will generally not be possible to go to the local courts to enforce the DAB decision. Much will depend upon the law that is applicable to the contract, but in most jurisdictions, the courts will not deal with the dispute at this stage because of the requirement within the FIDIC Conditions that disputes be settled by arbitration.

A third way was discussed in *PT Perusahaan Gas Negara (Persero) TBK v CRW Joint Operation (Indonesia)*.

Under a contract based on the FIDIC Conditions of Contract (1st Edition, 1999), Red Book (with amendments), PT Perusahaan Gas Negara (Persero) TBK ("PGN") engaged CRW Joint Operations ("CRW") to design, procure, install, test, and pre-commission a pipeline and an optical fibre cable in Indonesia (the “Contract”).

**2008 - DECISION OF THE DAB**

A dispute arose between the parties over variation claims under the Contract, and, in 2008, the dispute was referred by the contractor, CRW, to the DAB. The decision of the DAB was that the employer, PGN, was to pay over USD 17 million to CRW.

PGN issued a notice of dissatisfaction in respect of that decision but also failed to comply with it. CRW commenced an arbitration against PGN to enforce the DAB’s decision, relying on Clause 20.6 of the Contract.
2009 - THE ARBITRATION
The arbitral tribunal held that the DAB decision was binding, and that PGN had an obligation to make immediate payment of the approximately USD 17 million.

2010 - HIGH COURT OF SINGAPORE
The matter was then referred to the High Court of Singapore, as CRW sought to enforce the award and PGN sought to have it set aside. The Court found in favour of PGN and set aside the award on the basis that, under the Red Book procedure, the dispute over PGN’s failure to comply with the DAB’s decision was a separate dispute that should have been referred to the DAB before it could be referred to arbitration. In reaching its decision, the Court highlighted the distinction between an arbitration contemplated pursuant to Clause 20.6 and one contemplated under Clause 20.7. An arbitration brought pursuant to Clause 20.7 is confined to the narrow circumstances where a DAB decision has become final and binding, i.e. where a notice of dissatisfaction has not been issued. The issue to be determined in such circumstances is the failure of the unsuccessful party to comply with the decision. It does not envisage an enquiry into the merits of the DAB decision.

By contrast, Clause 20.6 provides a mechanism for parties to bring a “fresh” arbitration to be decided on the merits. However, an arbitration pursuant to Clause 20.6 must be referred to the DAB in the first instance for its decision. The real dispute was whether the DAB decision was correct (because a notice of dissatisfaction had been issued), whereas CRW tried to limit the dispute as to whether payment of the USD 17 million should be made immediately. CRW relied on Clause 20.6 but failed to satisfy the requirements of Clause 20.6, namely that disputes are, in the first instance, to be referred to the DAB. Given that the requirements of Clause 20.6 had not been met, the tribunal had exceeded its powers by rendering a final award on a dispute when the DAB had not first issued a decision based on the merits of the dispute.

However, the court held, obiter, that it would be possible for a successful party to refer the matter to arbitration pursuant to Clause 20.6, seeking an interim or provisional arbitral award, pending a final determination of the dispute, as a means of enforcement.

2011 - SINGAPORE COURT OF APPEAL
The matter was subsequently referred to the Singapore Court of Appeal, who came to the same conclusion, namely that the 2009 award should be set aside, albeit for different reasons.

2011 - SECOND ARBITRATION
After the rulings of the Singapore courts, CRW commenced a second ICC arbitration against PGN, requesting the tribunal to resolve the merits of the primary dispute, but also to compel immediate payment by PGN of the still-outstanding USD 17 million by way of an interim award (as had been suggested by the High Court of Singapore).

2013 - INTERIM ARBITRAL AWARD
In 2013, an interim award was issued by the majority of the tribunal, ordering immediate payment pending the resolution of the underlying dispute.

2014 - HIGH COURT DECISION
PGN applied to set aside the interim award, arguing that the interim award was really a “provisional” award and, therefore, was not permitted under Singapore’s International Arbitration Act (the “Act”), which requires interim awards to be final and binding.

The judge held that Singapore’s International Arbitration Act does not prohibit a tribunal from issuing a provisional award.
However, PGN was unsuccessful. The judge held that the Act does not prohibit a tribunal from issuing a provisional award and that, in any event, the award was not provisional. The award determined with finality CRW’s rights with regard to the decision of the DAB.

Unfortunately, the High Court’s decision is not the end of it. PGN has appealed the court’s decision, so it remains to be seen what approach the Court of Appeal will take.

FIDIC GUIDANCE

Interestingly, FIDIC are alive to this gap. On 1 April 2013, the FIDIC Contracts Committee, in recognition of the uncertainty of its own drafting, issued a guidance memorandum to address the issue. The memorandum states that whether a DAB decision is “final and binding” or simply “binding”, a failure to comply with that decision may be referred directly to arbitration and summary or expedited relief should be available. The FIDIC guidance memorandum recommends parties should now amend Clause 20 and provides some recommended alternative wording.

The effect of the new clause is that, regardless of whether or not a notice of dissatisfaction has been served, the failure of a party to comply with any DAB decision may be referred to arbitration and expedited relief in the form of an interim award may be given by the tribunal without the need to investigate the merits of the underlying dispute.

However, it must be remembered that the guidance memorandum is just that—guidance—and will not help those parties who have already entered into contracts with the un-amended wording. However, it is notable that the most recent edition of the FIDIC Gold Book includes new provisions (Clause 20.9) to make clear FIDIC’s intention, and the other standard forms are sure to include the recommended wording when new editions are published.

CONCLUSION

The potential deficiencies in the disputes procedure of the FIDIC Contracts have been known for a while, hence the guidance notes being issued by the FIDIC Contracts Committee last year. This case provides a clear signal that the suggested solution by the FIDIC Contracts Committee is a viable one—namely expedited relief in the form of an interim arbitral award requiring compliance with a DAB decision is a possible remedy for the successful party.

Authors

Mike Stewart
London
mike.stewart@klgates.com

Camilla de Moraes
London
camilla.demoraes@klgates.com

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The design/build delivery model offers owners and contractors the potential for greater efficiencies in the construction process, but if the parties do not carefully manage the design review process, the project can experience unnecessary delays to procurement and construction that can cascade throughout the project. It is a complex process to track all of the hundreds or thousands of different engineering drawings submitted on a large project to ensure that they are being reviewed and approved according to the contract schedule. The process is further complicated because the owner’s engineers and the contractor’s engineers (and sometimes third-party reviewers) may have conflicting engineering judgments on complex technical issues.

A good contract can help the parties avoid some of the common problems in the design review process. This article discusses some of the potential problems that owners and design/build contractors may encounter in the design review process and suggests some contract drafting strategies to prevent or mitigate these problems and keep the project on track.

**Design Review Problems**
On any project, the final design is typically what tells the contractor what to buy (procurement) and what to build (construction). Thus, if the parties cannot finalize the design on time, procurement and construction will be delayed.

Design delays can cause potentially serious problems for procurement. Manufacturers, particularly manufacturers of complex mechanical and electrical equipment, often have tight production schedules.

For example, if the owner and contractor are unable to agree on the design of the equipment to be used within an industrial plant, the contractor may not be able to place the purchase order in time to take advantage of openings in the vendor’s production schedule. The contractor may then be forced to wait for the next opening and pay premiums to expedite manufacturing and shipping.

**HERE’S A TIP**
There are several ways contracts can help you avoid delays in design approval.

**BY RYAN D. DEMOTTE AND RICHARD F. PACIARONI**
Design delays can also delay the start of critical construction activities. If the owner and contractor have not agreed on the basic layout of a plant or the design of key buildings or processes, the contractor may not be able to start even basic civil works. Even if basic designs are agreed, delays in finalizing detailed designs can still cause delays. In more complex industrial plants, the building designs often depend on the type and layout of the equipment inside of the buildings.

Thus, the contractor needs to know the configuration of the equipment inside the building order to finalize building details such as where to put openings for pipes and wiring in the walls and to ensure that the structure can support the loads from the equipment. Without final designs, the contractor may have to stop work before finishing a building or inefficiently work around the areas with unfinished designs.

These are just a few examples of how upfront design delays can lead to project delays and cost overruns. Below, we provide some contract guidelines to owners and contractors to help prevent or mitigate some of these common design delay traps.

**Guidelines for Addressing Design Review**

The contract is the foundation of the design review process. The contract terms establishing the design review process should be clear, comprehensive and easy to follow for the project teams. By laying out a clear and thorough design review process with objective standards in the contract, owners and contractors can avoid the ambiguities that lead to design disputes later in the project. The contract should clearly define both the review process and also the standards the design must meet.
Some of the most important contract terms for the design phase are those establishing the review and comment time periods for drawings. The contract should establish clear time periods for review and comment from the initial submission through final approval. The contract should set an initial set number of days from the contractor’s submittal for the owner to either approve or provide comments, and then a further set number of days for the contractor to respond to those comments. These defined time periods for review and response should continue to apply to all subsequent rounds of comments until the parties finalize the construction drawings. This keeps all parties “on the clock” and helps to avoid having unfinished designs fall into gaps in the contract and sit unaddressed for weeks or months at a time.

The contract should also provide flexibility to expedite the approval of important designs. The parties should consider contract terms that allow the contractor to identify some of the most important drawings and submittals (e.g. plot plans, process flow diagrams, P&IDs, critical long-lead equipment, etc.) for expedited review. This will allow the contractor to prioritize the designs that are critical to keep key procurement and construction activities on schedule.

To ensure a smooth review process, the owner may also consider setting limits on the number of drawings that the contractor can submit at any one time. This will ensure that the owner’s reviewing engineers have enough time to comply with the contract review times and prevent the contractor from overwhelming the owner’s review staff by submitting hundreds of designs at one time.

To minimize design disputes, the contract should include clear and objective design standards. If possible, owners and contractors should base the contract on well-known industry standards and include those standards as contract documents. The parties should be particularly cautious of any design standards based on the approval of third-parties, such as government agencies (e.g. transportation authorities). If the parties cannot avoid third-party approval due to the nature of the project, the contract should clearly lay out which party is responsible for working with the third-party reviewer and for any delays caused by the third-party review.

Despite the best efforts of the parties, some disputes over design are likely. So a good contract should include mechanisms to facilitate quick resolution of any disputes. One idea the parties may consider is requiring a design review meeting or workshop for certain drawings or sets of drawings if they are not approved after the initial review and comment period. Mandatory meetings will force the face-to-face discussions that can often help the parties resolve design issues.

**Staying on Schedule**

The review and approval of designs comprise the critical first phase of a design/build project. By addressing the design review process in the contract based on the guidelines provided above, the parties have a better chance of avoiding design delays and keeping the project on schedule. —

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Richard F. Paciaroni is a partner and Ryan D. DeMotte is an associate in the Pittsburgh office of K&L Gates LLP. For more information, contact Paciaroni at Richard.paciaroni@klgates.com or 412-355-6767. DeMotte can be reached at Ryan.demotte@klgates.com and 412-355-6440.

‘The contract is the foundation of the design review process.’
Mexico’s Energy Reform and its Anticipated Impact on Dispute Resolution Involving Foreign Stakeholders

John F. Sullivan III
Edward William Duffy
Allyson Pait

Overview of Mexico Energy Reform

In December 2013, Mexico approved constitutional changes that ended the 75-year oil and gas exploration and production monopoly of Mexico City-based Petroleos Mexicanos (PEMEX). The Energy Reform Bill (the “Bill”), a series of constitutional amendments, was enacted in an effort to jump start investment opportunities for domestic and foreign businesses and open new areas to oil and gas exploration, including offshore and shale plays where PEMEX has not had significant involvement.

The Bill allows the government to promulgate four types of contracts for exploration and production by investors, including service contracts, profit-sharing contracts, production-sharing contracts, and licenses (which are similar to concessions).

The Mexican Energy Reform is anticipated to substantially increase foreign direct investment in Mexico’s energy resources and spur new types of contractual relationships between a wide range of private and public entities. Investors necessarily must consider risks associated with these investments and potential disputes, which can be broken into two general categories: (1) investor-state disputes with the Mexican government, and (2) general commercial disputes between contracting parties (which may include both public and private entities).

Round One of Auction

Mexico is currently undergoing Round One of its energy reform program, which involves the bidding and awarding of contracts to private companies wishing to develop oil and gas resources on Mexican land and in Mexican territorial waters. The types of contracts vary and include service agreements, profit-sharing contracts, production-sharing contracts, and licenses. Round One is divided into five phases, or bid calls, and in each phase, the government will award rights over specified blocks to the successful contractors. Phase One of Round One ended in July and was not considered a success, as relatively few companies bid for the exploratory blocks offered. The phase reigned in only nine bids for contracts for hydrocarbon plays from the twenty-five global energy companies slated to participate. Mexico awarded contracts for only two of the fourteen offshore blocks offered. Analysts cited slumping oil prices and security concerns as the main reasons for the disappointing phase. Additionally, many investors were apprehensive about the dispute resolution options available under these production-sharing contracts and had specific concerns that the Mexican government could use the remedy of “administrative rescission” to terminate contracts without compensation.

In an effort to become more attractive to bidders during the successive phases, Mexico began allowing companies to bid on blocks individually and as part of a consortium for different blocks. Additionally, credit and financial guarantee requirements were relaxed, the availability of administrative rescission was narrowed, and minimum bid requirements will now be available two weeks prior to the auction, instead of immediately before bids are opened.
As a result, September’s Phase Two was considered successful and awarded production-sharing contracts for three of the five shallow-water blocks offered. The winning bidders included Eni (Italy), a consortium of Pan American Energy (Argentina) and E&P Hidrocarburos y Servicios (Argentina), and a consortium of Fieldwood (US) and Petrobal (Mexico).

Phase Three contracts will be awarded on December 15, 2015 for the twenty-five onshore fields offered. Phases Four and Five, which will offer deep-water blocks and extra heavy shallow-water blocks, and non-conventional blocks, respectively, are expected to occur during the first quarter of 2016. Round Two is scheduled to begin later in 2016, and Round Three in 2017. Additional assets will be available for bidding in these subsequent rounds.

Model Production-Sharing Contract Key Terms

On June 9, 2015, Mexico published the model production-sharing contract for the July tender, which provides a contractor with the exclusive right to explore and produce hydrocarbons for a 30-year period in a defined area (the term can be extended for ten additional years). This period is divided into four phases: (1) exploration; (2) evaluation; (3) declaration of commerciality; and (4) production. The approval of Comisión Nacional de Hidrocarburos (CNH—the agency tasked with supporting the Ministry of Energy in the implementation and regulation of Mexico’s upstream oil sector) is required for the exploration plan, the work program (for the evaluation period), and the development plan. CNH approval is also required for annual work programs and budgets. The production-sharing contracts also address the contractor’s environmental obligations (which include establishing a trust to fund abandonment operations), force majeure (the contract provides that either party may terminate the contract if operations are interrupted continuously for two years), assignment (CNH’s approval is required) and indemnification of the government by the contractor.

As to dispute resolution, the contract includes a Mexican choice-of-law clause and requires the parties to mediate in the event of a dispute. If mediation fails, the adjudication of the dispute will proceed through one of two avenues. In the case of administrative rescission, the dispute will be resolved by Mexican federal courts. All other disputes will be resolved by binding arbitration, conducted in Spanish under UNCITRAL rules before a panel of three arbitrators in The Hague. Although arbitration in The Hague under UNCITRAL rules should not concern most investors, there are significant questions about the availability and use of the administrative rescission remedy.

CNH may seek administrative rescission, which results in termination of the contract without incurring any obligation to pay compensation to the contractor, in a number of circumstances, which were not precisely defined in the production-sharing contracts for Phase One. Deputy Energy Minister Lourdes Melgar defended the inclusion of clauses allowing for administrative rescission, emphasizing that a majority of CNH commissioners must approve administrative rescission and that it is only available in limited circumstances, usually following an opportunity for the contractor to cure the problem at issue. Despite these assurances, many executives expressed concerns about the inclusion of such clauses because they provide the Mexican government with an avenue to cancel the contract without paying any compensation and because a Mexican court would adjudicate such disputes.

The Problems of Administrative Rescission and Potential Nullification

Undoubtedly, international investors are going to want reassurance on enforceability of arbitration awards. This concern was highlighted after Mexican courts nullified an award that an arbitration panel had entered in favor of an American company’s subsidiary against PEMEX. See Corporación Mexicana de Mantenimiento Integral, S. De R.L de C.V. (“Commisa”) v. Pemex-Exploración y Producción, 2013 WL 4517225, (S.D.N.Y. Aug. 27, 2013). The Mexican courts nullified the award because subsequent legislation prohibited PEMEX from arbitrating the “administrative rescission” of contracts even though this legislation became effective well after Commisa initiated arbitration. The U.S. District Court for the Southern District of New York refused to defer to the Mexican courts’ nullification decision, noting that it
ran contrary to basic notions of justice to deprive Commisa of its right to arbitration and to leave it without a remedy.

The continuing ability of CNH to seek administrative rescission of contracts through the Mexican court system (though this right has been narrowed) is still a concern to investors. The grounds for administrative rescission are fairly broad and somewhat undefined, leaving Mexican courts with significant discretion to authorize administrative rescission. Additionally, the history of the Commisa case may concern investors that Mexican courts will nullify arbitration awards on grounds that are more liberal than in most countries.

**Contractor and Investor-Friendly Revisions for Additional Bidding**

Given the concerns raised by oil companies and investors, Mexico revised the production-sharing contracts for subsequent phases. In particular, the contracts significantly narrowed the availability of administrative rescission to circumstances that were defined with greater precision. These include events in which a contractor’s negligence results in a fatality, inability to carry out activities in the Contract Area for more than 90 days, and a 25% drop in average production for more than 30 days. Administrative rescission remains available when the contractor fails to comply with the minimum work plan without justification or when a contractor makes false statements to the government. The administrative rescission procedures, however, now include the appointment (if the contractor so desires) of an independent expert to assist in determining whether the contractor acted negligently. In addition to alleviating concerns regarding administrative rescission, CNH also loosened credit requirements for contractors’ corporate guarantors (including reducing the required shareholder equity value from $6 billion to $2 billion). CNH also increased flexibility for joint bidders acting as a consortia to restructure their bids.

**Further Developments to Watch**

As bidding rounds continue, and more changes are made by Mexico, investors and other persons interested in participating in the development of Mexico’s petroleum resources should carefully monitor the treatment of administrative rescission in the contracts for subsequent phases and rounds and consider the associated risks. They should also be aware of the legal uncertainties inherent in offshore oil and gas exploration and production and shale development. Such activities must be carried out in compliance with an extensive and evolving regulatory framework and may require tribunals to confront questions of first impression on a wide range of legal issues. Disputes involving offshore exploration and production and shale development often entail unusual legal issues, including choice of law, property, contract, and tort issues— all of which create significant uncertainties to would-be stakeholders in Mexico’s emerging oil and gas industry.
FRACTURING RELATIONSHIPS:
THE IMPACT OF RISK AND RISK ALLOCATION
ON UNCONVENTIONAL OIL AND GAS PROJECTS

DAVID H. SWEENEY, PRESTON CODY,
SUSAN LINDBERG, MICHAEL P. DARDEN

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** David H. Sweeney is Of Counsel in the Houston, Texas office of K&L Gates LLP. Michael P. Darden is a Partner in the Houston office of Latham & Watkins LLP and is the Chair of Latham’s Oil & Gas Transactions Practice and Co-Chair of the global Oil & Gas Industry Team. Susan Lindberg is General Counsel of Eni US Operating Co. Inc. Preston Cody is a Senior Managing Consultant with Wood Mackenzie in Houston. The contents of this Article reflect the individual opinions of the authors and not the positions of Wood Mackenzie, Eni Petroleum US LLC, Latham & Watkins LLP, or K&L Gates LLP (or any of their respective affiliates).
I. INTRODUCTION

Some commentators have suggested that unconventional oil and gas projects are akin to manufacturing. While there is some truth in this analogy, it is misleading. Unconventional plays are indeed different than conventional plays, but they do not represent the riskless manufacture of barrels or Btus. Unconventional projects have the same basic set of risks—from geological failure to commodity prices—as their conventional counterparts, and in some cases, additional risks that do not materially affect conventional projects. However, these risks apply differently during a project’s lifecycle and are typically different in degree and source. Thus, the de-risking process is necessarily different—in this case, more gradual. This Article focuses on exploration risks, operational risks, and external risks that have proven to be the most relevant to the development of unconventional oil and gas projects through their unique lifecycle and suggests an alternative analytical and contractual framework to more effectively evaluate and deal with them.

Unconventional oil and gas resources, specifically oil and gas extracted from geological systems of low porosity and/or permeability, such as shale, have changed the face of the United States’ domestic exploration and production business. From an economic perspective, “[o]ngoing improvements in advanced technologies for crude oil and natural gas production continue to lift domestic supply and reshape the U.S. energy economy.” These “advanced technologies” (which might be more appropriately labeled novel combinations of existing production techniques—namely, horizontal drilling and hydraulic fracturing)

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1. “Unconventional” has many meanings in the oil and gas industry. In the context of this Article, however, it refers solely to hydrocarbon-bearing formations of low porosity and/or permeability that must be drilled horizontally and hydraulically fractured in order to produce economically. “Unconventional” specifically does not refer to coalbed methane, deepwater or deep gas operations, oil sands, or the like, although the manner in which agreements governing these types of assets differ from agreements governing “normal” accumulation-type assets may be instructive, as described below.

2. See, e.g., Emily Pickrell, Moody’s: Risk of a Dry Hole Has Fallen Nearly to Zero, FUELFIX (June 13, 2013), http://fuelfix.com/blog/2013/06/14/moodys-risk-of-a-dry-hole-has-fallen-nearly-to-zero/ (“The risk of drilling a dry hole has fallen nearly to zero, and E&P companies are developing a repeatable, manufacturing-style approach to unconventional resources.”).

required to economically produce hydrocarbons from shale necessitate equally novel ways of looking at the risks associated with each phase in the lifecycle of these projects. Novel contractual structures are arguably required to deal with this difference in risk profile.

Specific joint venture transactions among large, sophisticated oil and gas companies have provided, in some respects, innovative solutions to the risk profile problems posed by unconventional projects. In general, however, the domestic exploration and production industry has been, and continues to be, rooted solidly in norms that are more appropriate for, and evolved to deal with, conventional assets. There are numerous examples of the legal and commercial sectors of the oil and gas industry attempting to adapt entrenched ways of doing things to evolving physical realities, but on the whole, these seem to be just that—adaptations to the way that these assets are physically developed without a fundamental (re-)analysis of the risks that parties take in developing them. Large joint venture transactions have utilized interesting risk-sharing mechanisms, but, innovative as these might be, their lessons and concepts do not seem to have effected fundamental change on an industry-wide scale. The “rock doctors” and engineers have effectively adapted. Commercial negotiators and lawyers generally have not.

With this in mind, the purpose of this Article is not to propose the definitive solution to these issues or to (purposefully) tread on the sacrosanct. Rather, we seek to show potentially different ways to conceptualize certain risks common to most unconventional projects and suggest means of dealing with these risks from a contractual perspective that are more closely tailored to the issues they are trying to address. We propose that unconventional projects are conceptually just as risky from a profitability perspective as their conventional counterparts. The subject

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4. Representative deals include Eni’s Barnett Shale transaction with Quicksilver Resources in 2009, Reliance’s Marcellus Shale transaction with Atlas in 2010, Exco’s Marcellus Shale and Haynesville Shale transactions with BG Group in 2009 and 2010, Statoil’s Marcellus Shale deal with Chesapeake in 2008, Range Resources’ transaction with Talisman in 2010, Chesapeake’s Barnett Shale transaction with Total in 2010, Chesapeake’s Eagle Ford transaction with CNOOC in 2010, and NiSource and Hilcorp’s Utica Shale deal in 2012, as well as a number of private transactions, the existence and terms of which cannot be disclosed publicly.


6. “Risk,” from the perspective of a lawyer—even a transactional lawyer—can refer to almost anything. In this Article, the term is used only in the sense of the risk of not making a
matter of many of these risks is the same, regardless of the project; however, the unique combination of exploration risks, operational risks, and external risks, together with how, and how long, they apply over the course of a project, and how they are eliminated, gives unconventionals fundamentally different asset profiles.

The resulting difference in risk profile makes traditional methods of risk management potentially unsuitable for an unconventional project. We suggest that the “concept/pilot/ramp-up/exploit” framework identified by Wood Mackenzie may be more useful than the traditional “exploration/(appraisal)/development/production” project cycle framework.\(^7\) As has been implicitly recognized by the now-common joint venture\(^8\) structure for the development of shale assets, the inherent conflicts between parties caused by extended de-risking timeframes and the lack of discrete dividing lines among project lifecycle stages can be better managed through contractual mechanisms that keep parties together instead of affording them maximum autonomy. This, we believe, should hold true to some extent regardless of the specific contract at issue—be it joint venture, farmout, joint operating agreement, or otherwise.

II. RISK AND RISK ALLOCATION IN CONVENTIONAL PROJECTS\(^9\)

A conventional oil and gas project generally progresses through the following relevant phases: (i) exploration (is there anything there?); (ii) appraisal (how much is there?); (iii) development (how do we produce and sell what is there?); and (iv) production (how much do we produce and sell?).\(^10\) The risk of a lack of commercial viability generally drops significantly upon the progression from one phase to the next, as

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8. The term “joint venture” is used in this Article as shorthand for the type of transaction described *infra* in Section IV. It is not meant to imply a legal partnership, which is not commonly used (outside of, perhaps, the tax context) for joint oil and gas development in the United States.

9. Much of the following discussion has been adapted or reproduced from a forthcoming training module on worldwide joint operating agreements to be published by the Institute for Energy Law. See DAVID H. SWEENEY, TRAINING MODULE: JOINT OPERATING AGREEMENTS (forthcoming 2014) (manuscript at 96–102) (on file with the Institute for Energy Law).

10. This Article focuses on risk in the exploration, development, and production phases and thus omits a discussion of plugging and abandonment as a distinct phase. Treatment of these phases varies widely depending on the specific agreement. In the United States, at least with respect to onshore assets, these phases are generally not expressed in as many words; however, the general framework still conceptually applies. By way of example, each version of the AAPL 610 operating agreement form contains a contractual requirement that the parties to the agreement participate in the first (initial) well in the contract area. Non-consent is not permitted in this case because, among other things, this first well, to a large extent, “de-risks” the contract area. Thus, allowing non-consent parties to participate in subsequent wells would allow them to benefit from the risks taken by the participating parties solely at the cost of a portion of the production from the initial, “exploratory” well.
exploration risk (which can end a project entirely) gives way to other
risks which can reduce the ultimate value of the project (though not
necessarily cancel it). Thus, predictably, the further along a project is, the
greater the freedom allowed to a party to participate or not participate in
any given operation.

A. Conventional Phases and Risks

Most oil and gas projects begin with exploration—the search for a
commercially viable accumulation of hydrocarbons.\textsuperscript{11} Exploratory
operations can include geological and geophysical studies (including
seismic shoots) and the drilling of exploratory wells.\textsuperscript{12} There is generally
some doubt during this period about whether (and in what quantities)
hydrocarbon deposits exist. Thus, exploratory operations are generally
considered to be technically and economically riskier than most other
types of operations. Decisions regarding whether to conduct these
operations are made under uncertainty and are time sensitive, since a
failure to conduct sufficient exploratory operations within a given
timeframe may cause rights to terminate under almost any granting
instrument.\textsuperscript{13} Consequently, participation in exploratory operations is
generally mandatory and the consequences for failure to participate are
severe.\textsuperscript{14}

The exploration phase, and many of its attendant risks, typically ends
with the drilling of an exploration well, which either definitively proves or
disproves the existence of hydrocarbons. However, the mere existence of
a discovery does not mean that hydrocarbons are present in quantities
that make them worth producing, or that they can be produced
economically. Further operations may be required “to verify the size,
shape and nature of petroleum reserves and resources and to carry out an
economic analysis”—in other words, to appraise the commercial viability
of the discovery.\textsuperscript{15}

Appraisal programs will improve the parties’ understanding of the size
and quality of the reservoir and establish whether or not the reservoir
achieves a minimum economic field size. At this point, the parties must
make a final decision regarding investment in the substantial cost of

\textsuperscript{11} WILLIAM & MEYERS, MANUAL OF OIL AND GAS TERMS 380 (12th ed. 2003).
\textsuperscript{12} Id.
\textsuperscript{14} E.g., AAPL FORM 610-1989: MODEL FORM OPERATING AGREEMENT arts. VI.A, VII.D
(1989) [hereinafter AAPL FORM 610].
\textsuperscript{15} CLAUDE DUVAL ET AL., INTERNATIONAL PETROLEUM EXPLORATION AND
EXPLOITATION AGREEMENTS: LEGAL, ECONOMIC & POLICY ASPECTS § 9.10 (2d ed. 2009). As
noted above, U.S. onshore agreements typically do not expressly delineate this phase. However,
conceptually, it still exists, even if on a scale much larger than a single contract area. This phase
becomes conceptually important in unconventional projects, and thus it has been specifically
mentioned here.
developing the project.\textsuperscript{16} If the parties are confident that a project can be developed economically, subsurface risk will generally no longer be applied as a risk factor to the entire project.\textsuperscript{17} The project will then proceed to the development phase, in which the parties create a plan to construct the infrastructure and drill the wells that are necessary to efficiently produce hydrocarbons from the discovery. Development is generally the most expensive and procurement-intensive part of a project. It typically involves the drilling and completion of multiple wells and may require the construction of substantial infrastructure, such as treatment facilities, tank batteries, gathering and transportation lines, and marketing facilities. Thus, it is typically in this development phase that the lion’s share of capital investment must take place. Primary risks include the cost and availability of, and delays in obtaining, materials, together with increased cycle times between initial capital expenditures and first commercial production.

The development phase terminates when all production infrastructure needed for production has been built and installed and all wells necessary for optimal production have been drilled and completed. Once this is complete, the parties generally proceed to extract hydrocarbons from the contract area (the production phase). Work performed during this phase is generally concerned with optimizing the production and gathering, marketing, and selling hydrocarbons from the contract area. Initially, operations during this phase are concerned primarily with keeping equipment running and production flowing. However, as the reservoir is depleted and its pressure drops, the parties may eventually consider reworking wells, installing artificial lift equipment, injecting gas to maintain or increase pressure, and even conducting enhanced recovery operations.\textsuperscript{18} Risks once a project has been brought online include fluctuations in commodity prices and breakdown of facilities and equipment; however, these (and the accompanying costs to mitigate them) are minimal relative to risks through completion of the development phase and are more relevant to the value of the asset than its viability.\textsuperscript{19}

\textbf{B. Risk Allocation in Conventional Projects}

Conventional projects are thus typically characterized by discrete lifecycle stages, with a definite transition and distinct reduction in risk at the conclusion of each stage. In the context of a conventional project, the first few wells typically carry the most geological risk and may effectively

\textsuperscript{16} Id. §§ 9.14, 9.15.
\textsuperscript{17} Cody, supra note 7.
\textsuperscript{18} DUVAL ET AL., supra note 15, § 9.17.
\textsuperscript{19} Cody, supra note 7.
prove or disprove a particular project or area (at least as to a given formation). In contracts, these risks are typically allocated to the parties as a whole. Exploratory activities, such as drilling an initial well on a project, are generally either contractually mandatory or carry such a high non-consent premium (frequently relinquishment) that they become effectively so. This is generally true regardless of the type of agreement. For example, in an obligation farmout agreement, failure to drill a well results in breach of contract and loss of acreage. Similarly, the commonly encountered AAPL form 610-1989 joint operating agreement makes mandatory the “Initial Well” on the contract area covered by the joint operating agreement. Were it otherwise, taking exploration risk would be a losing proposition when compared to waiting to make an investment decision after exploration risks have been minimized or eliminated.

However, once an area has been explored and any discovery appraised to determine if it can be produced economically, these risks drop considerably. The valuation of a conventional project is certainly affected by uncertainties in volumes, commodity prices, and costs during later phases, but, as discussed below, generally not to the same extent as even a successful unconventional project. Consequently, conflicts between parties regarding continued capital outlays can be offset by greater freedom of action for each individual party. If a company does not wish to participate in an operation, it need not do so, and the effect on the remaining parties is minimal relative to the effect in an unconventional project. This is typically reflected in governing agreements. Risks of any particular operation can be entirely allocated to one party or the other, often on a well-by-well or operation-by-operation basis. In the context of a joint operating agreement, participation is typically determined on a

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20. See, e.g., John S. Lowe, Analyzing Oil and Gas Farmout Agreements, 41 S.W. L.J. 759, 809–11, 812–14 (citing Martin v. Darcy, 357 S.W.2d 457, 459–60 (Tex. Civ. App.—San Antonio 1962, writ ref’d n.r.e.), as an example of the measure of damages for failure to drill an exploration well under an “obligation” farmout). This, and not what Professor Lowe terms an “option” farmout, is likely the most common farmout variety, as “the most common motivation for a farmor to farm out is to preserve a lease . . . .” Id. at 793. However, even in a farmout that does not contractually require operations, the result of a failure to drill is typically forfeiture of acreage and/or forfeiture of the right to earn.

21. See DERMAN, supra note 5, at 45. Derman notes that, in the model form AAPI 610-1989 Joint Operating Agreement, the drilling of the “Initial Well” is ostensibly mandatory, both under the JOA and frequently under granting instruments and/or farmouts, though some courts have limited the obligation of an operator to actually commence operations in a timely fashion. Id.; see, e.g., Argos Res., Inc. v. May Petrol. Inc., 693 S.W.2d 663, 665 (Tex. App.—Dallas 1985, writ ref’d n.r.e.) (holding that time was not of the essence in an operating agreement for the drilling of a well when an agreement was not part of a lease arrangement). Equivalents exist in most forms of the joint operating agreement, including Rocky Mountain Mineral Law Foundation Form 2 (§ 9.1, et seq.), Rocky Mountain Mineral Law Foundation Form 3 (§ 8.1, et seq.), Rocky Mountain Mineral Law Foundation Form 1 (§ 12.1, et seq.), AAPI Form 710 (§ 10.1, et seq.), and AAPI Form 810 (§ 10.1, et seq.).

22. Cody, supra note 7.
well-by-well basis. Failure of a party to participate in one well would not preclude the same party from participating in the next. 23 In the context of a farmout, failing to conduct or participate in operations (subsequent to any obligation work) generally results only in a failure to earn acreage. 24 The farmee generally keeps acreage on which it has drilled and completed producing wells. 25 Infrastructure and midstream assets, if they are required to be built by the jointly-developing parties at all, are generally handled with separate agreements. 26 Because each well in a successful conventional project is generally more productive over a longer period of time, less infrastructure (and thus infrastructure expenditure) is typically needed.

III. HOW ARE UNCONVENTIONALS DIFFERENT?

Unconventional resources, by contrast, are characterized by, among other things, low porosity and permeability, requiring horizontal drilling and hydraulic fracturing. Each well has a generally lower estimated ultimate recovery per successful well over a shorter period of time (despite high initial production rates), and thus a greater number of required wells and accompanying infrastructure. 27 This results in a higher breakeven factor for most shale plays and thus heightened sensitivity to costs and prices. 28 In addition, shale plays have turned out to be somewhat riskier from an exploration perspective than many have previously considered. Even where a play is conceptually viable, it is generally not geologically homogeneous, increasing the risk that a particular area, or even wells within an area, may not be viable. Finally, the developmental framework and discrete beginning and end of

23. See AAPL FORM 610, supra note 14, art. VI.B.2(b) (“[E]ach Non-Consenting Party shall be deemed to have relinquished to the Consenting Parties . . . all of such Non-Consenting Party’s interest in the well and share of production therefrom . . . .”) (emphasis added). Note, however, that, in some circumstances, subsequent operations in the same formation may be prohibited unless state law spacing and density rules permit them.
25. Id.
26. See Arthur J. Wright & Craig A. Haynes, Building Infrastructure—Gathering Systems and Central Facilities, OIL AND GAS AGREEMENTS: THE PRODUCTION AND MARKETING PHASE, 4-1 (ROCKY MTN. MIN. L. FOUND. 2005) (noting that modifying a joint operating agreement to handle gathering lines and central infrastructure is not an optimal approach compared to ownership of these facilities in a separate entity, in part because “[t]he JOA is not designed to construct and operate pipelines—much less . . . account for non-consent issues and requires 100% consent to proceed in most instances”). Many shale joint ventures, by contrast, utilize separate, often quite complex, agreements related solely to midstream assets.
28. See Cody, supra note 7 (noting a “break-even” price for a top-performing Bakken Shale project of approximately $50 per barrel versus a “break-even” price for a very large, discovered Gulf of Mexico field of $15 per barrel). Successful breakevens for deepwater Gulf of Mexico fields often range from $20–$45 per barrel and $50–$70 per barrel for successful breakevens onshore in unconventional tight oil projects.
different phases of development that characterize conventional projects do not lend themselves to unconventionals. The result has been, in many cases, confusion in the evaluation of potential projects and a struggle to adapt existing rules for conventionals to unconventionals. We suggest that the alternative, four-stage unconventional development lifecycle is a useful tool for (re-)analyzing the risks inherent in a shale project. Using this framework highlights specific exploration, operational, and external risks not necessarily present (or present to the same degree and with the same effect) in a conventional project. Reconsidering these risks in a different context, in turn, makes it more apparent why shale joint ventures to date have typically been structured in the way that they have and suggests a framework for evaluating and papering future projects.

A. Phases of an Unconventional Project

From the perspective of a transactional attorney or commercial negotiator, recognizing the revised lifecycle concept for an unconventional project is a necessary step in understanding the risks involved in an unconventional project as compared to a conventional project. Wood Mackenzie has identified four typical phases in the life of an unconventional project that replace the “exploration-appraisal-development-production” framework of a conventional asset: (i) concept, (ii) pilot, (iii) ramp-up, and (iv) exploitation. The primary purpose of this alternative shale worldview is to give operators a new vocabulary to more accurately describe and evaluate a given potential investment compared to its conventional counterpart. However, it is also useful in understanding risk allocation between multiple parties within the same project. As with the conventional project framework, different risks are present during each of these phases. Unlike the framework of a conventional project, the line between each phase is not necessarily distinct or predictable, and a project may seem to be in more than one phase at any time.

1. Concept Phase

During the concept phase of a project, a company attempts to “identify prospective unconventional resource targets that do not have any production history.” Implicitly, the greatest risk in this phase is play concept risk—that is, the risk that a play will not yield any commercially

29. Cody, supra note 7.
30. Id.
31. Thus, by way of example, a pilot program as described below can be ongoing during the “ramp-up” process and can continue into the “exploitation” phase, as the operator continues to learn the geology of the play and optimize well design.
32. Cody, supra note 7.
viable acreage. By way of example, the Mississippian-age, black shale concept is present in different basins along the Ouachita Fold Thrust Belt and has undergone concept testing in five distinct plays: the Black Warrior Basin (Floyd Shale), the Arkoma Basin (Fayetteville and Woodford Shale), the Fort Worth Basin (Barnett Shale), and the Delaware Basin (Barnett/Woodford Shale). This play concept has proven commercially viable in the Fort Worth Basin and the Arkoma Basin. In the Black Warrior Basin and the Delaware Basin, it has not. In the Black Warrior Basin, the Floyd or “Neal” formation is too high in clay content to be effectively stimulated with current hydraulic fracturing techniques. In the Delaware Basin, the Barnett/Woodford formations can be over twice as deep as in the Fort Worth Basin, leading to well costs that are too high to make the play economic.

The most obvious analogy to play concept risk is exploration or dry hole risk in a conventional project. However, this analogy has not been consistently drawn because these two risks are conceptually different. The risk of a dry hole in a conventional, accumulation model reservoir can be quite high. The risk of a dry hole in a shale play is practically non-existent. This has led to a misperception that there is no exploration or, more generally, finding risk for shale. There is. The geological reasons behind a dry hole and a failed shale concept are different, but the result is the same—no project.

2. Pilot Phase

To de-risk a concept, an operator must conduct a pilot program. During the pilot phase of a project, the parties will drill multiple wells and experiment with technologies in an effort to understand the geology of a play well enough to be able to deliver repeatable and economic results.33 Play concept risk is, of course, present in this phase; however, two additional risks begin to impact a play as the pilot program is conducted: acreage prospectivity risk and well variability risk. The unfortunate manufacturing analogy that has attached itself to shale plays in general is founded, in part, on the idea that all shale acreage is created equal. It is not.

Even within a proven play concept, there is substantial risk that unproven acreage will have geology that differs substantially enough from proven areas that production from wells is insufficient to economically recover well costs (let alone be a better allocation of capital when compared to a conventional project, even if well costs can be recovered). This typically occurs due to well productivity or composition of production (that is, whether the formation is more productive of

33. Id.
liquids or gas). These geological variations produce distinct sub-plays within the overall play that have different production characteristics. By way of example, variations in thermal maturity and thickness of the Marcellus Shale causes it to be subdivided into twelve sub-plays, with just two core areas that are highly productive.\(^{34}\) Value is concentrated in these core areas, but they represent only a small portion of the play extent. The Marcellus has had a smaller percentage of acreage that is economically viable (20%) than conventional prospects in a major Gulf of Mexico deepwater play (30%).\(^{35}\)

Even successful shale play pilot programs (and exploitation programs) have typically had a large variation in early well performance. That is, during the pilot program, and even an exploitation program, early well performance (and lack of performance) tends to put a wide range around expected ultimate overall well performance. Early wells can suggest stronger or weaker performance than may ultimately be achieved. Eventually, wells will begin to demonstrate a statistically significant central tendency within a range of variability that suggests that future expected well performance will be at an economic (or non-economic) level, thus confirming the prospectivity or non-prospectivity of the acreage. But, this generally takes time and a material number of wells—frequently more than are planned.

Acreage prospectivity risk and well variability risk, working together symbiotically, are most analogous to appraisal risk in a conventional project—that is, a hydrocarbon-bearing reservoir is present, but it is not commercially developable. However, acreage prospectivity and well variability risks extend much further into the life of an unconventional project and at a greater level than any exploration risk normally associated with a conventional prospect. De-risking, from a geological perspective, is a more gradual and incremental process in an unconventional project and can continue into the final phases of the project’s lifecycle.

3. Ramp-Up

After the conduct of a successful pilot program, the operator frequently begins a ramp-up phase in which (if necessary) financing is

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\(^{34}\) See Marcellus Expected to Dominate U.S. Gas Supply, WOOD MACKENZIE (Nov. 6, 2013), http://www.woodmacresearch.com/cgi-bin/wmprod/portal/corp/corpPressDetail.jsp?oid=11670428.

\(^{35}\) Estimates of commercial success rates derive from Wood Mackenzie’s “Key Play Service,” which analyzes well performance for shale plays and Wood Mackenzie’s “Upstream Service,” which maintains a database of exploration wells and discovered fields. Based on these data sources, the 20% figure used for the Marcellus Shale equates to the percentage of acreage located within either the Bradford/Susquehanna core areas or the Southwest rich-gas extent of the play. For the Deepwater Gulf of Mexico, there are at least 87 wells that have targeted the Miocene play, from which at least 26 discovered fields proved commercially viable.
secured, rigs and other materials are procured, and midstream and other infrastructure is built out. This phase typically heralds the beginning of a significant increase in capital expenditures compared to the pilot. Operators have not typically thought of final investment decisions in terms of shale, since, among other things, the line between the pilot and ramp-up phases may not be especially distinct. However, a decision to enter the ramp-up stage of a shale project represents a shift in emphasis for the drilling program, from understanding and delineating the commerciality of acreage to achieving an efficient scale of operations and building production quickly, such that operating cash flows can cover ongoing capital requirements.

During this phase, operational risks come into play. These include problems that (i) cause higher than expected well costs, typically due to operational inefficiencies, unplanned non-productive time, and difficulty procuring the rigs, equipment, and services necessary for development at an acceptable cost, or at all (cost risk); (ii) cause a lower than anticipated rate of completing new producing wells due to supply chain limitations, permitting, operational inefficiencies, and intentionally slowing down project plans to avoid extended cycle times between capital expenditure on a well and its initial production (delay risk); and (iii) extend the period between capital expenditure on a well and its initial production, typically due to logistical issues, backlogs of well completions, or insufficient infrastructure capacity (cycle-time risk). As noted, each of these risks is present to some extent in a conventional project; however, in an unconventional project, they persist, by and large, until the end of the project.

4. Exploitation Phase

After sufficient resources are mustered during the ramp-up phase, an unconventional project moves into the exploitation phase. This terminology will likely be familiar to practitioners experienced with international granting instruments and joint operating agreements. However, in the context of a shale play, it is more analogous to a combination of development and production and represents a continuous process that frequently extends until the end of the project. During this stage, development drilling continues in order to maintain production until all viable well locations are exhausted. Risks during this stage are an amalgam, to varying degrees, of the risks present during each of the previous phases, other than play concept risk, which presumably has been

36. Cody, supra note 7.
37. Id.
38. Id.
eliminated prior to a decision to spend the money fully developing the project. Supply chain difficulties (if a procurement decision was not taken to lock in supply and price during ramp-up) can significantly increase costs and decrease margin. Likewise, most operators continue to carry exploration risk during this period, as reflected by estimates of a developable percentage of its acreage.

B. Unconventional Risk Profile

Unconventional project risks can be broadly placed into three categories: (i) exploration, (ii) operational, and (iii) external.

1. Exploration Risks

Exploration risks include play concept risk, acreage prospectivity risk, and well variability risk. Shale plays are frequently, and erroneously, thought to not involve these risks. This assumption is presumably based (at least in part) on the low chances of a true dry hole. Adapting this concept from the conventional project paradigm may cause a company to overvalue the de-risking properties of initial work. The initial well in a conventional project may have a significant de-risking effect, but the first well, or even the first few wells, in a pilot program do not de-risk an unconventional project to nearly the same degree. In fact, these factors are likely to be present throughout the life, or most of the life, of an unconventional project.

A pilot program should, if properly conducted, prove or disprove the viability of a play concept. However, while one or two exploration wells and two or three appraisal wells will generally prove or disprove a conventional project, an unconventional pilot program can involve dozens of wells. These pilot program wells typically involve a greater amount of “science” and experimentation as the operator learns the geology of the play, but do not involve cost efficiencies due to economies of scale. Thus, they are generally much more expensive than later wells drilled as part of the exploitation phase. As with conventional exploration and appraisal wells, pilot program wells are linked to, and have a significant impact on, later exploitation wells.

Even if a play concept is proven, it may not generally be clear whether the particular acreage being developed is, as a whole, economic. Well performance variability may add significant uncertainty to the planning of pilot programs, as it will not be clear how long the pilot will last. Even if

39. The word “initial” was chosen purposefully here as a reference to the “initial well” exploration concept in most U.S. joint operating agreements.
40. Pilot well costs depend on the play, with a typical range of five million dollars to fifteen million dollars per well.
the play and parts of the specific acreage under consideration are proven, and well performance has stabilized to some degree, exploration risks will likely continue into the later stages of a project, making ramp-up and exploitation difficult and expensive:

During these later stages, the ‘percent developable’ acreage and well performance deviations represent the major remaining subsurface risk that unconventionals face that conventional fields do not. Percent developable is a direct determinant of the number of well locations (hence remaining value) of the undeveloped portion of the acreage. These later-stage risks can be quite substantial. For example, a leading US operator of shale plays has applied factors of 30% to 75% developable to its established positions.41

Failure to account for these exploration risks can make a project appear to be economic when it ultimately is not. By way of example, an operator may estimate that acreage capture costs and the conduct of a pilot will cost approximately two hundred fifty million dollars. Based on expected well performance and costs and a projected well schedule, this might yield one and one half billion dollars in net present value. Without considering exploration risk, this project is clearly economic. However, on a risked basis, project economics are likely to be much more sensitive to the amount of capital deployed in the early risk stages. Well variability risk may cause the pilot stage to extend past the original plan, and the amount of risk capital to be increased (say, to four hundred million dollars instead of two hundred fifty million dollars). At the end of the pilot phase, this project may still be strongly positive. However, as noted above, there is no guarantee that all or any of the acreage on which the pilot program was conducted will prove commercially viable. To evaluate the merits of conducting a pilot project, companies should consider applying a risk factor to the value of the expected ramp-up and exploitation phases. Based on the Marcellus example above, one might apply a twenty percent risk factor at an early stage, such that the risked project value may only be three hundred million dollars. In this case, exploration risk will have effectively resulted in participants spending more money capturing and proving up acreage than the project is ultimately worth.

The foregoing example uses the twenty percent expected chance of success number for illustrative purposes only. There is no one right number to use, as the ultimate chance of success will be driven by widely different subsurface characteristics. However, up-front technical work on understanding the geology of a play can focus companies on areas with better subsurface characteristics, which will presumably be more likely to

41. Cody, supra note 7.
prove commercial. As new information comes in from the pilot program, the assessment of risk must be continuously updated. Over time, this twenty percent chance of success should rise significantly.

Careful planning and execution of each well should reduce this geological risk gradually over time (as opposed to suddenly in the conventional context), but this does not happen quickly. As noted below, this should be taken into account in both the evaluation of, and the contracts governing, an unconventional project.

2. Operational Risks

Operational risks include (i) cost risk (the risk of costs to procure services, rigs, and other equipment being higher than anticipated or budgeted), (ii) delay risk (the risk that rigs, services, and other equipment may not be available at all), and (iii) cycle time risk (the risk that a longer than expected period of time will elapse between capital expenditure on any particular well and first production from that well). These risks should be familiar to any student of the exploration and production industry in the United States (and elsewhere); that is, anybody who has been in the industry for more than a few years, or anybody who has ever read H.G. Bissinger’s *Friday Night Lights*.\(^2\) When in demand, rigs, services, and other equipment cost more and are less readily available. As of January 7, 2000, the Baker Hughes rotary rig count for North America was 786.\(^3\) As of May 16, 2014, it was 1861.\(^4\) The surge of unconventional development in the United States has resulted in higher costs and less availability.\(^5\) However, operational risks have a disproportionate impact on unconventional projects.

Project economics during the pilot, ramp-up, and exploitation phases (post-discovery) are challenged by low net margins per barrel for unconventional projects. Unconventionals began as gas plays because gas is easier to extract from tight formations. Even with the move to liquids,


> There may not have been a more awesome graveyard in the country than the old MGF lot off Highway 80—thirty acres filled with equipment that had cost $200 million and in the fall of 1988 might have fetched $10 million—with three hundred thousand feet of new and used drill pipe up on metal stilts like pixie sticks, four hundred drill collars, and the guts of nineteen rigs.


the most successful plays generally rely on gas drive mechanisms. Unconventionals tend to have higher gas-to-oil ratios and natural gas liquid content with their production stream. In current market conditions, this generally results in a lower per-barrel of oil equivalent revenue realization. Costs related to unconventional projects tend to be higher as well: the costs for rigs and crews (including frac crews), equipment, services, and operating generally tend to be much higher than in a conventional project, due (among other things) to high demand and scarcity nationally, and frequently, in the geographical location of the play itself. These costs are generally required throughout a project to even maintain production. As a play is de-risked, acquisition costs such as lease bonuses and royalties generally increase significantly. The result is low net margins per barrel relative to, for example, a successful deepwater Gulf of Mexico project, that make the value of an unconventional project highly sensitive to costs. Delays in unconventional projects are common as well. These, coupled with relatively long drilling programs, cause the time value of money to further erode value through longer cycle times for capital (as, for example, wells wait for the availability of hydraulic fracturing equipment and crews).

3. External Risks

External risks, such as market, political, and regulatory risk, affect unconventional projects throughout their lifecycle. These risks are nothing new to the oil and gas industry; however, their effects on unconventional projects are magnified due, among other things, to the marginal nature of these projects and their perceived environmental effects. By way of example, typical unconventional tight oil projects with breakevens in the range of $50–$70 per barrel are more sensitive to changes in commodity prices than development of deepwater Gulf of Mexico fields with typical breakevens of $20–$40 per barrel. For these projects, a 20% fall in commodity prices may reduce project net present value by up to 50% percent for a deepwater Gulf of Mexico field, but could cause the net present value of an unconventional tight oil project to decrease by 125%, causing it to fall below the breakeven price (into negative territory).46

Likewise, unconventional projects have brought the oil and gas industry back onshore (and in the United States) on a greater scale than ever before, and frequently in urban areas. Fleets of equipment and armies of workers motivate environmentalism, and the media is geared to magnify the impact of almost any incident. The result has been federal, state, and, most recently, local, regulatory action that makes operations

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more difficult and/or expensive, along with regulatory uncertainty in some areas.47

C. Impact on Joint Development

Each of the risk factors outlined above has created, and exacerbated, conflicts between parties jointly developing a project. The carrying of the operator’s costs that typically accompanies a shale joint venture may incentivize the carried partner to take more exploration risk than is justified by the underlying project economics—for example, by drilling carried wells on highly speculative acreage. In such a case, if the land proves up, the operator captures the upside without putting its own (or putting little of its own) capital at risk. As described above, continuing exploration risks create a strong linkage between each part of a shale project.48 Thus, it makes less sense to allow one party to conduct its own program or elect to not participate in the costs of, for example, a late-stage pilot well, when it will reap the benefits of this well by virtue of the fact that future wells are more likely to be drilled on good acreage and at a lower cost.

Likewise, operational risks may create or exacerbate differences between parties. An operator might, for example, seek to offset cost risk by committing to the procurement of goods and services in advance. A non-operator—especially one that is carrying the operator—might desire to maintain flexibility instead of paying for future services up front in order to secure their availability. Budgeting for a forward-looking contracts and procurement strategy is likely to be difficult (especially with relatively low project margins) if a party does not know whether its counterparty will participate in any given operation. Similar conflicts can arise regarding attempts to maximize ultimate recoveries versus well profitability (through tradeoffs in well and completion designs, well spacing, restricted flow programs, and the like); the desire to drill multiple wells from pads to increase efficiencies, reduce costs, and minimize surface disturbance versus single wells to hold the maximum...
amount of acreage; and/or the desire to drill ahead of any necessary infrastructure versus at such time as capacity is available.

With respect to external risk, non-operating partners are likely to desire material input into operations, not only because they are sharing costs but because they may share the blame for the operator’s perceived sins. This is especially relevant given how controversial hydraulic fracturing has become and the differing health, safety, and environmental standards and organizations that incumbent emerging-play shale operators generally must deal with. Similarly, commodity price risk coupled with high costs and low margins may cause conflicts between partners with different overall asset portfolios. A company with little or no cash flows outside of shale projects or late-stage, cash producing conventional projects may be more inclined to focus capital on an unconventional project. Conversely, a party that requires near-term capital outlay for a conventional project or is struggling with financing might desire the flexibility to divert capital to a more attractive play.

The typical U.S. scheme of joint development emphasizes autonomy of action.\textsuperscript{50} Except for relatively minimal initial operations, a party may frequently opt out on an operation-by-operation basis. In a conventional world, this might be an appropriate method of allocating risk. However, unconventionals are risky, and it is this continuing risk that results in shale development operations being more interconnected than may be currently realized. For this reason, persons working with documents governing unconventional joint development should consider taking account of the project as a whole and focus on continuity of the participants’ commitment to a project. Unconventional joint venture agreements have, to some extent, attempted to address this. However, due to the nature of the risks involved in an unconventional project, it is useful to revisit the conflicts that may have arisen between parties in existing agreements and consider how these might have been resolved, and unconventional risks more appropriately allocated, through use of a modified contractual framework.

\section*{IV. Contractual Allocation of Unconventional Risk}

The traditional tools of joint development in the oil and gas industry have included some form of operating agreement (joint, unit, or otherwise) and the farmout agreement (and derivations thereof),

\textsuperscript{50} See generally Andrew B. Derman & James Barnes, \textit{Autonomy Versus Alliance: An Examination of the Management and Control Provisions of Joint Operating Agreements}, 42 ROCKY MTN. MIN. L. INST. 4-1 (1996) (noting the level of autonomy commonly found in U.S. joint venture control structures and arguing for a more collaborative approach to joint development).
frequently working in concert. In terms of joint operations, the hallmark of these agreements, and indeed, the U.S. onshore domestic exploration and production business generally, is independence. A party has the right to pursue its own interests with respect to any particular operation, with minimal interference, or even input, from counterparties. A party may generally participate, or not participate, in a particular operation following minimal initial required work, such as an initial well in the context of a joint operating agreement. Conversely, a party may generally propose any operation and carry it out regardless of the wishes of its counterparties, so long as it has full subscription of the costs. This structure has served for conventional projects with relatively low cost and moderate technical complexity, though it has not been without its critics.

With the advent of the shale revolution, the industry has realized, to some extent, that these traditional agreement structures do not fit the requirements of an unconventional resource play. From a commercial perspective, the capital-intensive nature of shale projects makes them prime candidates for joint development. However, simple farmouts, or divestitures with a series of smaller joint operating agreements, have tended to not be satisfactory. The early companies that were (or became) proficient with shale projects were eager to keep the upside from their work, but were in need of capital for ramp-up and exploitation stages of projects. Thus, a farmout was a logical structure to adopt, albeit with substantial changes. These changes typically include (substantially) more elaborate control procedures, (much) larger carried interests, longer and more complex mandatory work, more control by, and the operatorship of, the carried party, and a holistic view of a play as a whole (and not smaller individual areas). Basic contractual structures typically included an acquisition agreement, a joint development agreement, an area of mutual interest agreement, an agreement covering midstream assets and facilities, and innumerable joint operating agreements governing smaller

51. What follows is a generalization of control structures in agreements governing conventional joint operations onshore in the United States. We recognize that not all structures conform to this description—notably, even within the world of formalized structures, the AAPL’s coalbed methane addenda to its onshore Form 610, and, to a limited extent, some of the Rocky Mountain Mineral Law Foundation unit operating agreement forms; however, in terms of absolute number, these are the exception and not the rule.
52. See generally Derman & Barnes, supra note 50.
53. E.g., AAPL FORM 610, supra note 14, art. VI.B.
54. See, e.g., id. at art. VI.B.2.(a).
55. See generally, Derman & Barnes, supra note 50.
56. See, e.g., DERMAN, supra note 5, at 45; Larsen, supra note 5; Matthews & Kulander, supra note 5; Christiansen & Brooks, supra note 5; Michael J. Wozniak, Horizontal Drilling: Why it’s Much Better to “Lay Down” than to “Stand Up” and What is an “18” Azimuth” Anyway?, 57 ROCKY MT. MIN. L. INST. 11-1, 11-8 (2011).
groups of wells.57

This contractual structure has been, in many respects, an innovative and efficient solution to the problems posed by unconventional. However, even recent shale joint venture transactions have rarely, if ever, expressly identified or dealt with the phase of development of a particular play or the relevant risks going forward. Not surprisingly, there has been some dissatisfaction with certain aspects of these deals after the fact by their participants. Conflicts between parties have resulted from how these joint venture structures handle the risks of unconventional joint operations—specifically those described in more detail in Section II.C.3. In addition, though shale is “going mainstream” through revisions to traditional documents such as joint operating agreements, there has been no move to adopt similar frameworks as an industry. This failure has the potential to lead to further conflicts and decreased efficiency, as parties turn away from standardized forms.59

The risks inherent in unconventional projects necessarily interconnect a given set of operations, even if the wells are not linked by pressure communication. A successful late-stage exploitation well carries in it the lessons learned (and costs) of marginal, or even uneconomic, pilot program wells. A stronger relationship between individual operations suggests that parties should remain more closely aligned through the life of the project. Thus, we suggest that requiring closer alliance between parties in both large joint venture structures and other smaller versions of joint development governance documents might more appropriately deal with risks and conflicts that arise from them in the context of an unconventional operation. The following paragraphs discuss how risks are currently handled (if they are handled at all) and suggest potential solutions for more appropriately allocating these risks in the shale context.

A. Exploration: Concept Risk

Exploration risk in a conventional project is generally handled by contractually requiring that a party participate in exploratory operations,


58. See generally Weems & Tellegen, supra note 5 (discussing the new AAPL 610H-1989 joint operating agreement). The Canadian Association of Petroleum Landmen was one of the first organizations to propose industry standard terms specific to unconventional operations in Section 8 of its 2007 model form. In addition, the AIPN committee that is creating an Unconventional Resources Operating Agreement is nearing completion of its project. In this respect, it is worth noting that governing documents for many U.S. shale joint ventures seem to borrow concepts from AIPN model forms quite heavily.

59. See Weems & Tellegen, supra note 5, at 3 (“The proliferation of these custom forms defeats a key function of the Model Form, which is to provide certainty and uniformity.”).
and/or causing it to relinquish its interests in the project if it does not. 60 Once exploration operations have been completed, however, a party gains significant operational freedom. Thus, in a U.S. onshore joint operating agreement, if a party fails to participate in the initial well in a contract area, it generally will have breached the joint operating agreement, leading (potentially) to liability for damages. 61 Once this well has been drilled, however, each party is, for the most part, free to propose or not propose or to participate in or not participate in subsequent operations.

This allocation of exploratory and appraisal dry hole risk to all of the parties, with relative freedom afterwards, makes some sense when the geological de-risking process is largely complete after the first few wells. However, as noted above, a few wells do not (necessarily) a successful play concept make. 62 A well-run pilot program may encompass dozens of wells—both vertical and horizontal—drilled in several potential sub-areas within a play, as well as test production. Allowing concept risk to be placed on one consenting party after an initial well or two may result in under-investment in play de-risking and science, as even parties that have an interest in developing a play may be disincentivized to spend money overcoming initial well variability and determining whether a play will be commercially viable.

Conversely, joint development agreements specifically tailored to shale have sometimes resulted in over-expenditures on exploration. These transactions have typically (although not always) involved payment of the operator’s costs by a non-operating party seeking entry into a specific play, or U.S. shale generally. 63 This carry is generally subject to only minimal restrictions, such as time and total dollar amount. An initial work program and budget is usually agreed to as part of the joint development agreement governing the transaction; however, this is frequently quite general, prescribing, for example, minimum and maximum footage or number of wells, or a general area for the acquisition of new leases. The result is that the carried partner will be incentivized to take on more exploration risk than may be justified. A party whose capital is not at risk may, for example, acquire leases in non-core areas and drill wells on this acreage in an effort to capture value using the non-carried partner’s risk capital. 64 While the deployment of

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60. See, e.g., AAPL FORM 610, supra note 14, at VI.A; Lowe, supra note 20, at 793 (failure to earn in the context of a farmout).
61. DERMAN, supra note 5, at 3.
62. Supra Section III.B.1.
64. In addition, the sharing of information may be a problem. One of the most common complaints of non-carried partners is that they have no idea whether their funds are being well spent. They receive a check and a bill in the mail each month and any request for an explanation
risk capital may not be economically justified by the risk-adjusted expected value of the land, if it proves successful, the carried party does not suffer the loss of risk capital. This creates a free option for them to attempt to conduct pilot programs on land. On the other hand, though less common, there have been instances in which a carried party does not spend the entire carried amount and thus under-explores an area, potentially because it has written off the project too soon in the pilot. Other than the loss of the carry, this frequently carries no adverse consequence for the carried party.

A major goal of a pilot program should be to eliminate, to the extent practicable, play concept risk, and the contractual allocation of risk between parties should support this. Adoption of the traditional, conventional, autonomy-based risk allocation method will likely result in under-exploration. On the other hand, shale-specific joint ventures have tended to encourage over-exploration and expenditures in highly speculative areas. Arguably, the goal of an agreement governing joint operations during the concept and pilot phases of a shale project should be to keep the parties aligned. Just as non-consent is not permitted for initial wells in a joint operating agreement, so should it be prohibited (or, if not prohibited, disincentivized) during the pendency of an entire pilot program. To allow a party to fail to participate during the period in which well variability may create uncertainty, but then participate in future wells, is akin to allowing a party in a conventional project to view the results of an exploration well (drilled at other parties’ cost) before deciding whether to participate in future wells on a non-promoted basis. However, this methodology requires parties to carefully define where the pilot program will begin and end, what operations (and additional lands) it will encompass, and how they will adjust the program to changing circumstances—especially when only one party has capital at risk.

Thus, the details of pilot programs should be agreed to “up front.” In the context of a shale joint development agreement, this would likely take the form of a more detailed required work program. In a document governing a smaller venture, such as a joint operating agreement, this could take the form of the replacement of the initial well concept with a pilot program. If a non-participation right is desirable during the pilot program, the parties could add an acreage relinquishment provision. However, relinquishment of a single operating agreement contract area but not a play as a whole could result in the non-participating party still

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65. For example, in the AAPL 610-1989 form of operating agreement, Article VI.A could be revised to reference multiple wells on multiple tracts with a single formation with conforming changes to the definition of “Initial Well” and throughout the document. A section could then be added forbidding “subsequent operations” under Article VI.B unless and until the pilot program is completed.
obtaining some of the benefit of the pilot program through its participation in other contract areas. In this case, breach of contract damages might be a better approach. Conversely, the parties should consider defining a procedure whereby modifications to the initial plan can be discussed and agreed upon, as the uncertain nature of unconventional pilots requires flexibility in response to new and evolving information.

This first approach would likely cause controversy in that it would (i) increase the complexity of agreements and the time required to negotiate them, causing delay, and (ii) deprive the operator of the flexibility that it needs to make adjustments to the pilot program. Both of these issues could presumably increase project costs. In the latter case, reduced flexibility could mean that the operator will have to obtain consent from its partners to deviate from the agreed-to pilot program, introducing uncertainty and complexity into the decision-making process. These are fair points. However, the relevant question is not whether these changes potentially increase costs. Rather, it is how much they increase costs relative to the risks of having a pilot program that is unsuccessful, not due to geology, but because there is an incentive on the part of one party to either over-explore or under-explore the contract area. In any event, these issues could potentially be mitigated, at least to some extent, by keeping non-operators and/or non-carried parties “in the loop” about operational decisions, either through formal committees, informal information sharing arrangements, or other arrangements, such as secondments.

B. Exploration: Acreage Prospectivity Risk and Well Variability

Acreage prospectivity and well variability risk (or their nearest equivalents) in a conventional project are typically handled by allowing parties to determine their participation after an initial work program on an operation-by-operation basis. Failure to participate in any one well does not necessarily determine participation in subsequent wells or affect ownership of previous wells in which a party did participate. Thus, a party that elected not to participate in the drilling of a well would typically not lose its rights to previous wells or subsequent wells (or even the well at issue, after the participating parties recover their costs plus a premium). As illustrated in Section III.B.1, above, acreage prospectivity

66. See, e.g., DERMAN, supra note 5, at 59.
67. Secondments have been relatively common in unconventional projects, though this is usually attributed to a desire by the non-operator to “learn” the shale business from its more experienced partner.
68. See, e.g., AAPL FORM 610, supra note 14, at VI.B.1–2.
69. But see id. art. VI.B.7 (placing limits on the ability of the parties to drill additional wells into a formation already producing from a well in the contract area, unless the proposed new
is determined, and well variability risk decreases, only gradually over time and through the execution of operations. Thus, allowing a party to elect not to participate in early (even if non-pilot) wells and participate in later wells would allow that party to benefit from the experience gained and science conducted from and on the early wells, without paying its share of costs and taking the geological risk of those wells. This would disincentivize parties to drill wells necessary to prove or disprove acreage and eliminate well variability.

Shale joint venture agreements have typically addressed this issue by requiring participation (and even a carry) long after a pilot program has finished and/or mandating a work program and budget and an operating committee. While this may solve the problem posed by the traditional conventional methodology, it results in the same conflicts between carried and non-carried parties described in Section IV.A, above. That is, the carried party is incentivized to either drag out the pilot program, carry out too much exploration, or conduct the wrong type of exploration. Four possible types of contractual solutions are the creation of sub-areas, a non-consent matrix, prohibiting non-consent, and challenge-of-operator provisions.

1. Sub-Areas

A balance of interests is required to align the interests of the parties in proving up acreage and to eliminate well variability without doing so at the sole cost of one party or encouraging the acquisition and drilling of highly speculative acreage. Combined with a detailed and well-conceived pilot program, one potential solution to this issue would be the creation of sub-areas within the larger project area. Each sub-area would be subject to a mini-pilot project in which participation would be mandatory (for example, in a joint venture, where the carry of one party’s costs would constitute part of the purchase price) or failure to participate would result in relinquishment of rights to the sub-area.

This is not without precedent in both previous shale joint ventures and in conventional exploration and production contracts. Where this has occurred in large-scale shale joint ventures, it has typically been accomplished among distinct plays, either through separate suites of contracts that apply independently once finalized but were nevertheless part of the same overall transaction, or through the ability of parties within a single joint development agreement to reallocate capital.
expenditures from one area to another. Sub-units have been used as well with federal exploratory units and in coalbed methane joint venture documents. Both the U.S. federal unit agreement form\textsuperscript{71} and its accompanying joint operating agreement, typically based on the Rocky Mountain Mineral Law Foundation Form 1 or 2, allow a much larger area to be subdivided into semi-independent “drilling blocks” and “participating areas” that function as independent units. A party that does not participate in the initial well in such a sub-unit is effectively out of the sub-unit, but not the remainder of the larger unit.\textsuperscript{72} Similarly, the model coalbed methane revisions to the AAPL Form 610-1989 (and 1982) joint operating agreement contains an option to group wells and infrastructure into “pods.”\textsuperscript{73} Failure to participate in the development of a pod is sometimes deemed to be an election not to participate in subsequent operations with respect to the pod. For example, a party that does not participate in a well proposed as part of a pod relinquishes its interest in production from the pod as a whole and is not entitled to participate in the drilling of subsequent wells in the pod (at least until the non-participating party’s rights revert).\textsuperscript{74}

One of the challenges to this approach would likely be the difficulty in determining, before operations begin, where one sub-area begins and another ends. As with, for example, a unit in the Gulf of Mexico or outside of the United States, some level of educated guess would likely be required absent subsurface data. This is a valid criticism. However, it would presumably be possible to draft around this issue, potentially by delaying the creation of sub-areas until the end of the initial pilot program (or a predetermined point in time that approximates the end of the initial pilot program), when the parties know more about play geology.

2. Step-Down Premium Matrix\textsuperscript{75}

Another potential solution to acreage prospectivity and well variability

\begin{itemize}
  \item \textsuperscript{71} See 43 C.F.R. 3186.1 (2013) (statutory model form of federal units).
  \item \textsuperscript{72} E.g. ROCKY MTN. MIN. L. FOUND., FORM 2 § 6.1 (1995).
  \item \textsuperscript{73} Coalbed methane operations are generally more interdependent than most onshore operations. Groupings of wells (pods) and infrastructure—specifically for dewatering (reducing hydrostatic pressure within the coal seam so that gas will no longer be bonded to the coal matrix), disposing of this produced water, and compression of what is typically very low pressure gas—are required for a development to “work.” Thus, there is a need to “package” certain operations with respect to coalbed methane projects. See Frederick M. MacDonald, The AAPL Form 610 JOA Coalbed Methane Checklist, OIL AND GAS AGREEMENTS: JOINT OPERATIONS, 11-1, 11-2 (ROCKY MTN. MIN. L. FOUND. 2007) (“The defining difference between conventional and CBM development is therefore the required infrastructure.”). The same thing might be said of shale.
  \item \textsuperscript{74} AAPL FORM 610-1989 COALBED METHANE CHECKLIST § VI.B.2(b)1 (Option 2).
  \item \textsuperscript{75} Many thanks to Ilya F. Donsky, Manager, Drilling Operations, of LUKOIL Overseas Offshore Projects Inc. for bringing this concept to the authors’ attention.
\end{itemize}
risk would be to create a non-consent matrix that applies a reducing back-in premium the further along in the drilling program the non-consent occurs. Thus, for example, failure to participate during the pilot might result in relinquishment, while failure to participate in the sixty-sixth well in a program might only result in a two hundred percent cost-recovery premium. The viability of the concept would depend entirely on the cost recovery premiums chosen, which is difficult to discuss (other than conceptually) in a legal paper. As with the sub-area solution, however, one potential criticism of this approach is that it arbitrarily draws a line after which penalties become less severe before any real subsurface information is gathered.

3. No Non-Consent Permitted

Some would argue that a non-consent election should not be permitted at all in the context of an unconventional project. Given the interdependence of each well in an unconventional program, this is certainly a viable point of view. In this case, decisions would be made by the parties and would be binding on the group. However, this solution does not really deal with the risk that is (arguably inappropriately) allocated to the carrying partner in a joint venture and in any event would not be likely to be generally accepted by the exploration and production industry.

4. Under-development and the CAPL Challenge of Operator Procedure

As a final word regarding exploration risks, non-operating parties should consider an operator that does not conduct enough exploration operations. While a non-operator (especially one that is carrying the operator) would obviously be concerned about over-spending, under-spending can also result in a project never becoming commercial. In addition, failure to drill acreage in order to maintain it will ultimately result in its loss. In a typical joint operating agreement, the non-operating party is likely to be protected against this by its right to propose operations. This option may not be available to parties to a farmout or a joint venture. In this case, one potential solution is found in the “challenge of operator” provisions of the Canadian Association of Petroleum Landmen (CAPL) 2007 form of operating procedure. Under these provisions, a non-operator may, in some circumstances, offer to act as operator on better terms than the current operator. If such an offer is made, the operator is then put into a position of “put up or shut up.” It

76. See, e.g., AAPL FORM 610, supra note 14, at VI.B.1.
77. CANADIAN ASS’N OF PETROLEUM LANDMEN, FORM OF OPERATING PROCEDURE §§ 2.03 et seq. (2007).
may either match or exceed the non-operator’s proposed terms, in which case it remains the operator (but based on those revised terms), or resigns. The winner of the challenge becomes the operator, but must operate in accordance with its proposals and bear all costs in excess of what was set out in its winning the challenge. In addition, the successful challenger may not resign for two years after becoming the operator. Challenges may only be brought after the current operator has been operating for a continuous period of two years. This procedure is an unlikely candidate for standardized inclusion in U.S. documents, but it is a potentially interesting tool to keep an operator honest and give a non-operator that has “learned the ropes” of unconventional development (especially a carrying party in a joint venture) an opportunity to operate, if it can add value.

C. Operational Risks

Operational risks are typically either dealt with in a cursory manner or not directly dealt with at all in conventional governing documents in the United States. Many companies would consider these risks part of the cost of doing business. Thus, cost risk is an accepted part of the oil and gas industry. A party’s right to be reimbursed by its partners for their respective shares of operating costs is generally not susceptible to challenge solely on the basis that the costs are too high. The commonly used 2005 edition of the COPAS (Council of Petroleum Accountants Societies, Inc.) accounting procedure permits rejection of a charge only in very specific circumstances, such as the charge being based on an incorrect cost-bearing interest, or an Authorization for Expenditures (AFE) that was not properly approved. In addition, under most conventional accounting procedures, the accumulation of surplus stock that is charged to the joint account (and that might be used to hedge against future cost increases for, or scarcity of, this equipment) “shall be avoided.” Most joint ventures do not have significant provisions designed to mitigate cost risks, other than limits on the amount of a carry. Thus, an operator is incentivized to save costs to some extent in order to preserve its right to be carried for as many wells as possible.

Delays and cycle time issues, likewise, are dealt with in joint operating agreements only in the requirement that a party re-propose an operation that has not commenced within ninety days. In farmouts, delay typically

78. Id. §§ 2.03, 2.05.
79. This assumes that the operator was not grossly negligent and excludes certain provisions requiring competitive rates, such as Article 5 of the AAPL Offshore (Deepwater) Form (2007).
80. COPAS ACCOUNTING PROCEDURE § I.4.B (2005). Note that there are no cost overrun provisions in a typical U.S. joint operating agreement and accounting procedure.
81. Id. § II.3.
82. AAPL FORM 610, supra note 14, at VI.B.1. But see Weems & Tellegen, supra note 5, at
leads to forfeiture of a right to earn or breach of contract, but is otherwise not generally expressly handled. In a shale joint venture, delay is controlled, if at all, through a time limit on carry obligations.

As noted above, unconventional projects are sensitive to changes in costs as well as delays. That carried interests are common in shale joint ventures is in part a result of high and unpredictable development costs. Issues and decisions that might cause increased costs, delays, and increased cycle times are the very matters with respect to which U.S. non-operators usually are not afforded much input or influence. Some conflicts can be avoided before a project begins by ensuring that the parties have similar operating philosophies with respect to the project. By way of example, if an operator prefers to utilize early, multi-well pad drilling to gain efficiencies in lieu of early de-risking and holding (potentially) more acreage and then later switching to pad-based drilling, the non-operator should determine that this approach is acceptable prior to entering into any agreement. Many shale joint ventures have attempted to mitigate this by using operating committee concepts borrowed from international agreements. However, it is unlikely that any U.S. operator that is not at a severe bargaining disadvantage would allow an operating committee (either through its contractual power or voting control by the non-operator) to micro-manage operations. Thus, even the best operating committee provisions will probably not alleviate the effects of operational conflicts. Further, more complex decision-making structures may be, at some level, counterproductive in that the time that it takes to make a decision may leave the operator unable to take advantage of opportunities, such as buying another operator’s surplus equipment to alleviate its own shortages.

With respect to increasing cost and equipment scarcity issues, potential shale investors should consider including a specific recognition of when a pilot ends and a final investment decision (of sorts) is to be made. Though these phase lines are frequently indistinct, and have not traditionally been considered at all, setting a point—even if it is artificial—at which the parties must make an in-or-out decision would allow the operator’s procurement procedures to alleviate cost and delay

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12. The new horizontal modifications to the AAPL 610 form (and presumably the forthcoming revised form itself) will contain provisions designed to protect an operator against what is apparently one of the most common sources of delays—the inability to move a horizontal rig into position after a “spudder rig” has left the drilsite until after the time period allotted in the relevant AFE.

83. In fact, under the AAPL Form 610-1989 joint operating agreement the operator actually acts as an independent contractor and is “not subject to the control or direction of the Non-Operators except as to the type of operation to be undertaken . . . .” AAPL FORM 610, supra note 14, at V.A. Shale joint ventures are typically not an exception to this rule.

84. See, e.g. AIPN MODEL FORM INTERNATIONAL JOINT OPERATING AGREEMENT arts. 5 et seq. (2012); see also Exco Res., Inc., supra note 63 (BG/Esco Joint Development Agreement).
risk and to achieve economies of scale. This would result in increased up-front commitments for all parties and potential surpluses of equipment, but with lower overall costs and a reduced risk of delay due to unavailability. However, without a definite final investment decision and commitment from a non-operator to bear its share of these costs, an operator will be unlikely to budget for or be willing to bear all of the risk of ramping-up, building infrastructure, and otherwise preparing for production. Effectively mitigating operational risks, as with exploration risks, requires that parties surrender some of their freedom in favor of certainty.

D. External Risks

External risks, such as changes in law, politics, and commodity prices, are difficult to mitigate, and will almost certainly affect projects, both conventional and unconventional, throughout their lifecycles. However, unconventional projects are especially sensitive to these risks due to their operation-intensive nature and the political controversy that has surrounded hydraulic fracturing. Effectively mitigating them (to the extent possible) requires, again, a shared operating philosophy, some input regarding operations for non-operators, and a commitment to the project regardless of its sensitivity to commodity prices.

These risks are rarely specifically addressed in U.S. joint operating documents. Commodity price risk can be seen as effectively handled by the ability of a party to refuse to participate further in operations and re-allocate capital to other projects. Other than this, it cannot be effectively jointly mitigated unless the joint venture structure is an incorporated stand-alone entity that hedges its production. Some shale joint ventures afford the parties the ability to jointly agree to cease spending money on one play to focus on another that falls within the same document; however, the alternative project is usually not a higher-margin conventional project. Provisions relating to health, safety, and environmental (HSE) programs are almost entirely absent from traditional U.S. agreements, though shale joint venture documents have, from time to time, included requirements for HSE programs and allowed for HSE audits. However, the impact of external political and legal issues can potentially be lessened through the adoption of effective

85. If this occurs, parties that participate in the acquisition of goods and services may be able to offset losses to some extent by selling surplus, as scarcity tends to affect all operators.
86. The CAPL “challenge of operator” procedures, discussed supra § IV.B.iv, could potentially find application here as well. If the problem is the operator (and this is generally what non-operators will, to some extent, believe), these provisions allow the non-operator a mechanism to become the operator.
87. These provisions are frequently borrowed from AIPN documents.
policies, procedures, and programs.88

V. CONCLUSION

Ultimately, unconventional projects are risky—in some respects more so than conventional projects. However, the purpose of this Article is not to imply that they are not worth it or to deny the impact that unconventionals have had on the U.S. energy industry, and indeed, the United States as a whole. But by ignoring or failing to understand the risks inherent in an unconventional oil and gas project, investors do their own projects a disservice. An unconventional risk profile can be dealt with to a large extent via contractual risk allocation, just as can that of a conventional asset. However, applying conventional risk sharing mechanisms to an unconventional project can be just as counterproductive as believing that producing oil from shale is like producing widgets from a factory.

The purpose of this Article, in that respect, has not been to provide a definitive solution. Rather, by suggesting different ways of conceptualizing the lifecycle of an unconventional project and offering general solutions, we hope to join our voices in the discussion that has already begun regarding how best to adapt over one hundred fifty years of drilling and production experience to a new world. Luckily, the shale boom is just beginning and has yet to finally settle into its proper place in the portfolios of oil and gas companies and in the industry as a whole.

88. See Weems & Tellegen, supra note 5, at 15 (citing Denbury Resources’ decision to employ pad-based drilling in its 2011 Corporate Responsibility Report as an example of a company’s response to the need to “minimize surface disruption when drilling in sensitive areas”).
In April, I participated as a panelist for a program titled Failure is an Option, which addressed best practices for developing a construction project. Being the only lawyer on the panel among seasoned construction professionals, I was prepared to tackle the topic from a lawyer’s perspective. I was told to expect the following questions: 1) Is there such a thing as a “good” construction contract?; 2) Can a “good” contract increase the likelihood of success?; and 3) What are the attributes of a “good” construction contract?

After nearly 30 years of handling construction claims and disputes, I felt that I was qualified to address these points. Specifically, my answers to the first two questions were “yes.” A good analogy that I can offer is that a “good” construction contract is like a well-constructed ship—it will get you safely through rough water. Conversely, a “bad” construction contract is analogous to a poorly constructed ship—in rough water, it is likely to capsize, resulting in disaster.

As I considered the third question, I compiled the following list of attributes of a “good” construction contract:

**It is Best Suited to Deliver the Project in the Way the Parties Intended**
Many delivery systems are available to the parties (EPC, EPCM, GMP, Cost Plus, Reimbursable, etc.). Great care must be taken to select the project delivery system that is best designed to meet the parties’ and the project’s expressed needs.

**It Presents Itself as an Integrated, Well-considered Whole**
Taking shortcuts to save time and/or money should be avoided. Crafting a good construction contract takes a commitment by upper management on both sides to spend time and money up-front. You often only get one chance to get what you need in a contract, so it is an investment that will pay big dividends later if problems or disputes arise.

**It is Written in Clear, Concise, Unambiguous Language**
The clauses and provisions should be written in language that can be easily understood by someone unfamiliar with the project (such as an arbitrator or judge). Ambiguity in a contract can lead to differing interpretations of critical provisions and, in the case of disputes, may lead to the introduction of parole evidence and “custom and practice in the industry”—probably a result that neither party wanted or intended.

**It is Mechanically Sound**
All of the provisions, clauses, definitions and terms should be consistent throughout the document, its exhibits and attachments. The document should read correctly as a whole, leaving no gaps or incomplete references. All exhibits, appendices and attachments should be properly identified, included with the main body of the contract and referenced correctly throughout the body of the contract.

**It Clearly Defines the Scope of the Work**
Disputes over the scope of the work are the most common of all construction disputes and are typically the most costly. As such, it is critically important that the description of the scope of work be as fully developed as possible so that opportunities for differing interpretations and costly disputes over contract details are avoided.

**It Anticipates a Wide Variety of Potential Problems**
The construction contract will, in all likelihood, be a non-factor in the success of a project unless and until a serious problem arises. When problems occur, the parties read it, maybe for the first time, in order to determine their respective rights and obligations. By that time, it is sometimes too late to change the outcome of the problem or dispute. Accordingly, a good contract should consider and address the many obstacles that may arise throughout the project and clearly define the method by which problems will be resolved.

**It Fairly Allocates Risks to the Party who is Best Positioned to Anticipate and Control the Risks**
The construction contract will, in all likelihood, be a non-factor in the success of a project unless and until a serious problem arises. When problems occur, the parties read it, maybe for the first time, in order to determine their respective rights and obligations. By that time, it is sometimes too late to change the outcome of the problem or dispute. Accordingly, a good contract should consider and address the many obstacles that may arise throughout the project and clearly define the method by which problems will be resolved.

In this context, I would like to direct your attention to the many facets of a construction contract that might be considered. Some examples of risks that are sometimes misallocated include:

- Unforeseen site conditions and environmental liability; best for owner to hold.
Attributes of a Good Construction Contract Continued

- Schedule and time of performance, unforeseen labor conditions, increases in the price of materials, risk of subcontractor non-performance, site control and safety; best for the contractor to hold.

It is Balanced

A contract that is oppressive and heavily in favor of one party inevitably leads to confrontation, disputes and inflated prices. Unfair contracts also tend to break down what may be a cooperative spirit between the parties, making it less likely that the parties will work to resolve problems constructively. Examples of abused clauses include:

No damage for delay: Typically inserted by owners to shift costs of delays to the contractor, but inevitably leading the contractor to claim the delay is the Owner’s fault and claim for acceleration.

Onerous indemnity provisions: One party should not ask the other to indemnify it for its own negligence.

Onerous notice provisions: Owners sometimes put near impossible requirements on the contractor to give notice of a claim. If these provisions are not followed, the claim is forfeited. While well intentioned, it fosters an adversarial atmosphere, breaking down cooperation.

It Carefully Considers all Aspects of Insurance

The insurance program must be well considered and comprehensive. It should address party specific insurance coverages and their defined limits, and should provide for waiver of subrogation so as to avoid finger-pointing if insurance claims are needed.

It has a Clear Dispute Resolution Mechanism

At the stage of contract formation, most people avoid thoughts that the project may result in a “bet the company” dispute, but the drafting stage is the time to contemplate this scenario and determine a comprehensive dispute resolution clause. Considerations must include choice of law, choice of venue, choice of language (for international contracts), whether the dispute will be subject to litigation or arbitration, and which party gets to choose the forum. Consideration should also be given to permitting joinder of third parties to any dispute between the owner and the contractor. Much time and money can be wasted in just appointing the decision maker(s) if the dispute resolution clause is not well crafted.

It Must be Understood and Followed at the Project Level

Last, but not least, the ultimate value of a good construction contract lies in how well it is understood and followed by the project teams. Those who drafted and negotiated the contract must thoroughly explain the key contract provisions to front line project managers and other project participants, ensuring they fully understand what it is expected and how they must act to preserve the rights of the company. Anything less will risk making all the good effort and attributes identified above meaningless, potentially leading to the forfeiture of important rights.

Conclusion

In conclusion, the attributes of a “good” construction contract are those that: 1) make it easily understood; 2) address the myriad of issues and problems that can arise; and 3) properly and fairly balance the risks and rewards between the parties. A construction contract that achieves these goals can be expected to enhance the likelihood of success of the project.

Richard Paciaroni is a partner in the law firm of K&L Gates, LLP, where he is one of the leaders of the firm’s international Engineering and Construction Practice Group. His office is located in Pittsburgh, Pennsylvania. Paciaroni has experience with construction disputes worldwide with a particular focus on projects in South America and the Middle East. In the construction field, his practice includes representation of clients involved in the offshore oil and gas, petrochemical, steel, heavy and highway, pulp and paper, power generation and general building construction industries. He can be reached at richard.paciaroni@klgates.com.
Drafting Effective Waivers of Consequential Damages

Jason L. Richey*
William D. Wickard**

It seems highly unlikely that a project’s construction manager, which agreed to a $600,000 fee, would be held liable by an arbitration panel for over $14 million in lost profits – twenty-four times the contract fee – after the project experienced a mere four-month delay. Improbable as it sounds, that has actually happened in a construction case. Sadly, this disastrous result could have probably been avoided had the parties’ contract included a waiver of consequential damages. Contractual provisions that mutually waive the rights of the owner and contractor to recover consequential damages have become common-place in today’s construction contracts.

However, the mere presence of a consequential damages waiver in a construction contract does not ensure the parties will avoid costly litigation over liability for consequential damages. Indeed, a consequential damages waiver that is improperly drafted may cause contractors and owners to expend significant time and money defending claims that seek damages for delay, lost profits or other damages commonly thought to only be “consequential.” As such, parties to a construction contract must negotiate clearly-worded project-specific waivers or they could face protracted and costly litigation over the recoverability of consequential damages. Such a provision will allow courts and arbitration panels to dismiss all or part of a construction case at an early stage if the waiver clearly bars a demand for certain types of consequential damages.

This article provides an overview of the significance of properly drafting effective consequential damages waivers and provides recommendations on how such provisions should be drafted to improve the odds that courts and arbitration panels will enforce them.

A. What are Consequential Damages in a Construction Dispute?

When a party breaches a construction contract, the law generally requires that the non-breaching party be placed in the position that it would have been in absent the breach.1 The non-breaching party may recover two types of damages - “direct or general” damages and “indirect or consequential” damages. The distinction is critical because generally, indirect damages can be barred by contract while direct damages can not. Distinguishing between direct and indirect damages has long been a difficult task for courts.

Generally, direct damages “follow naturally from the type of wrong complained of” and are “reasonably expected.”2 For example, the costs incurred by the owner to complete a project following the contractor’s default or wrongful abandonment of the project are direct damages.3 Many times, direct damages are...
also measured by the costs necessary to repair or replace a contractor’s defective work. Similarly, costs incurred to bring a project up to contract specifications have been found to be a “direct, usual and foreseeable loss.”

On the other hand, there is no universal definition for consequential damages. Generally, consequential damages are commonly thought of as losses that “do[ ] not flow directly and immediately from the act of the party, but only from some of the consequences or results of such act.” For a party to be able to recover consequential damages from the breaching party, they must have been reasonably foreseeable and within the contemplation of the parties at the time they made the contract. Typical examples of consequential damages include lost profits, lost rents, damage to reputation, down or idle time, interest and finance charges, loss of use of goods, additional labor costs, material escalation costs, depreciation, rental costs, additional energy costs, loss of productivity and efficiency, and additional home office costs. The most common and perhaps most costly example of consequential damages in a construction dispute are lost profits.

B. Waivers of Consequential Damages are Generally Enforceable and Beneficial to Contractors and Owner.

Contractual waivers of consequential damages between sophisticated parties are generally enforceable. Courts are inclined to enforce contractual waivers of consequential damages because “[a]
court is not at liberty to make a new contract for the parties who have spoken for themselves."\textsuperscript{11} However, a court will not enforce a waiver if it determines the provision is unconscionable,\textsuperscript{12} against public policy,\textsuperscript{13} or prohibited by statute.\textsuperscript{14}

Perini Corp. v. Greate Bay Hotel & Casino, Inc. presents a telling example of why consequential damages waivers should be utilized in the construction industry. In that case, Perini Corporation ("Perini"), entered into a construction-management agreement with an Atlantic City hotel and casino (the "Sands") where Perini agreed to serve as the construction manager for major renovations to the casino. Perini’s fee was $600,000.\textsuperscript{15} There were several components to the casino renovations, with the most notable aspect being the construction of a $400,000 ornamental, non-functional glass façade located outside the casino, facing the boardwalk. Previously, the Sands had no entrance visible from the boardwalk, and though the façade would be nonfunctional, the Sands anticipated that this “new glitzy glass façade on the east side of the building [] might act as a magnet to lure a new category of customers-strollers who might leave the boardwalk and walk the long block from the beach to the Sands.”\textsuperscript{16} Although the contract contained no completion date, the parties ultimately agreed that the renovations would be substantially complete by May 31, 1984. The ornamental façade, however, was not completed until August 31, 1984 and the project did not achieve substantial completion until September 14, 1984, approximately four months late. The Sands ultimately terminated Perini in December 1984.

In an arbitration, the Sands sought from Perini the lost profits it incurred as a result of the delay. Even though the project was only delayed by about four months, the arbitration panel awarded Sands over $14.5 million in damages, twenty-four times the contract fee. This amount represented the Sand’s lost profits from the end of May until it terminated Perini in December. Ultimately, the New Jersey Supreme Court affirmed the arbitrators’ shocking and substantial award, stating that even though it was “troubled by the magnitude of this award,” “[p]rojects of this magnitude are better left to the agreement reached by the parties in their contract.”\textsuperscript{17}

Perini could have avoided such a result by negotiating a contract that allocated the risk for such lost profits to the Sands by including a mutual waiver of consequential damages. Indeed, as one commentator has noted, the mere threat of outlandish consequential damages awards such as in Perini causes a financial drain on the entire construction industry:

> By their subjective nature, these claims [for consequential damages] typically are the largest, most costly and the most likely to lead to a windfall to one party and economic disaster to the other. The possibility of a windfall recovery is one of the most substantial impediments to settlement in disputes over delays or change orders. Eliminating these

\textsuperscript{11} Petty v. Sloan, 277 S.W.2d 355, 359 (Tenn. 1955).
\textsuperscript{14} See Mark Singleton Buick, 391 S.E.2d at 437.
\textsuperscript{15} 610 A.2d at 367.
\textsuperscript{16} Id. at 367.
\textsuperscript{17} Id. at 383.
exposures should substantially reduce the overhead cost of contractors for the benefit of the whole construction industry.\footnote{Lynn R. Axelroth, \textit{Mutual Waiver of Consequential Damages – The Owner's Perspective}, 18 – JAN Construction Law. 11, n.1 (1998) (quoting Howard Goldberg, Memorandum to Documents Committee Apr. 18-20, 1996, p.1).}

In direct response to the \textit{Perini} decision, in 1997, the AIA began including a mutual waiver of consequential damages in its A201 - General Conditions of the Contract for Construction.\footnote{Werner Sabo, \textit{Legal Guide to AIA Documents} 293 (4\textsuperscript{th} ed., Cumulative Supplement 2005).} Currently, the AIA’s waiver of consequential damages is included at section 15.1.6 of the A201 and provided as follows:

**Claims for Consequential Damages.** The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating this Contract. This mutual waiver includes:

1. damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

2. damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Subparagraph 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

Under the AIA provision, whether a type of damage is consequential depends upon the position of the litigant. From the owner's point of view, damages for rental expenses, loss of use, income and profit; damages relating to additional financing costs; damages to business and reputation; and damages for loss of management or employee productivity are consequential damages. From the contractor's point of view, damages for principal office expenses, loss of financing, business and reputation; and loss of profit (other than anticipated profits arising directly from its work under the contract) are consequential damages. In fact, this has led some to criticize the AIA’s waiver as not really being a “mutual” waiver since the list of consequential damages waived by the owner is not identical to the list waived by the contractor.\footnote{See Lynn R. Axelroth, \textit{Mutual Waiver of Consequential Damages – The Owner's Perspective}, 18 – Jan. Construction Law. 11 (1998) (“The owner is precluded from recovery of its lost profit and income but the contractor is specifically allowed profit arising directly from its work.”).}

The AIA’s inclusion of the waiver was seen as a “bellweather event” because the AIA’s forms are the “benchmark” and the “most influential documents” in the construction industry.\footnote{Gregory K. Morgan & Albert E. Phillips, \textit{Design Professional Contract Risk Allocation: The Impact of Waivers of Consequential Damages and Other Limitations of Liabilities on Traditional Owner Rights and Remedies}, 33 J.C. & U.L. 1, 14 (2006).} Many contractors believed it was “unfair to expect a general contractor, which is earning a profit of perhaps 5 percent to 10 percent on a project, to assume the risk of lost profits or other economic losses that the owner will sustain in the event the project is delayed or not completed, even if the delay or non-completion is due to the negligence or default of the contractor.”\footnote{Bruce Baker, \textit{AIA Construction Contract: Waiver of Damages and other Surprises}, 5/12/98 N.Y.L.J. 1.} By limiting an owner’s recoverable damages to direct damages only, the AIA’s waiver levels the risks between the owner and contractor so that a contractor’s potential exposure is proportional to its compensation under the contract. Under the AIA’s waiver, even if a project runs amok and the contractor causes delay to the project or even fails to complete the project, the contractor should not face an outlandish demand for lost profits and consequential damages like those
awarded to the owner in Perini. Not surprisingly, the AIA’s waiver of consequential damages was also “roundly criticized” by owners.23

Because the AIA’s waiver is not exclusive or project specific, a court or arbitrator must determine whether a particular damage not listed in the waiver is a consequential or direct damage. This presents a problem because no two courts define consequential damages in the same way.24 Many courts and arbitration panels have dismissed lawsuits without holding a trial, based on the presence of a consequential damages waiver. These courts and panels generally find that classification of damages is a legal issue for the courts and a trial is unnecessary where consequential damages are excluded by contract. Yet, some courts and arbitration panels take an opposite approach to waivers and hold a trial or hearing to decide whether certain categories of damages are consequential based on the premise that the precise demarcation between direct and consequential damages is a question of fact.

C. Courts Divergent Approaches to Consequential Damages Waivers.

Courts have taken different approaches to applying waivers of consequential damages in construction disputes. As shown below, some courts have dismissed a party’s claim based on the express language of the waiver while others have allowed a jury to decide whether the claim in fact seeks consequential damages and is barred.

1. No Liability for Consequential Damages.

Some courts and arbitration panels will enforce consequential damages waivers to narrow the issues to be resolved without a trial.25 These courts determine that because certain damages are clearly contractually-barred consequential damages, a trial regarding such damages would be futile and unnecessary.26 For instance, several courts have interpreted general consequential damages provisions that do not specifically mention delay to bar delay damages.27 Some commentators have stated that

25 See, e.g., Performance Abatement Servs., Inc. v. Lansing Bd. of Water & Light, 168 F. Supp. 2d 720, 740 (W.D. Mich. 2001) (“classification of damages is a legal issue for the courts” and delay damages were consequential damages excluded by contract); Long v. Monaco Coach Corp., No. 3:04-CV-203, 2006 WL 2564040, at *6 (E.D. Tenn. Aug. 31, 2006) (finding under Tennessee law that consequential damages were unavailable pursuant to exclusionary clause); Intercarbon Bermuda Ltd v. Caltex Trading & Transp. Corp., 146 F.R.D. 64, 73 (S.D.N.Y. 1993) (arbitration panel correctly dismissed case without hearing where contract barred recovery of consequential damages); Accord Island Creek Coal Co. v. Lake Shore, Inc., 832 F.2d 274, 278 (4th Cir. 1987) (holding as a matter of law that contract clause limiting consequential damages was enforceable and limiting plaintiff’s recovery to direct damages); World Enters., Inc. v. Midwest Aviation Servs., Inc., 713 S.W.2d 606, 610 (Mo. Ct. App. 1986) (because provision in contract which excluded consequential damages was clear and unambiguous whether provision excluded damages for loss of use was question of law for court). See also Pulte Home Corp., 579 S.E.2d at 192 (“Whether damages are direct or consequential is a matter of law for decision by the Court.”); R.K. Chevrolet, Inc. v. Hayden, 480 S.E.2d 477, 481 (Va. 1997) (same); Desco Corp. v. Harry W. Trushel Constr. Co., 413 S.W.2d 85, 91 (W.Va. 1991) (same).
26 See Clark, 237 F. Supp. at 237, 239 (as an “issue of law,” owner could not recover costs of lost tile from designer/builder of tile kiln even though waiver did not specifically define “consequential damages”); American Tele. & Telegraph Co. v. New York City Human Resources Admin., 833 F. Supp. 962, 991 n.22 (S.D.N.Y. 1993) (finding as a matter of law that certain costs were consequential damages even though waiver did not specifically define “consequential damages”); Boone Valley Cooperative Processing Assoc. v. French Oil Mill Machinery Co., 383 F. Supp. 606, 610 (N.D. Iowa 1974) (granting summary judgment because lost profits as result of explosion and disruption of plant operations were consequential damages even though waiver did not specifically define “consequential damages”); Cryogenic Equip., Inc. v. Southern Nitrogen, Inc., 490 F.2d 696, 698 (8th Cir. 1974) (court erred by submitting issue of plant owner’s lost profits to jury where its contract with contractor waived consequential damages but did not specifically define “consequential damages”).
27 See, e.g., Performance Abatement Servs., 168 F. Supp. 2d at 740 (finding as a matter of law that “delay damages” were excluded by consequential damages waiver that did not specifically define “delay damages” as consequential); Wright Schuchart, 1994 WL 1247, at *2 (finding there was no issue of material fact regarding whether plaintiff’s delay damages were direct or consequential damages); Monarch Brewing Co. v. George J. Meyer Mfg. Co., 13 F.2d 582, 584-85 (9th Cir. 1942) (finding as a matter of law that damages incurred during facility’s shutdowns were consequential damages).
because damages for delay can only be the consequence of a breach of a construction agreement, there can be no recovery for delay if the parties disclaim all consequential damages, without defining what they mean by consequential. 28 On the other hand, it has also been suggested that catch-all waivers that do not specifically define delay damages as consequential, should not bar recovery of delay damages. 29 As such, other courts have refused to apply consequential damages waivers to bar delay damages where the waiver did not specifically define delay damages as a type of consequential damages. 30

The court adopted the former approach in Otis Elevator Co. v. Standard Construction Co., finding delay damages were barred by a waiver even though they were not specifically defined as consequential damages. In Otis Elevator, a hospital claimed delay damages against an elevator installer when the installation of the hospital’s elevators was delayed. 31 According to the court, the hospital’s damages which arose “from failure to furnish the contract res in proper condition within the time required,” were contractually-barred consequential damages:

the cost of additional labor for operation of the hospital, the value of the time lost by employees because of faulty operation of the elevators, and the additional costs of construction in the new construction and alterations of the hospital which resulted from the delay in installing the elevators must also be rejected. They are consequential damages, here. 32

The court then reached its decision on the pleadings and without “affidavits or other additional facts bases,” and held that the hospital’s “counterclaim fail[ed] as a matter of law.” 33 As Otis Elevator shows, some courts will find that delay damages or other types of damages are contractually-barred consequential damages, and dismiss those damages from the case without a trial. 34 However, as discussed in more detail below, the best practice is to have an attorney draft the waiver provisions so as to enumerate the specific types of damages the parties consider being consequential. As such, parties should not have to rely on decisions like Otis Elevator to convince a court to enforce the negotiated waiver provision.

2. Juries Decide Whether the Damages at Issue are Barred by the Waiver.

Many courts take an opposite approach than the court in Otis Elevator. These courts find that it is a question of fact for a jury to decide whether certain categories of damages are consequential and, thus, barred by a consequential damages waiver. As a leading treatise has recognized “[d]amages that might be consequential under one contract can be direct or ordinary under another. Among the circumstances most relevant to the classification is the scope of the broken promise itself.”35 Further, the commercial context in which the contract was entered “is of substantial importance in determining whether particular

28 See, e.g., Steven G.M. Stein, CONSTRUCTION LAW, § 3.03[4][c][iii] (stating that “[c]onsequential and incidental damages…include…delay damages” and waivers “cut off such claims”); Richard Lord, 24 WILLISTON ON CONTRACTS § 66:64 (4th ed.) (“[T]he courts have upheld exclusions of consequential damages as against claims for damages due to delay …”).

29 Werner Sabo, Legal Guide to AIA Documents 293 (4th ed. 1998) (“One question that may arise is to what extent delay damages are waived by this provision. That question is not addressed by [the AIA’s consequential damages waiver], so the parties may consider adding a clause to cover this issue.”).

30 See, e.g., Mead Corp. v. McNally-Pittsburgh Mfg., 654 F.2d 1197, 1208-09 (6th Cir. 1981) (finding that parties, when drafting their contract, never resolved the “critical question” of who would bear the risk of delay damages); Carbontek Trading Co. Ltd. v. Phibro Energy, Inc., 910 F.2d 302, 306 (5th Cir. 1990) (“In its brief Carbontek notes that the contract excluded claims for consequential damages. The damages for delay claimed by Phibro, however, are not consequential damages. Incidental damages may be recovered even when consequential damages are excluded.”).

32 Id. at 608.
33 Id. at 605-6.
34 See also Performance Abatement Servs., 168 F. Supp. 2d at 740 (delay damages were consequential damages excluded by waiver); See, e.g., Wright Schuchart, 1994 WL 1247, at *2 (loss of productivity/efficiency were consequential damages barred by a waiver); Monarch Brewing, 130 F.2d at 584-85 (value of labor lost from shutdowns were consequential damages barred by a waiver).
damages flowing from its breach are direct or consequential.\textsuperscript{36} Moreover, courts repeatedly find that whether a loss constitutes direct damage or consequential damage is dependent on the specific circumstances of the case, and hence a question of fact:

In general, the precise demarcation between direct and consequential damages is a question of fact, and the commercial context in which a contract is made is of substantial importance in determining whether particular items of damages will fall into one category or the other.\textsuperscript{37}

For instance, in Niagara Mohawk Power Corporation v. Stone & Webster Engineering Corp., the owner of a nuclear power plant sued its piping contractor for breach of contract, negligence and gross negligence.\textsuperscript{38} The owner claimed its damages, which could be divided into twelve separate categories, totaled approximately $88,000,000.\textsuperscript{39} The contractor moved for summary judgment on the grounds that four of the owner’s damage categories – financing costs, costs incurred in conjunction with government inspections, engineering oversight costs and overhead costs – were barred as a matter of law by a consequential damages waiver.\textsuperscript{40} The language of the consequential damage waiver did not specifically define what the parties meant by “consequential damages,” and merely provided: “In no event shall the Contractor be liable for consequential damages arising out of the performance of erection work to the project.”\textsuperscript{41} The court found that “[g]enerally, whether damages are direct or consequential is an issue of fact which must be reserved for trial.”\textsuperscript{42} Consequently, the court declined to dismiss any categories of damages as barred by the consequential damages waiver, leaving the recoverability of much of the $88,000,000 in alleged damages to be decided at trial.\textsuperscript{43}

Similarly, in ANR Prod. Co. v. Westburne Drilling Inc., an oil and gas development company sued its drilling contractor for damages incurred in connection with an oil drilling project.\textsuperscript{44} The contractor moved for summary judgment on the basis that the owner was contractually barred from recovering consequential damages such as the cost of drilling a replacement well, rig rental, additional wages and materials purchased due to delay.\textsuperscript{45} The parties’ contract barred the owner from recovering consequential damages, but did not define what the parties meant by “consequential damages.” The court refused to grant summary judgment, stating:

The parties agreed that the drilling contract expressly bars recovery of consequential damages. But they differ in their respective definition and characterization of consequential damages. I do not find it appropriate to


\textsuperscript{37} Amer. Elec. Power Co. v. Westinghouse Elec. Corp., 418 F. Supp. 435, 459 (S.D.N.Y. 1976) (despite contract’s detailed list of non-recoverable damages, court found what was excluded was a question reserved for trial). See also Mrazek v. Firs Bank Southeast, N.A., 572 N.W. 2d 901, 1997 WL 700868, at *14 (Wis. App. Nov. 12, 1997) (“The question of what constitutes consequential damages is not a discretionary decision, but is a question of fact.”); Long Island Lighting Co. v. Transamerica Delaval, Inc., 646 F. Supp. 1442 (S.D.N.Y. 1986) (whether the parties’ contractual limitation on consequential damages should be given effect is reserved for trial); United States v. The Boeing Company, 79 F. Supp. 2d 877, 895 (S.D. Ohio 1999) (“It remains a question of fact to be decided at trial whether the Government’s and Relator’s allegations and theories of injuries, damages, and recovery are consequential, direct, or incidental in nature. This Court also finds that it would be inappropriate, premature, and against the interest of fairness and justice to decide this issue on a motion for summary judgment.”); Colonial Life Ins. Co. of Am. v. Elec. Data Syst. Corp., 817 F. Supp. 235, 243 (D.N.H. 1993) (“What constitutes consequential, or incidental, as opposed to direct damages is a factual issue which must be decided at trial.”). Accord Shared Communications Servs., 30 Pa. D.&C. 4th at 373 (trial court did not err by submitting “the issue of directness of the damages to the jury”).


\textsuperscript{39} See id. at * 28.

\textsuperscript{40} See id.

\textsuperscript{41} Id. at *27, n.53.

\textsuperscript{42} Id. at *28.

\textsuperscript{43} Id. at *42.

\textsuperscript{44} 581 F. Supp. 542, 549 (D. Colo. 1984).

\textsuperscript{45} See id. at 545.
resolve this question at this juncture because it is more than a simple dispute about definitions. The consequential damage issue raises important factual questions about each damage claim. Consequently, it renders summary judgment inappropriate.\(^{46}\)

As these cases show, because there is no exact formula or bright-line test for courts to apply to determine whether certain damages are direct or consequential, even where the parties have mutually waived their right to recover consequential damages, they still run the risk that a court will find that classification of damages as direct or consequential is a question of fact which must be determined by a jury at trial. Such an approach inevitably leads to protracted litigation or arbitration, where all sides engage in costly pre-trial discovery and then proceed to a trial or hearing where a fact-finder ultimately determines whether a particular category of damages is direct or consequential.

**D. A Party is More Likely to Avoid Litigation and/or Liability if it its Consequential Damage Waiver Specifically Defines the Scope of Consequential Damages.**

As the above-described cases show, some courts will hold a trial to determine whether certain damages are direct or consequential while other courts will decide before trial whether certain damages are direct or consequential. Nonetheless, a court is most likely to determine whether certain damages are consequential without a trial when the waiver specifically defines what the parties meant by “consequential damages.” When interpreting these types of waivers, courts are inclined to apply these waivers to preclude the recovery of such damages without the need for a jury trial. In particular, “where the parties have gone a long way in defining the scope of consequential damages in the contract itself,” courts routinely find, “as a matter of law, that the damages sought by the [plaintiff] ... constitute consequential damages, rather than direct damages,” without the need for a hearing.\(^{47}\) In fact, even damages traditionally thought of as direct damages, such as costs to repair or replace defective work, have been dismissed as a matter of law where the parties defined them as consequential damages.\(^{48}\)

For instance, in *Roneker v. Kenworth Truck Company*, the court dismissed a trucker's suit against the manufacturers of his truck and truck engine since the pertinent waivers included a detailed definition of consequential damages permitting the court to determine as a “matter of law” whether the trucker's damages were direct or consequential.\(^{49}\) In their contracts, the parties included the following categories as examples of consequential damages: loss of income; damage to vehicle, attachments, trailers and cargo; towing expenses, attorney’s fees; communication expenses; meals; lodging; overtime; loss of use of the Engine or vehicle (“downtime”); loss of time and inconvenience.\(^{50}\)

Like the parties in *Roneker*, the parties in *Envirotech Corp. v. Halco Engineering, Inc.* included an extensive definition of “consequential damages” in their contract. As such, the Supreme Court of Virginia held that the trial court erred by submitting the issue of consequential damages to a jury. In that case, a subcontractor on a sewage treatment project, Halco Engineering, Inc. (“Halco”), entered a contract with another entity, Envirotech Corporation (“Envirotech”) for the supply of equipment and start-up services for the project.\(^{51}\) The contract between Halco and Envirotech included the following waiver of consequential damages which listed several categories of damages the parties deemed “consequential damages”:

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46 Id. at 549.
48 See *Wausau Paper Mills Co. v. Chas. T. Main, Inc.*, 789 F. Supp. 968, 974 (W.D. Wis. 1992) (finding as a matter of law that “costs to repair or replace improperly designed piping, pumps and equipment” were contractually-barred consequential damages where engineer and owner defined them as such).
49 See id.
50 See id.
Seller shall not be liable to Purchaser for any incidental or consequential damages for any reason whatsoever, including but not without limitation, damages in the character of (a) loss of profits or revenues resulting from the failure of the equipment to meet specifications or warranties, (b) damages suffered by Purchaser as a result of loss of production facilities or equipment, (c) cost of replacement equipment, (d) damages suffered by customers of Purchaser, or (e) any fines or penalties assessed for failure to comply with any law or governmental regulations.\(^{52}\)

When the project was not completed on time, Halco sued Envirotech, claiming that Envirotech’s delays and failure to perform caused it to incur additional costs for office overhead, field supervision, tools and equipment, labor, and financing.\(^{53}\) The parties proceeded to a jury trial where Halco obtained a $428,554 verdict.\(^{54}\) On appeal, the court determined that all Halco’s damages were consequential damages and the trial court had erred by submitting the case to the jury:

> when the trial court “determined that the exclusion of consequential damages was not unconscionable, it was obligated to rule as a matter of law that those damages were not recoverable by [the subcontractor] under any circumstances”…[F]rom a practical standpoint, where, as here, experienced parties agree to allocate unknown or undeterminable risks, they should be held to their bargain; courts or juries should not be permitted to rewrite the agreement.\(^{55}\)

Consequently, the court annulled the jury verdict and entered a judgment for Envirotech.\(^{56}\)

One category of damages that parties to construction contracts often contractually define as a consequential damage is lost or wasted product. In those instances where the parties have specifically defined lost product as a particular type of consequential damage, the courts have routinely held as a matter of law that claims for wasted/lost production caused by production inefficiency are barred by a consequential damages waiver.\(^{57}\) For instance, in Wood River Pipeline Co. v. Willbros Energy Services Co., an owner and construction company negotiated a contract for the construction of an oil pipeline.\(^{58}\) In the contract, the parties negotiated the following consequential damages provision:

> Contractor shall not be liable under any circumstances or responsible to company for consequential loss or damages of any kind whatsoever including but not limited to loss of use, loss of product, loss of revenue or profit.\(^{59}\)

Soon after construction, the pipeline ruptured causing lost and wasted oil. The owner then brought an action to recover the cost of the lost oil and disposal costs. The Kansas Supreme Court held that the above language was “clear and unambiguous” and prevented recovery for the costs associated with the

\(^{52}\) Id. at 216.

\(^{53}\) See id. at 217.

\(^{54}\) See id.

\(^{55}\) Id. at 220.

\(^{56}\) See id. at 221.

\(^{57}\) See, e.g., Lincoln Pulp & Paper Co., Inc. v. Dravo Corp., 436 F. Supp. 262, 269-70 (D. Me. 1977) (applying clause excluding “loss of products” as a matter of law); Monarch Brewing Co., 13 F.2d at 584-85 (finding as a matter of law that value of beer and caustic soda that was lost due to failure of bottling machinery to properly function were contractually barred consequential damages); Rawlings v. Layne & Bowler Pump Co., 465 P.2d 107, 108 (Idaho 1970) (finding as a matter of law that clause excluding damage for loss of crops barred farmer’s claim against installer of malfunctioning irrigation equipment); Wallich Ice Mach. Co. v. Hanewald, 267 N.W. 748, 751 (Mich. 1936) (trial court erred by permitting defendant to claim the cost of lost meat caused by malfunctioning refrigeration plant where clause barred recovery of loss of refrigerant).

\(^{58}\) 738 P.2d 866, 868, 872 (Kan. 1987).

\(^{59}\) Id. at 868.
lost product caused by the rupture. Consequently, it affirmed the trial court’s grant of summary judgment to the construction company based on the consequential damages provision.

Similarly, in Pfaudler Co. v. American Beef Packing Co., the plaintiff executed a contract with the defendant to provide engineering services and equipment for a system in the defendant’s meat packing plant which would convert inedible products into marketable products such as dried meat scraps and liquid tallow. The system experienced various breakdowns and failures which resulted in the destruction and disposal of unsaleable products which were of no value. The court found as a matter of law that the loss of these products were consequential damages and prevented the defendant from recovering these losses, because the parties had specifically excluded consequential damages, including loss of product, in their contract.

Another category of damages that parties may define as consequential damages are delay damages. When delay damages are specifically defined as consequential damages, courts will hold that they are barred as a matter of law. For instance, in McNally Wellman Company v. New York State Electric & Gas Corporation, New York State Electric & Gas Corporation (“NYSEG”) contracted with a construction company to supply spillway gates for the refurbishment of a dam. The parties’ contract contained the following waiver of consequential damages:

In no event and not withstanding [sic] any other provision of this Contract shall Contractor be liable for any special, incidental, indirect, or consequential damages, or for any damages of a similar nature arising out of or in connection with this Contract, ... regardless of whether any such liability shall be claimed in contract, equity, tort (including negligence) or otherwise. By way of example of the foregoing limitation of liability, but without limiting in any manner its scope or application, Contractor shall not be liable for all or any part of any of the following, no matter how claimed...: loss of profit or revenue, ... cost of capital, ... loss or reduction of use or value of any facilities ... or increased costs of operations or maintenance. The limitation of liability contained in this Article shall be effective without regard to Contractor’s performance or failure or delay of performance under any other term or condition of this Contract, including those contained in any warranty article.

NYSEG claimed that delay in delivery of each of the gates caused it to incur delay costs, which included standby costs assessed by the subcontractor hired to install the gates. As an initial matter, the court found it was “axiomatic that parties to a contract must remain free to allocate risks and shield themselves from liability.” As such, the court found that the parties had contractually defined delay damages as consequential damages: “While ordinarily the precise demarcation between direct damages and incidental or consequential damages is an issue of fact, in this case the parties themselves defined the

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60 Id. at 871.
61 See id. at 872.
63 See id. at 705.
64 See id. at 709.
65 See Wausau Paper Mills Co., 789 F. Supp. at 974 (W.D. Wis. 1992) (finding as a matter of law that “down time costs” were contractually-barred consequential damages where engineer and owner defined delay and disruption costs as consequential).
66 63 F.3d 1188, 1191 (2d Cir. 1995).
67 Id. at 1193.
68 See id. at 1195.
69 Id.
scope of the excluded damages in the contract. All of NYSEG’s delay damages thus fall under [the waiver].” 70

Notably, in rare cases, even if the parties “have gone a long way in defining the scope of consequential damages in the contract itself,” courts are reluctant to classify damages as consequential as a matter of law and instead leave “the precise scope of direct damages [for resolution at trial] even if it is likely that certain damages will ultimately be deemed consequential damages.” 71 Nonetheless, this appears to be the exception rather than the rule.

E. A Party May Still be Subject to Consequential Damages if its Waiver Fails to Specifically Define the Scope of Consequential Damages.

If the parties do not specifically define what categories of damages the parties consider as consequential in their waiver, a party may still be forced to litigate claims for damages that have been traditionally considered as consequential damages and may even ultimately be subject to liability for such traditional consequential damages. This is illustrated by several courts which have found that lost profits are direct damages rather than consequential damages. 72

For instance, the Delaware Chancery Court has recently held in a non-construction case that a party was permitted to recover certain lost profits for breach of a non-compete agreement even though the agreement contained a consequential damages waiver that specifically barred recovery of “lost revenue or profits.” 73 The court, in eCommerce Indus., Inc. v. MWA Intelligence, Inc., relying upon a Second Circuit case, found that lost profits are only consequential when “as a result of the breach, the non-breaching party suffers loss of profits on collateral business arrangements.” 74 By contrast, lost profits are not considered consequential when “profits are precisely what the non-breaching party bargained for, and only an award of damages equal to lost profits will put the non-breaching party in the same position he would have occupied had the contract been performed.” 75 The court then went on to allow the counterclaim defendant to recover lost profits resulting directly from the breach of the non-compete clause but not lost profits from collateral business arrangements.

Under the reasoning of these cases, even where the parties have negotiated a consequential damages waiver that specifically disclaims lost profits, a party may attempt to overcome the clause by arguing that the revenue it anticipated earning under the allegedly breached agreement is a direct rather than a consequential damage, and therefore not barred by the language of the waiver. Parties may try to avoid such a result by making clear that the consequential damages waiver bars profits lost from collateral agreements and profits lost from the agreement at issue.

70 Id.
72 See, e.g., Oliver B. Cannon & Son, Inc. v. Dorr-Oliver, Inc., 394 A.2d 1160, 1163 (Del. 1978) (finding lost profits to be a direct loss although method used to calculate lost profits was speculative); Northern Petrochemical Co. v. Thorsen & Thorshov, Inc., 211 N.W. 2d 159, 166 (Minn. 1973) (awarding lost profits for the delayed occupancy of an industrial building). See also Springs Window Fashions Div., Inc. v. Blind Maker, Inc., 184 S.W.3d 840, 883 (“Lost profits can be component of benefit-of-the-bargain direct damages…”); Vistar Energy, LLC v. Motorola, Inc., 2006 U.S. Dist. LEXIS 78331, at *7 (S.D. Ind. Oct. 26, 2006) (“[L]ost profits are sometimes treated as consequential damages and sometimes as direct damages.”).
74 Id. at 47 (quoting Tractebel Energy Marketing v. AEP Power Marketing, 487 F.3d 89, 109 (2d Cir. 2007)). In Tractebel Energy Marketing, the developer of a gas-fire cogeneration facility sought damages it incurred in connection with the breach of a power purchase agreement whereby the developer agreed to supply and another entity agreed to take a minimum amount of energy products at prices stipulated in the agreement. The developer sought damages for the profits it had expected to make had the contract been performed. The Second Circuit found the district court erred in concluding the lost profits in that case were consequential damages: “[Developer] seeks only what it bargained for – the amount it would have profited on the payments TEMI promised to make for the remaining years of the contract. This is most certainly a claim for general damages.” 487 F.3d at 110.
75 2013 WL 5621678, at *47-48.
F. Owners and Contractors Should Negotiate Mutual Consequential Damages Waivers that are Project Specific and Explicitly Define What the Parties Mean by “Consequential Damages.”

When negotiating construction contracts, it is important for both contractors and owners to keep in mind that when market conditions for the construction industry are good contractors will have negotiating power. Indeed, in last decade’s construction boom, contractors had the freedom “to turn down onerous contract clauses or simply walk away” because there were not enough experienced contractors for the amount of projects. 76 While the market conditions have been steadily improving in the past couple of years, contractors most likely do not have the negotiating power they did in the past. 77 Nonetheless, regardless of market conditions, contractors and owners should pay close attention to contractual risk-shifting provisions, such as consequential damages waivers. In particular, contractors should be very reluctant to enter a construction contract without a waiver of consequential damages that protects it from potentially devastating economic effects like in Perini.

As the case law discussed in this article shows, “the definition of consequential damages may change depending upon the type of loss and the relationship between the parties.” 78 As a result, even where the parties have agreed to waive their right to recover all consequential damages, courts may still find that whether a particular damage is a consequential damage is a question of fact that should be decided by a jury. As such, owners and contractors should retain counsel to carefully craft consequential damages waivers to fit the particular type of construction project at issue to increase the odds that (i) the parties will not dispute what types of damages are recoverable under the contract; and (ii) if there is such a dispute, the waiver will be found to be enforceable.

An attorney reviewing a construction contract should carefully review the waiver of consequential damages to ensure it properly allocates risk between the owner and contractor. As the case law shows, the safest method to avoid a subsequent protracted litigation involving a question of fact over consequential damages is to negotiate a clearly worded project-specific consequential damages waiver that defines what the parties meant by “consequential damages.” Both owners and contractors should avoid general boiler-plate “catch-all” consequential damages waivers that do not define what the parties mean by consequential damages. Waivers should be “project-specific” in that they should anticipate and define the potential types of damages that could arise with this project and ensure they are clearly waived. Moreover, the parties should ensure the waiver is mutual. In other words, the list of consequential damages should be the same for the owner and contractor (unlike the AIA form). While following these recommendations does not guarantee a dispute-free project, following them will minimize the chances of a prolonged litigation regarding what constitutes a consequential damage.

Imagine a contractor who has done an outstanding job of building a magnificent skyscraper in the heart of one of the world’s largest cities. The skyscraper is 65% complete, expected to be finished on time and within budget. The contractor has not defaulted, and proudly touts that this construction project will be the centerpiece of the company’s accomplishments. Suddenly, the owner of the project notifies the contractor that it has been terminated from the job for the owner’s convenience. To complete the skyscraper, the owner replaces the contractor with one of its competitors. Can the owner unilaterally terminate the contractor even though the contractor was not in default? If so, what compensation is the contractor entitled to recover? The answer to these questions lies within the termination for convenience provision which has become increasingly common in private construction contracts.

The termination for convenience provision is one of the most unique provisions in construction contracts. It allows an owner to unilaterally terminate the contract with or without cause, or even if the owner itself is in default, without incurring a breach of the contract. Webster’s Collegiate Dictionary defines “convenience” as “something conducive to…ease.” This definition is consistent with the holdings of many courts that a party has “an absolute unqualified right to terminate a contract on notice pursuant to an unconditional termination clause without court inquiry into whether the termination was activated by ulterior motive.”

Such unilateral power defies the fundamental legal principle of “mutuality of contract.” Nevertheless, courts throughout the United States are frequently enforcing these provisions despite the consequences.

The termination for convenience provision historically was found almost exclusively in government contracts. Today, these provisions are increasingly appearing in private construction agreements. Owners, contractors, and their counsel must use care when drafting and implementing these clauses in private construction contracts so that their rights under the contract are properly protected. Finally, given the current boom in the commercial construction industry, contractors are in an extremely favorable position to negotiate contracts which either do not include the termination for convenience provision, or at least negotiate terms which equitably allocate between the parties the risk of such termination.

* Mr. Richey is a partner in the Construction and Engineering Practice Group in the Pittsburgh, Pennsylvania office of K&L Gates, LLP and can be reached at (412) 355-6260 or jason.richey@klgates.com.

** Mr. Wickard is of counsel in the Construction and Engineering Practice Group in the Pittsburgh, Pennsylvania office of K&L Gates, LLP and can be reached at (412) 355-8389 or william.wickard@klgates.com.

*** Mr. Bell is an associate in the Construction and Engineering Practice Group in the Pittsburgh, Pennsylvania office of K&L Gates, LLP and can be reached at (412) 355-6305 or chris.bell@klgates.com.

I. Historical Background of the Termination for Convenience Clause

The concept of terminating for convenience arose at the conclusion of the Civil War in response to the need to end wartime production.\(^2\) The advent of the “convenience termination allowed the government to conclude a burdensome contract by paying for the work performed (including a profit thereon) without having to pay any anticipated profits.”\(^3\) As early as 1863, Rule 1179 of the Army Regulations provided that military contracts “shall expressly provide for their termination at such time as the Commissary-General may direct.”\(^4\) This provision would allow the Government during a war to contract with a manufacturer for the production of 10,000 rifles each year for 10 years and then terminate the contract once peace ensued. The government, despite its breach, would not be liable to the manufacturer for the anticipated profit it would have made on the guns from the time of the termination through the duration of the contract.

This concept continued to be used in response to the massive procurement efforts that accompanied other wars.\(^5\) For instance, during World War I, the government entered large procurement contracts to produce weapons. Once the war ended, the government had no desire to purchase the weapons, but it had a legal obligation to do so under the contracts. Although the government, like any party to a contract, had the power to terminate the contract, exercise of that power would have amounted to a breach, absent the power to terminate for convenience.\(^6\) Such a breach would entitle the contractor to receive its anticipated profits – those profits which the contractor would have made if the contract had been completed.

By the middle of the 20th century, convenience termination clauses were becoming more common. For example, the 1950 edition of the Armed Services Procurement Regulations contained mandatory termination for convenience clauses to be used in the majority of significant defense contracts.\(^7\) After World War II, such clauses also began to increasingly appear in non-defense government contracts.\(^8\) In 1964, the first edition of the Federal Procurement Regulations contained optional termination for convenience clauses for use “whenever an agency considered it necessary or desirable.”\(^9\) In June 1967, the FPR was revised to make such clauses mandatory, with limited exceptions.\(^10\)

Not surprisingly, convenience termination became a staple of federal construction contracts and was recognized by both the Department of Defense’s Federal Acquisition Regulations and case law.\(^11\) Most of the law which exists today regarding the termination for convenience provision is a result of its use in government contracts. It is this government precedent which guides us today in the drafting and interpretation of the termination for convenience provision in the private contract, as little law has yet developed regarding the termination for convenience provision in the private sector.\(^12\)

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\(^2\) See, e.g., Torncello v. United States, 681 F.2d 756, 764 (Ct. Cl. 1982) (en banc).

\(^3\) Id.

\(^4\) United States v. Speed, 75 U.S. 77, 78 (1868).


\(^7\) See DAR 8-701 to 8-705.

\(^8\) See Linan-Faye, 847 F. Supp. at 1199.

\(^9\) FPR 1-8.700-2.


\(^11\) See FAR 49.502; Caldwell & Santmyer, Inc. v. Glickman, 55 F.3d 1578, 1581 (Fed. Cir. 1995).

\(^12\) Ginicorp, v. Capgemini Gov’t Solutions, LLC, No. CL-2005-5029, 2007 WL 420132 (Va. Cir. Ct. 2007) (“federal common law on this subject has ‘evolved’ through the last one hundred and fifty years, and a historical perspective of the relevant cases might well be of assistance in understanding the present status of the evolutionary process”).
II. Enforceability of the Termination for Convenience Clause

The power to terminate for convenience has been written into federal regulations and private contracts with a very broad brush. For example, FAR 52.249-2(a) provides that “[t]he Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government’s interest.” Stressing the “Government’s interest” portion of this formula, the Armed Services Board of Contract Appeals noted that the government has no duty to terminate for convenience to benefit a contractor.13 The Court of Claims later held that the government may terminate at will, rather than merely when there is a decreased need for the object of the contract.14 Nevertheless, the clause is most frequently invoked in the case of decreased need, or when proof of a default may be difficult.

Since the Supreme Court recognized the government’s right to terminate for convenience in 1875,15 courts and administrative boards have placed few limits on the right to terminate for convenience. Termination for convenience essentially gives the terminating party the power to demand contract performance while still reserving the right to terminate that performance if the contract later proves undesirable. Giving force to such power, the District Court of New Jersey said that the parties enjoy “considerable discretion in deciding when and to what extent a contract may be terminated.”16 The question then becomes: under what conditions can a party opposing the termination for convenience attack the enforceability of such a clause?

1. Consideration -- Mutuality of Contract

The doctrine of termination for convenience arose as an exception to the common-law requirement of mutuality of contract. Indeed, it is difficult at first to see how a contract with a termination for convenience arrangement can contain consideration. The Restatement provides that “[a] promise or apparent promise is not consideration if by its terms the promisor or purported promisor reserves a choice of alternative performances . . . unless each of the alternative performances would have been consideration if it alone had been bargained for.”17 Where one of the alternative performances of a contract is termination, there will be no consideration between the parties to make the contract enforceable.

Nevertheless, courts have found consideration present merely through the requirement that the contractor be provided notice in the event of a convenience termination.18 Both the Tenth Circuit and the Eastern District of Pennsylvania have held that the ability to terminate for convenience does not constitute lack of consideration where the contract requires the contractor to notify the subcontractor of the termination and pay damages after the termination.19

The long-standing history of the termination for convenience clause would likely make an attack on the viability of the clause based on consideration unfruitful. Arguably, the existence of a notice provision and/or the existence of a provision which enumerates the types of damages which can be recovered

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13 Rotair Indus., Inc., ASBCA 27571, 84-2 BCA ¶ 17,417.
15 Corliss Steam-Eng., 91 U.S. at 323.
16 Linan-Faye, 847 F. Supp. at 1199. See also EDO Corp. v. Beech Aircraft Corp., 911 F.2d 1447, 1453 (10th Cir. 1990) (stating that the court will enforce termination for convenience provision freely entered into by two parties).
18 See Sylvan Crest Sand & Gravel Co. v. United States, 150 F.2d 642, 645 (2d Cir. 1945) (government’s requirement that it provide reasonable notice of termination was sufficient to fulfill consideration requirement); Engers v. Perini Corp., No. CIV. A. 92-1982, 1993 WL 235911, at *8-9 (E.D. Pa., June 28, 1993) (in a private contract the party must meet the condition precedent of proper notice before the termination for convenience clause bars anticipated future profits or else the contract will be illusory); Niagara Mohawk Power Corp. v. Graver Tank & Mfg. Co., 470 F. Supp. 1308, 1316 (N.D.N.Y. 1979) (in private contract, two-day notice provision rendered a contract non-illusory and enforceable); Handi-Van, Inc. v. Broward County, 116 So.3d 530, 539 (Fla. Dist. Ct. App. 2013) (in public contract, 90-day notice provision provided sufficient consideration).
when a contract is terminated for convenience should satisfy the consideration or mutuality of contract requirement and, thus, make the termination for convenience provision enforceable. However, most jurisdictions have not ruled on this issue, and it is well-established law that "[e]very court which considers a termination for convenience clause must scrutinize the contract to verify that the contract is not illusory or void for want of consideration."\(^\text{20}\)

2. Bad Faith Termination of the Contract and the Change in Circumstances Doctrine

Prior to Court of Claims’ 1982 decision in Torncello v. United States, courts usually found that a contractor could successfully challenge a convenience termination only by showing bad faith or an abuse of discretion by the government.\(^\text{21}\) Torncello changed this by stating that the government could not avoid paying anticipated profits through a termination for convenience unless there was a change in circumstances between the time when the contract was executed and when it was terminated.\(^\text{22}\) According to the court, this limitation was necessary to avoid creating an illusory contract in which the government has no obligation to the contractor.\(^\text{23}\) Torncello overruled Colonial Metals Co. v. United States,\(^\text{24}\) which had held that a termination was proper where the government awarded a contract knowing of a lower price which it subsequently sought.\(^\text{25}\)

Later decisions construed the “changed circumstances” test narrowly, as did Chief Judge Friedman in his Torncello concurrence.\(^\text{26}\) For example, one court held that a mere deterioration in a business relationship was sufficient to meet the changed circumstances test.\(^\text{27}\) In Torncello, Chief Judge Friedman understood the majority to hold only that when the government enters into a contract with the intent to not perform under the contract, there can be no convenience termination.\(^\text{28}\) Decisions subsequent to Torncello have not been uniform in adopting the changed circumstances test,\(^\text{29}\) and Torncello itself has seen its fair share of criticism. In 1996, the successor court to the Court of Claims held that a termination for convenience is improper only when the government acts in bad faith.\(^\text{30}\) This contradicts the Torncello rule that there must be a change in circumstances.

In the last two decades most courts have moved away from the change in circumstances test. In District of Columbia v. Organization for Environmental Growth, Inc., the District of Columbia Court of Appeals stated that Torncello stands for the “unremarkable proposition” that the government may not claim the benefit of a termination for convenience provision after entering a contract knowing full well it would not honor it.\(^\text{31}\) The court held that the only restrictions on the exercise of a termination for convenience clause are when it is shown that the terminating party acted in bad faith by specifically intending to injure the other party, or when the terminating party’s actions were motivated only by malice.\(^\text{32}\) While the court

\(^{20}\) Engers, 1993 WL 235911, at *7 (citing Torncello, 681 F.2d 756).

\(^{21}\) See e.g., John Reiner & Co., 325 F.2d at 442.


\(^{23}\) See Torncello, 681 F.2d at 769-71.

\(^{24}\) 494 F.2d 1355 (Cl. Ct. 1974).

\(^{25}\) Torncello, 681 F.2d at 772.

\(^{26}\) See id., at 773 (Friedman, C.J., concurring).


\(^{28}\) Torncello, 681 F.2d at 773 (Friedman, C.J., concurring).

\(^{29}\) Linan-Faye, 847 F. Supp. at 1201.


\(^{31}\) District of Columbia v. Organization for Envtl. Growth, Inc., 700 A.2d 185, 201 (D.C. 1997) (quoting Caldwell & Santmyer, 55 F.3d at 1582). See also EDO Corp., 911 F.2d at 1453, n.6 (the court rejected the change in circumstances doctrine holding that the modern trend is that contract was entered into in good faith).

endorsed the bad faith test, it did note that the change in circumstances test would be met where the
government grows dissatisfied through the course of the contract period.33

Subsequent cases have made it even more evident that the pendulum is swinging back to the bad faith
end of the spectrum. Courts are refusing to find that the government must demonstrate a change in
circumstances in order to validly terminate for convenience. Instead, they are finding that only a showing
of bad faith on the part of the owner will defeat a termination for convenience.34

These cases have not been uniform in their interpretation of the bad faith test to be applied. For example,
a termination based on national origin, if proven, would constitute bad faith.35 Moreover, several courts,
including the District of Columbia Court of Appeals as described above, have held that numerous actions
designed to injure the contractor, including making intentionally false statements, amount to bad faith.36
In contrast, the Maryland Court of Appeals in Questar Builders, Inc. v. CB Flooring, LLC found that a
private contract’s termination for convenience clause must be exercised in line with the terminated party’s
“reasonable expectations” and that doing so merely to acquire a better price constitutes bad faith.37
Similarly, the U.S. Court of Federal Claims recently reaffirmed that the government has abused its
discretion, and therefore acts in bad faith, when it terminates a contract for convenience in order to get a
better price for itself.38

One notable exception to the trend toward the bad faith test is RAM Engineering and Construction, Inc. v.
University of Louisville, in which the Supreme Court of Kentucky adopted the change in circumstances
test for all public construction contracts in the state.39 In that case, the court found that a temporary
restraining order issued in bid-protest litigation commenced by a disappointed bidder on a university
stadium construction project was a substantial changes in circumstances that justified the university
terminating its contract with the successful bidder for its convenience.40 Notably, the Kentucky court
artculated the change in circumstances test as merely giving effect to Kentucky’s recognition of the duty
of good faith in such contracts.41

Other courts interpreting state law have not been hesitant to reject the unclear Federal common law
related to bad faith.42 Instead, these courts will strictly interpret the language of the termination for
convenience clause and generally treat the contract as terminable at will.43 In New York, courts simply

34 See Custom Printing Co. v. United States, 51 Fed. Cl. 729, 734 (Fed. Cl. 2002) (stating that “[t]here is no requirement that
the Government show ‘changed circumstances’ . . . in order to justify termination for convenience”) (citing T&M Distrib., Inc. v.
United States, 185 F.3d 1279, 1284 (Fed Cir. 1999)); see also RAM Eng’g & Constr., Inc. v. University of Louisville, 127 S.W.3d
579, 584 (Ky. 2003) (describing the continuing erosion of the Torcello “changed circumstances” test).
35 See Benjamin P. Garcia, ASBCA 18035, 73-2 BCA ¶ 10,196.
36 See Organization for Envtl. Growth, 700 A.2d at 201 (quoting Kalvar Corp. v. United States, 543 F.2d 1298, 1301 (Cl. Ct.
1976)); U.S. v. White, 765 F.2d 1469, 1480 (11th Cir. 1985); Apex Int’l Mgmt. Servs., Inc., by Trustee in Bankruptcy, ASBCA Nos.
38087 et al., 94-2 BCA ¶ 26,642.
37 410 Md. 241, 282, 978 A.2d 651, 676 (2009). Interestingly, unlike several courts which previously considered the issue,
the Maryland court drew a firm distinction between terminations for convenience clauses in public versus private contracts, and left
open the possibility that they would adopt the changed circumstances test for public contracts with the state. Id. at 271-272.
CBCA 508, 10–1 BCA ¶ 34,442 (May 13, 2010)).
39 127 S.W.3d at 586.
40 Id. at 587.
41 Id. at 585.
43 See id. accord Lamb Eng’g & Constr. Co. v. Nebraska Pub. Power Dist., 103 F.3d 1422, 1429-30 (8th Cir. 1997)
(interpreting Nebraska law) (enforcing clause that allowed termination by the owner “at any time and without cause” and required
the owner to “pay the contractor reasonable and proper charges for termination”); Dalton Props., Inc. v. Jones, 683 P.2d 30 (Nev. 1984)
(“[T]he courts have long recognized the validity of contracts that provide either party the option of terminating the contract at will”);
Sammons Commc’n’s. of Ind., Inc. v. Larco Cable Constr., 691 N.E.2d 496, 498 (Ind. Ct. App. 1998); (same); Avatar Dev. Corp. v.
De Parti Constr., Inc., 834 So. 2d 873 (Fla. Ct. App. 2002) (upholding clause granting a unilateral right to terminate without cause,
will not look at the reason for the termination. Similarly, other courts have found that the existence of a notice provision or partial performance of the contract were by themselves sufficient to uphold a termination for convenience, regardless of the terminating party's motives. This in part reflects some states’ determination that the precedent regarding terminations for convenience in contracts with the federal government is of limited value when interpreting these clauses in private contracts. Thus, whether the terminating party acted in bad faith or with malice is irrelevant.

3. Termination for Default Versus a Termination for Convenience

Case law illustrates that there is occasional confusion as to whether a party has been terminated for default or for convenience. If the contractor reasonably believes the termination to be for convenience, it will be treated as such even though technical language to that effect is lacking in the notice. Conversely, if the contractor knows that the termination is for default, a court will treat it as such even though the notice indicates that it is for convenience to “save face” for the contractor. In such cases, any damages will be awarded in accordance with the rules for default terminations. However, where there is genuine controversy due to an inadequate notice, the termination will be treated as one for convenience.

Once a termination for convenience has been elected, it may not be converted into a termination for default even though a default existed at the time of termination. Thus, it is important to weigh one’s options before deciding which path to pursue. Yet, there is no penalty where the government, and perhaps a private owner, chooses default, then later changes the termination to convenience. This principle is in accord with the constructive termination for convenience doctrine which is discussed below.

III. Damages under a Termination for Convenience Clause

1. Actual Costs Plus Profit

The express language in a contract usually governs the extent to which damages are awarded after a termination for convenience. The parties often provide in their contract that in the event of a termination for convenience of the Owner, the contractor shall be entitled to full reimbursement of its actual costs plus a measure of profit and overhead. Stated differently, the basic measure of damages after a convenience termination under this scenario consists of costs incurred by the contractor, plus a

45 Handi-Van, Inc., 116 So. 3d at 539.
46 See Handi-Van, Inc., 116 So. 3d at 539 (rejecting the federal standards and finding “the contracts here at issue are best analyzed under Florida contract law”);
47 See Richard Camera Co., ASBCA 11930, 68-1 BCA ¶ 6990.
49 See id.
50 See Stroud Realty, HUDBCA 75-13, 76-1 BCA ¶ 11,770.
51 See Roged, Inc., ASBCA 20702, 76-2 BCA ¶ 12,018.
52 See Linan-Faye, 847 F. Supp. at 1202.
reasonable profit based on the value of the work already performed. Customarily, the contract does not provide for the recovery for unearned or anticipated profit. Essentially, a convenience termination converts a fixed-price contract into a method of cost reimbursement as to work performed up to the effective date of termination. Therefore, if the contractor has incurred no costs, there can be no recovery.

These fundamental damages principles have been adopted and applied by many courts including New York’s highest court in Arc Electrical. In that case, a contractor terminated a subcontractor for convenience. The termination for convenience provision at issue required the contractor to pay “the entire amount due” at the time of receipt of the termination notice. However, after the termination, the contractor refused to pay the subcontractor for actual costs incurred because it argued that the architect failed to approve the subcontractor’s work. The contractor argued that without the architect’s approval, the subcontractor was not due its actual costs. The Court rejected this argument and pointed out the difference in the payment obligations of the contractor before and after a termination for convenience:

[There is considerable difference between the rejection of a claim for a progress payment and the refusal of payment after the contract has been terminated and all work has ceased . . . The withholding of approval, though it may have postponed, did not eliminate Arc’s right to compensation for the work it had performed. However, once the contract was terminated, preventing the subcontractor from curing any defects, it is reasonable to construe the contract as providing for payment for all work actually performed, even though it may not have been entirely completed. If there were any deficiencies in performance, they would merely diminish the amount to which Arc would be entitled and would not (and should not) result in the forfeiture of its entire right to be compensated. Such a construction of the contract, which adequately protects the interests of both parties, comports best with its language . . . .

The court then went on to explain the rationale for allowing Arc to recover its actual costs for all work performed:

[Indeed, even if a requirement for the architect’s approval was expressly incorporated [into the contract], it would not be enforceable. It was Fuller’s own act, in terminating the contract, which rendered it impossible for Arc to take any necessary steps to satisfy the architect. The law looks with disfavor on contractual provisions that would allow one party, by its own unilateral act, to avoid its obligations by preventing or hindering the other party from fulfilling one of the conditions to the contract. “[T]he defendant cannot rely on [a] condition precedent . . . where the nonperformance of the condition was caused or consented to by itself”.

As Arc Electrical demonstrates, a termination for convenience clause will not be interpreted in order to work as a forfeiture on the nonterminating party. It is the cardinal principle of the termination for convenience clause that the contractor receive full reimbursement of its actual costs together with overhead and profit because any nonperformance of the contract is a direct result of actions taken by the terminating party. Such a result is consistent with well-settled law that a party to a contract cannot rely on the failure of the other party to perform when he has frustrated or prevented the performance.

2. Reasonable Costs

The costs recoverable under a convenience termination must be reasonable. This standard is embodied in federal regulations, which state that “[a] cost is reasonable if, in its nature and amount, it does not

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55 See Linan-Faye, 847 F. Supp. at 1198.
58 Arc Elec., 24 N.Y.2d at 103-104 (emphasis added).
59 Id., at 103-04 (emphasis supplied) (citations omitted).
60 See e.g., William Green Constr., 477 F.2d at 934; Nolan Bros., 405 F.2d at 1253; Arc Elec., 24 N.Y.S.2d at 131.
exceed that which would be incurred by a prudent person in the conduct of competitive business.” A caveat to the above test is that while costs incurred plus profit thereon is the usual measure of damages, the total contract price acts as a cap on the allowable recovery. This holds true unless there is a separate lawsuit based on some other theory, such as fraud, extraneous to the convenience termination.

The contractor carries the burden of establishing its incurred costs. Evidence from accounting records is the preferable method of showing costs. However, if such records are unavailable through no fault of the contractor, evidence of costs may be based on estimates. Nevertheless, if the contractor uses estimates, it retains the burden of proof as to costs. A contractor is thus well advised to keep detailed records of costs incurred, along with appropriate documentation.

There are a number of categories of costs that courts have deemed recoverable. The most obvious costs recoverable are labor and materials used directly in the contract job. But other, less apparent, costs may sometimes be recovered as well. For example, in Navgas, Inc., a contractor was allowed to recover the cost of bid preparation. Moreover, F.A.R. 31.205-42(c) contains a list of allowable initial costs, including training, plant rearrangement, production planning and idle time due to production methods testing. Nevertheless, these are costs for which the contractor has been allowed recovery. Private parties should contract as to which specific items are reimbursable when there is a convenience termination.

3. Consequential Damages

Termination for convenience clauses generally disallow recovery of consequential damages as being too remote. Such remote damages include the cost of bankruptcy, the loss of future business and the loss of expected profits. Similarly, loss of production and impairment of credit are disallowed consequential damages. The cost of retaining employees or of manufacturing products falls on the contractor if such measures are not required to wind up work under the contract. Moreover, vague concepts such as “moral obligation” are insufficient to support a claim for recovery.

Nevertheless, post-termination costs that are not too remote are generally recoverable. FAR 31.205-42(b) allows as damages those costs which cannot be discontinued despite the reasonable efforts of the contractor. Such post-termination costs might include transit for employees stationed at a remote location or continuation of a special manufacturing process where disruption would cause a complete loss on the project.

4. Owner’s Recovery for Defective Work or Overpayment

“Where [a party] elects to terminate for convenience, as provided in [a construction contract] . . . it cannot counterclaim for the cost of curing any alleged default.” Such a claim would be inappropriate since the act of terminating for convenience deprives the contractor of the opportunity to cure deficiencies by better performance as the contract is nearing completion. For courts to hold otherwise would be inconsistent with the nature of a termination for convenience which is not based upon any fault or negligence on the part of the contractor.

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63 See Bailey Specialized Bldgs., Inc., ASBCA 10576, 71-1 BCA ¶ 8699.

64 See Clary Corp., ASBCA 19274, 74-2 BCA ¶ 10,947.

65 Navgas, Inc., ASBCA 9240, 65-1 BCA ¶ 4533.

66 See Aerdo, Inc., GSBCA 3776, 77-2 BCA ¶ 12,775.


68 See Engineered Sys., Inc., ASBCA 18241, 74-1 BCA ¶ 10,492.

69 Kay & Assoc., Inc., GSBCA TD-17, 76-2 BCA ¶ 12,127.


71 See Arc Elec., 24 N.Y.2d at 132; Fruin-Colnon, 585 N.Y.S.2d at 255-56.
In Tishman Const. Co. v. City of New York, the city made the decision to terminate the plaintiff, a contractor, for its own convenience and not for default. The defendant then counterclaimed against the contractor for, inter alia, “alleged overpayments” for work conducted before the contractor was terminated. The Appellate Court affirmed the lower court’s granting of plaintiff’s summary judgment motion on defendant’s counterclaim for overpayment. As the Tishman Court explained, if a party wishes to pursue a claim for the default of a contractor for overpayment, it should terminate under the provision of a contract for default because such provisions enable a party to recoup the expense of curing the contractor’s default. If, however, the party elects to terminate for convenience, the terminating party loses its ability to recoup its alleged overpayment cost because the termination extinguishes the non-defaulting party’s right to complete the project. Again, the rationale for this result is that the convenience termination is not based in fault or negligence, and, indeed, the contractor has no control over whether or when a termination for convenience is elected. Any such recovery for overpayment must derive from a separate action based on fraud or mistake.

5. Equitable Adjustment

Unlike issues regarding defective work and overpayment, the law in certain equitable circumstances will favor the owner in determining damages. For instance, if the contractor would have suffered a loss had the contract been completed, as determined at the time of termination, it is fair and appropriate to make a “loss adjustment” to the amount of recovery. This is to avoid a situation in which the owner or government pays, and the contractor receives, more than it expected to pay or receive on the relevant portion of the contract. Conceptually, the loss adjustment should yield a result such that the recovery of costs incurred on the completed portion of the contract is reduced in proportion to the amount of loss that would have been suffered on the entire contract.

Another common source of an equitable adjustment, this time favoring contractors, is recovery for unabsorbed overhead. Where a contract is partially terminated, overhead costs will often be higher relative to the continued portion of the contract than they would have been relative to the entire contract price. Courts have allowed recovery of this item as an equitable adjustment. The Fifth Circuit noted that “[t]here seems to be little question that unabsorbed overhead is properly includable in an equitable adjustment if the contractor can prove that changes idled some of its facilities” and diminished direct costs to which overhead was charged. In other words, if fewer units of a product are produced, or fewer man-hours are worked, and overhead remains the same or similar, the amount of overhead per unit will be greater. This concept contrasts with unrecoverable absorbed overhead, such as when equipment used on a terminated project is used elsewhere.

An equitable adjustment may also be made where the government, or owner, causes a loss in some other respect. For example, in Celesco Indus., Inc., the contractor was entitled to an equitable adjustment where it incurred additional costs due to a defective wire resulting from poor government specifications. The Board did note, though, that the burden of proof under a preponderance standard was on the contractor in establishing the amount of the equitable adjustment. Moreover, the adjustment would be decreased or nullified if the government is prejudiced by any delay on the part of the contractor in notifying the government of the problem or defect.

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72 643 N.Y.S.2d at 589.
73 Id. at 590.
74 Fruin-Colnon, 585 N.Y.S.2d at 255-56.
76 See Southwestern Eng’g Co. v. Cajun Elec. Power Coop., Inc., 915 F.2d 972, 977 (5th Cir. 1990).
77 Id. at 976 (quoting R. Nash, Government Contract Changes 16-3 (2d ed. 1989)).
78 But see EDO Corp., 911 F.2d at 1451 (citing Nolan Bros., Inc. v. U.S., 437 F.2d 1371, 1389 (Cl. Cl. 1971) (claims for unabridged overhead apparently are not recoverable against the government)).
79 Celesco Indus., Inc., ASBCA 21928, 81-2 BCA ¶ 15,260.
80 Id.
81 Id.
IV. Constructive Termination for Convenience

Sometimes, the government, despite the existence of a termination for convenience provision in the contract, will terminate a contractor for default, which a court later determines to be improper. One might assume that the government would be liable for damages, including anticipated profits, under a breach of contract theory. However, this is not the case. When a termination for default is improper, courts have nonetheless absolved the government of the breach by holding that the government could have terminated for convenience.\textsuperscript{82} There is no award of damages for breach of contract, and, instead, the court will award damages only under the convenience termination provision. Thus, the government’s already broad power to terminate for convenience is greater than it appears at first blush. The doctrine that began as a method of easing the transition from war to peace has become a tool for limiting damages when the government would otherwise be liable for breach of contract.

In describing this doctrine, the District Court of New Jersey in Linan-Faye stated that: “[c]onstructive termination for convenience is a judge-made doctrine that allows an actual breach by the government to be retroactively justified . . . [T]his doctrine applies in situations where the government stops or curtails a contractor’s performance for reasons that are later found to be questionable or invalid.”\textsuperscript{83} Despite this doctrine’s common-law origins, government regulations now expressly convert improper default terminations into convenience terminations. F.A.R. 52.249-8(g) states: “[i]f, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.” Thus, a contractor will not be able to recover unearned profits when the government improperly terminates for default, unless bad faith is shown.

Bolstered by the federal regulations, courts find it easy to apply the doctrine of constructive termination for convenience. Indeed, the court in Linan-Faye noted that when a contractor enters into a contract, it recognizes that if the government invokes the convenience termination clause, the contractor’s remedies for breach, including those committed prior to termination, are limited to the remedies set forth in the termination for convenience clause itself. In other words, where the parties agree on a method of calculating damages, a court must enforce that method.\textsuperscript{84} One court found that the existence of a default by the government does not bar a convenience termination pursuant to the applicable contractual clause.\textsuperscript{85} The court’s rationale was that the purpose of a convenience termination is to allow the government to avoid paying unearned anticipated profits when it breaches or terminates.\textsuperscript{86}

When the government has the choice of terminating for convenience or for an alleged default by the contractor, the course of action is obvious. Assume a situation where the government believes the contractor has defaulted, yet the contractor has raised potential meritorious defenses. The question arises whether to terminate for convenience or for default. The government undoubtedly will terminate for default with little fear of the consequences. Its worst case scenario is that the court will convert its default termination into a constructive termination for convenience.

Absent explicit contractual language that an improper default termination is automatically converted to a convenience termination (also known as a “Conversion Clause”), the doctrine of constructive termination for convenience may not apply in the private setting. The sparse case law on this issue does not yield a definitive answer. The Eastern District of Pennsylvania has stated in Engers:

\textsuperscript{82} See, e.g., Salsbury Indus. v. United States, 17 Cl. Ct. 47, 57 n.7 (1989).
\textsuperscript{83} Linan-Faye, 847 F. Supp. at 1200 (citing Erwin v. United States, 19 Cl. Ct. 47, 53 (1989)).
\textsuperscript{85} Nolan Bros., Inc., 405 F.2d at 1253.
\textsuperscript{86} Id. at 1254.
This Court has not found a single case where a private party was allowed to “constructively” terminate a contract for convenience . . . . The rationale behind not allowing private parties to “constructively” terminate contracts for convenience is consistent with the maxim that contracts shall not be illusory. 87

Likewise, a New York court would not allow the conversion from a default to convenience where no Conversion Clause existed. 88 Perhaps the closest a court has come to allowing a private termination for convenience occurred in Linan-Faye. In that case, the court allowed a local government to constructively terminate for convenience. 89

While this does not directly address contracts solely between private parties, Linan-Faye does extend the rationale of the constructive application of the doctrine beyond the realm of federal government contracts, leaving open the possibility that it can be extended even further. Moreover, the Engers decision involved an attempt to invoke the doctrine absent the relevant contractual language. Thus, private parties would be wise to not rely on judicial applications of the doctrine, and to expressly provide in their contracts for the automatic conversion of an improper default termination into a convenience termination. However, even without this language, courts in private contract disputes may choose to invoke the doctrine.

Interestingly, one court has declined to invoke a “constructive termination for convenience” when the doctrine works against the government. In Diversified Energy, Inc. v. Tennessee Valley Authority, 90 the contractor included a stiff penalty of $14.00 per ton for each ton scheduled for delivery for the remainder of the contract (i.e., $22 million) if the termination for convenience clause was utilized by the Owner. On appeal, the contractor argued that the governments’ repeated breaches of the contract constituted a constructive invocation of the unilateral termination clause. However, the Sixth Circuit held that the “constructive termination for convenience doctrine” can only be applied when it limits the government liability. It cannot be applied to increase liability. 91

V. Drafting and Implementing a Termination for Convenience Clause

Knowing how to draft a convenience termination clause and being aware of relevant issues can protect both the owner and the contractor. The owner is protected for obvious reasons by limiting the contractor’s recovery after termination. If the inclusion of a termination for convenience provision is a possibility, a knowledgeable contractor has the flexibility to protect itself because the terms of the clause are mostly negotiable. Thus, the contractor can put itself in a more favorable position by knowing all of its options. For example, the contractor may, like in Diversified Energy, negotiate a liquidated damages provision in the event the clause is utilized, or the contractor may demand a provision requiring the owner to deal exclusively with the contractor for some period of time if the owner decides to continue the project after termination. In other words, though a termination for convenience primarily benefits an owner, a contractor can seek to protect itself by knowing the available options for making the provision more palatable.

Because there is little law on the termination for convenience clause, there is much room for negotiation in drafting such provisions. Nevertheless, this also means that the owner and contractor must be quite careful that the language chosen fulfills their expectations, and that the result is an effective clause. If the clause is not drafted carefully, litigation will ensue, thereby nullifying the benefits the parties initially desired. Contractors need to be especially wary of these clauses and, depending on their relative bargaining position vis-à-vis the owners, should try to either: (1) exclude the termination for convenience clause altogether; (2) negotiate the provision on the most favorable terms possible; or (3) although nearly unheard of, include a termination for convenience provision which is exercisable by the contractor itself.

87  Engers, 1993 WL 235911, at *8.
89  See Linan-Faye, 847 F. Supp. at 1205.
90  223 F.3d 328 (6th Cir. 2000).
91  Id. at 338.
1. Excluding the Termination for Convenience Clause Altogether

If possible, contractors should work to avoid convenience termination altogether for the important reason that it is mainly a weapon which benefits owners. Indeed, the market conditions of last decade’s construction boom made avoidance of the clause easier for contractors because “the volume of work [gave] contractors the freedom to turn down onerous contract clauses or simply walk away.” While the market conditions have been steadily improving in the past couple of years, contractors most likely do not have the negotiating power they did in the past. Because the lower volume of projects in recent years may make it more difficult for contractors to avoid the convenience termination clause outright, it has become much more important for contractors to attempt to negotiate a more favorable clause.

2. Negotiating the Termination for Convenience Clause Contractor

If it is not possible to exclude the termination for convenience clause, contractors should seek to negotiate the best possible terms in the event of termination. Perhaps the most straightforward example of the termination for convenience clause is contained in the Federal Acquisition Regulations, which provide that “[t]he Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government’s interest.” Other standard language for a termination for convenience clause is contained in the A201 - General Conditions of the Contract for Construction published by the American Institute of Architects (“AIA”) and includes certain specifics regarding recoverable damages, i.e., costs incurred by reason of the termination along with reasonable overhead and profit on work not performed. Currently, the AIA’s termination for convenience clause is included in Section 14 of the A201 and provides as follows:

14.4.1 The Owner may, at any time, terminate the Contract for the Owner’s convenience and without cause.

14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner’s convenience, the Contractor shall:

1. Cease operations as directed by the Owner in the notice;
2. Take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
3. Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

14.4.3 In case of such termination for the Owner’s convenience, the Contractor shall be entitled to receive payment for the Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

Convenience termination provisions, like those contained in the federal regulations or the AIA General Conditions, can also be included in subcontracts. For instance, the Association of General Contractors’ “Standardized Subcontract for Building Construction,” under ¶ 10.5, allows the prime contractor to “suspend, delay or interrupt all or any part of the Subcontractor’s work for such period of time as may be determined to be appropriate for the convenience of the Contractor.” The subcontractor must then notify the contractor within ten days of the costs the subcontractor has incurred as a result of the termination. As this clause suggests, it is important to make explicit whether the general contractor can terminate for its own convenience, or only when the owner does so.

These sample clauses are helpful in assessing the type of language used. However, the exact manner and language which private parties should use to draft a termination for convenience clause will vary.

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92 Gary J. Tulacz, The Top 400 Contractors: Prosperity Allows Firms to be Selective, ENR, May 21/28, 2007, p. 43-44.


94 F.A.R. 52.249-2(a).
depending on the circumstances, and parties should consult a knowledgeable attorney. However, a few guiding principles are universal. Most importantly, as the aforementioned case law indicates, written notice should be universally present in convenience termination provisions because "precedent provides that the clause will not be found unenforceable for lack of consideration if it includes a notice requirement."95

One of the most important parts of a termination for convenience provision, after the granting language and the notice requirement, is a section detailing the measure of damages in the event of a termination. The basic formula is that the contractor will be paid for actual costs incurred until the effective date of termination, as well as a profit on those costs. The provision should note precisely which costs may be recovered, as well as the manner in which a profit will be measured. The manner of calculating profit can vary, but the easiest method of determining this is to add a set percentage to the total costs incurred, with that percentage subject to negotiation.

In addition to specifying damages, such a provision should also note the time within which the contractor must submit a claim to the owner and the time within which the owner must pay the contractor.96 An additional protection available to contractors is a provision which would prevent the owner from terminating without first agreeing to pay for all past work completed.97 This would protect the contractor if the owner terminates for convenience and then tries to refuse payment because of unsatisfactory work; in that instance, the owner may be in default for failure to terminate correctly.98

Other provisions will vary more, based on the requirements of the contract and the relative bargaining power of the owner and contractor. The clause may allow recovery of unallocated overhead, that which will not be absorbed under other work. In other words, if equipment goes unused because of a termination, the cost of that equipment will be higher in proportion to the unterminated portion of the contract than it would be in proportion to the contract as a whole. Such a provision can be dangerous, though, as disputes may arise regarding what overhead is reasonably unabsorbed. For example, an owner may contend that a contractor could have easily obtained another contract on which to use its equipment. While the overhead would still be unabsorbed, the issue would be whether this is fairly reimbursable. An alternative to including such a provision is to increase the percentage of profit added to the costs incurred, and then to state in the clause that unabsorbed overhead is not recoverable. The contract should expressly state what materials or equipment are unrecoverable "common items." Otherwise, some of these may be considered recoverable costs incurred because they may not fit neatly into the category of "overhead."

Another negotiable provision is a loss adjustment clause. If it appears at the time of termination that the completion of the contract would have created a loss for the contractor, an owner would desire not to pay the contractor for its full costs incurred. However, such a determination can only be based on estimates which no doubt would become the subject of contention. The parties may choose instead to deny recovery of profit in such a case, rather than adjusting the amount of recoverable costs incurred. While disputes may still arise as to whether the contractor would have suffered a loss, this alternative avoids conflicts as to how much of a loss would have occurred.

Regardless of whether a loss adjustment (or equitable adjustment) provision is included, the contract should still state explicitly that the total contract price serves as a cap on damages. Moreover, any provision granting or denying a loss adjustment should state whether defective work in the terminated portion of the contract at the time of termination gives rise to an adjustment of damages. The fairest option is to allow recovery of costs incurred in producing the defective work, because the contractor has no control over when a convenience termination is elected. However, if a loss adjustment is made, an

95  James R. Walsh and Hugh Alexander, At Your Convenience: Courts are Generally Enforcing Termination for Convenience Clauses in Private Sector Contracts that are Well-drafted and Prudently Invoked, 21 LOS ANGELES LAWYER 42, 46 (July/August 1998).
96  See id. (arguing that contractors should “include language that prohibits the buyer from disputing any invoices submitted to and received by the [owner] prior to termination” and that owners should include language which requires contractors to submit all invoices within a specified time period).
97  See id.
98  See id. (citing Rogerson Aircraft Corp. v. Fairchild Indus., Inc., 632 F. Supp. 1494 (C.D. Cal. 1986)).
estimate of the total cost to complete the project should include the estimated cost of correcting the defective work.

As suggested, the equitable adjustment is another potential point of contention. Where the contractor slants his bid so that greater profit is allocated to one portion of the contract and that portion is later terminated, the contractor will want an adjustment of the contract price with respect to any completed or unterminated part of the contract. The measure of such an adjustment would probably be less contentious than that of other adjustments because it is an easier amount to prove, but an owner may not wish to pay the contractor more than it sought on a particular portion of the contract. The solution to this situation will vary, but the potential for an equitable adjustment can be used as leverage in negotiating other portions of the measure of recovery. As stated above, the owner may forego the possibility of a loss adjustment in exchange for a provision denying an equitable adjustment. Alternatively, the owner may allow an equitable adjustment if the contractor cannot recover unabsorbed overhead. Perhaps the easiest solution is to deny an equitable adjustment, while informing the contractor that it should bid in a manner such that profit is spread evenly across all portions of the contract, if possible.

Finally, the termination for convenience clause may also expressly provide for the contractual version of the constructive termination for convenience doctrine. In other words, the Conversion Clause should state that a default termination, if unjustified, is automatically converted into a termination for convenience, and that damages are limited accordingly. As much as the equitable and loss adjustments, such a conversion provision will no doubt be subject to negotiation.

3. Inserting a Termination for Convenience Clause that is Exercisable by the Contractor Against the Owner

There is no case law directly on this point, but it is conceivable that an owner and contractor may find themselves in a bargaining position where it is favorable to include a termination for convenience clause that is exercisable by both parties, or solely by the contractor. This situation would be ideal for contractors because the risk of termination would fall equally on both parties, or on the owner exclusively. In a construction boom, it may be possible to negotiate such a provision. It would allow a contractor to escape from a losing or hostile project. Such a provision may be upheld by courts, so long as it contains a notice provision and is freely bargained for between the parties.

VI. Conclusion: Implications of the Convenience Termination Doctrine for Private Parties

In today’s strong construction market, contractors should have ample leverage and bargaining power to secure the most favorable allocation of risk, especially when it comes to a termination for convenience clause. If possible, such a clause should be kept out altogether to prevent owners from denying future profits in the event of breach, default, or termination. If this cannot be done, contractors should negotiate the clause on terms most favorable to them. An especially useful way to accomplish that is to insert a provision prohibiting termination for convenience unless all bills that have been submitted by the contractor have been paid. This will ensure that the contractor is compensated for work actually performed in the event that the owner later attempts to convert the convenience termination into one for default. Finally, if contractors find themselves in a strong enough position, they may be able to insert a termination for convenience provision exercisable by both parties, or even by the contractor alone.

Though much of the foregoing discussion is based on governmental precedent, this history of the termination for convenience clause will undoubtedly have a large impact on how courts interpret the clause in the private setting. This history and legal precedent raises many implications for private contracting parties. One piece of advice, however, bears repeating: if parties desire to include a termination for convenience provision, they should contemplate every possible circumstance and draft contractual provisions using the most explicit language possible to minimize confusion in the event of a dispute.

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99 But cf. Philip L. Bruner & Patrick J. O’Connor, Jr., BRUNER AND O’CONNOR ON CONSTRUCTION LAW, § 18:47 (West 2007) (stating that “all standard termination for convenience clauses confer the right to terminate only upon the owner” [emphasis added]).
Important Changes in Litigating Oil and Gas Cases in Federal Court: What the 2015 Amendments to the Federal Rules Mean for Oil and Gas Companies

By J. Nicholas Ranjan and David I. Kelch

INTRODUCTION

Many oil and gas disputes are litigated in federal court. In recent years, federal litigation has undergone significant changes in discovery practices and rules. For example, with the increase in electronically stored information, like emails and text messages, the federal and local rules have changed to ensure that such electronically stored information, or “ESI,” is preserved and disclosed. The problem that many companies face, however, is that the costs of preserving, collecting, reviewing, and producing ESI as part of federal litigation can be extraordinarily high. This is particularly acute in cases against oil and gas companies that involve historical information, payment information, and large numbers of plaintiffs or claimants (e.g., payment, royalty, class actions, and mass contamination cases).1 Similarly, even in “routine” cases—like oil and gas lease disputes—where the collection of ESI may extend to email accounts and text messages of personnel and agents in the field (sometimes on non-company servers), e-discovery costs can be disproportionate to the issues at stake.2

The high costs of e-discovery in federal litigation recently spurred the Supreme Court of the United States to amend the federal rules in a manner that has the potential to narrow the scope and limit the cost of expensive e-discovery. This has the potential of assisting those oil and gas companies that litigate in federal court in reducing and managing their defense costs, particularly in this challenging economic environment.

Below is a summary of the proposed amendments (which would go into effect on December 1, 2015, absent congressional legislation opposing or altering them), and the potential effect of the changes on oil and gas litigation in federal court.

SUMMARY OF THE AMENDMENTS

The proposed amendments can be grouped into three categories: (i) early case management; (ii) proportionality of discovery; and (iii) preservation of ESI.

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1 In a recent study of Fortune 500 companies, the RAND Institute found that the median total cost for ESI production among participants reached the astounding sum of $1.8 million dollars per case. Nicholas Pace & Laura Zakaras, Rand Institute for Civil Justice, Where the Money Goes: Understanding Litigant Expenditures for Producing Electronic Discovery, 28 (2012).

2 In a “survey of the ABA Section of Litigation, 78% of plaintiffs’ attorneys, 91% of defense attorneys, and 94% of mixed-practice attorneys agreed that litigation costs are not proportional to the value of small cases, with 33% of plaintiffs’ lawyers, 44% of defense lawyers, and 41% of mixed-practice lawyers agreeing that litigation costs are not proportional in large cases.” See Committee on Rules of Practice and Procedure of the Judicial Conference of the United States, Report of the Judicial Conference Committee on Rules of Practice and Procedure, at B-6, B-7 [hereinafter Final Report], available at http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Reports/ST09-2014.pdf.
Important Changes in Litigating Oil and Gas Cases in Federal Court: What the 2015 Amendments to the Federal Rules Mean for Oil and Gas Companies

The early case management amendments are largely designed to spur “early and more active judicial case management.” They include an amendment that decreases the deadline to serve a complaint and summons (from 120 days to 90 days), in order to expedite the start of a case. They also include changes in the sequencing and manner of early conferences with the court, and the manner in which objections to discovery can be stated.

Of greater consequence, the second category of changes is designed to eliminate disproportionality between what is at stake in litigation and discovery. For example, new Rule 26 recognizes that “the costs of discovery in civil litigation are too often out of proportion to the issues at stake in the litigation[.]” With that in mind, the new rule limits the scope of discovery to that which is “proportional to the needs of the case[.]” Importantly, this means that the new Rule 26(c)(1) will be amended to include “the allocation of expenses” among the terms that may be included—in other words, if certain ESI must be produced by a company, the other side may have to pay for the expense involved.

The final category of changes is designed to clarify the law regarding the spoliation of discoverable information. The new Rule 37(e)—a complete rewrite of the rule—was developed to “establish[] greater uniformity in how federal courts respond to the loss of ESI.” The new rule only allows serious sanctions for spoliation (i.e. the intentional, reckless, or negligent withholding, hiding, altering, or destroying of evidence relevant to a legal proceeding) where the spoliating party “acted with the intent to deprive another party of the information’s use in the litigation.”

A FEW KEY EFFECTS OF THE AMENDMENTS ON FEDERAL LITIGATION

The most important effects of the amendments concern those related to the proportionality of discovery and preservation of ESI.

First, the scope of discovery is now limited to that which is “proportional.” In other words, courts will not permit discovery into expensive ESI, without a cost-benefit analysis. Before initiating discovery, courts are likely to hear conflicting estimates of the costs and the benefits of discovery. Using “extrinsic information,” such as “whether the requested information was created by ‘key players,’” and evidence samples will likely be important to a cost-benefit analysis. Further, where expensive e-discovery is required from an oil and gas company, that company may have the ability to allocate the costs to the other side.

Second, while it still remains critical to preserve potentially relevant ESI, the new changes to the rules are more forgiving when a party has inadvertently failed to do so. In the past, failure to preserve certain ESI could lead to sanctions, including preventing a party from

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2 Final Report at B-11.
4 Final Report at B-11.
5 Under new Rule 16(b)(1), scheduling conference will not now take place “by telephone, mail, or other means[,]” but are likely to be in person. Additionally, under new Rule 34, objections to discovery requests may not be boilerplate, but must be stated “with specificity” and must state “whether any responsive materials are being withheld on the basis of that objection.”
6 Final Report at B-22.
7 Rule 26 currently allows “discovery regarding any nonprivileged matter that is relevant to any party’s claim or defense[,]” but the new Rule 26 limits this general scope to discovery of that which is “proportional to the needs of the case[,]” Final Report at B-15.
10 Id. at 165–66.
introducing certain evidence or permitting the jury to infer an adverse fact simply because evidence was not preserved. The new rule would appear to prohibit such a severe result for inadvertent mistakes.

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The creative oil and gas litigator will leverage the new changes to the rules so that oil and gas litigation in federal court—particularly during the discovery stage—will be more proportional and less costly. For those companies in the industry that face litigation that involves ESI (e.g., payment, royalty, class actions, and mass contamination cases) the changes may be beneficial in managing and defending litigation in a cost-effective manner.

Authors:

J. Nicholas Ranjan
nicholas.ranjan@klgates.com
+1.412.355.8618

David I. Kelch
david.kelch@klgates.com
+1.412.355.7427
UK Shale Gas - Going all out for Shale

Shale Gas and Oil Policy Statement by DECC and DCLG 16 September 2015

By Jane Burgess, Sebastian Charles and Paul Tetlow

As part of a package of measures to kick-start the shale gas industry in the UK, the UK government issued a joint Written Statement by DECC and DCLG on 16 September 2015 containing a new shale gas and oil policy. This policy has immediate effect and is a material consideration to be taken into account by mineral planning authorities in the determination of shale gas applications and in the preparation of mineral development plans.

The policy sets out new planning powers designed to speed up the current time taken by mineral planning authorities to process shale gas applications and includes:

- New power for the Secretary of State to call-in shale gas applications for his own determination
- Limited power to recover shale gas appeals for determination by the Secretary of State for a 2 year period
- Prioritisation of appeals by PINS for exploration for or development of shale gas allowing them to leapfrog ahead of other sorts of appeal awaiting determination.
- Expectation that shale gas applications will be determined within 16 weeks
- New power for the Secretary of State to determine shale gas applications where such applications are made to underperforming planning authorities who have repeatedly failed to determine such applications within statutory time limits
- Amendment of permitted development rights to allow drilling of boreholes for groundwater monitoring without the need for planning permission.
- Further consultation on new permitted development rights to allow drilling of boreholes for seismic investigation and to locate/appraise shallow mine workings without the need for planning permission.

The policy announcement has been strongly welcomed by the shale gas industry. The industry have expressed concerns over the current planning procedures in the UK for obtaining approval for the extraction of shale gas and in particular the time taken to process such applications. The delay in determining a recent application by Cuadrilla in Lancashire for 2 test sites near Blackpool which was subsequently refused, after a year, is certainly evidence of these difficulties.

However the proposal to remove shale gas decisions from a locally elected group of members may be a step too far for some, particularly in view of the recent call for increased community engagement in shale gas applications by the Taskforce on Shale Gas.

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2 [http://tinyurl.com/pyr4bcp](http://tinyurl.com/pyr4bcp) [http://tinyurl.com/nnayqou](http://tinyurl.com/nnayqou)
3 [https://www.taskforceonshalegas.uk/reports/first-report](https://www.taskforceonshalegas.uk/reports/first-report)
UK Shale Gas - Going all out for Shale

Shale Gas and Oil Policy Statement by DECC and DCLG 16 September 2015

In an attempt to win public support for shale gas, the UK Government have also announced in the Written Statement their intention to present proposals later this year to establish a sovereign wealth fund to share with the local community a proportion of the tax revenues recouped from shale gas. This initiative, coupled with the commitment already made by shale gas industries to make set payments to local communities at the exploration and production phases of shale gas development, may assist in reducing public opposition to shale gas.

Investors in the shale gas industry in the UK are watching with interest to see what impact this policy announcement may have on the decision making process in the UK. The additional need to ensure a consistency of environmental standards across Europe is also critical if investment in the shale gas industry in the UK is to be encouraged. The recent decision\(^4\) by the European Commission on 3 September to review the effectiveness of Recommendation 2014/70/EU (which set minimum principles for the exploration and production of hydrocarbons such as shale gas using hydraulic fracturing) will assist in determining whether the existing environmental regulation governing the extraction of shale gas needs to be strengthened and improved.

This policy contained within the joint Written Statement formally replaces the earlier Shale Gas and Oil Policy Statement by DECC and DCLG issued on 13 August 2015.

Should you require further information about any of the matters contained within this alert or any advice on how these reforms may impact on your development proposals, please contact the authors or your usual K&L Gates contacts.

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Authors:

Jane Burgess
jane.burgess@klgates.com
020 7360 8271

Sebastian Charles
sebastian.charles@klgates.com
020 7360 8205

Paul Tetlow
paul.tetlow@klgates.com
020 7360 8101

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New MLP Rules Provide Bright Lines and New Challenges

By J. Stephen Barge, David H. Sweeney, Kenneth S. Wear, and Christine M. Green

On May 5, 2015, the Internal Revenue Service (“IRS”) released proposed regulations that, if finalized, would provide guidance on qualifying income from minerals and natural resources activities for master limited partnerships (“MLPs”).¹ For the oil and gas industry, the proposed regulations provide welcome formalization of some views that the IRS has expressed in past private letter rulings. While generally good news, the proposed regulations are potentially troublesome in some respects. Income from certain hydraulic fracturing activities has been “blessed,” but there are some important limitations on fracking income that some in the industry may find onerous. Also of potential concern, the proposed regulations narrow the scope of some activities such as processing of natural gas and petroleum products.² Finally, because the new rules establish an exhaustive list of qualifying activities, there is the very real risk that some current practices are left out and that future innovations will not be covered.

The proposed regulations under section 7704(d)(1)(E) of the Internal Revenue Code would replace a cumbersome but flexible ruling practice with a defined and exclusive list of activities that give rise to qualifying income. Activities that do not fit within the definitions under final regulations would not qualify, risking the application of entity-level tax for natural resources MLPs. The IRS is inviting comments until August 4, 2015, concerning whether additional activities should be included. Companies should review the list and consider whether current or future activities and technologies that are not clearly covered in the proposed definitions should be brought to the attention of the IRS.

Regardless of the industry sector, companies considering a MLP structure should make sure that their activities fit squarely within the proposed regulations. Even though the IRS has resumed issuing letter rulings with respect to activities that produce qualifying income, it will not issue comfort letter rulings and it remains to be seen whether the IRS will take an expansive view of qualifying activities under the new regulations. Although the proposed regulations provide a 10-year transition period for existing MLPs, MLPs should not wait to review their activities for compliance in case any restructuring needs to be accomplished during the transition period.

¹ A copy of the proposed regulations is available at http://www.gpo.gov/fdsys/pkg/FR-2015-05-06/pdf/2015-10592.pdf (last visited May 7, 2015). Note that the proposed regulations would not change the current treatment of income with respect to renewable, or inexhaustible, resources such as soil, air, mosses, and minerals from sea water. Income derived from renewable resources still would not be treated as qualifying income.

² For example, under the proposed regulations, the chemical conversion of natural gas components into ethylene and propylene through the use a steam cracker would not give rise to qualifying income. Yet, in PLR 201241004, the IRS determined that income derived from processing natural gas components into olefins by using a gas-fired cracking furnace gave rise to qualifying income. Also, for the timber industry, the proposed regulations depart from past determinations as processing pulp and treating lumber would no longer qualify.
New MLP Rules Provide Bright Lines and New Challenges

Summary:
A MLP is a publicly traded partnership (“PTP”) that is taxed as a partnership rather than a corporation because it meets the qualifying income exception in section 7704(d). A PTP meets the qualifying income exception when at least 90% of its income is qualifying income, which generally includes passive sources of income (e.g., dividends and interest) and under section 7704(d)(1)(E), income from the “exploration, development, mining or production, processing, refining, transportation . . . , or the marketing of any mineral or natural resource.”

Under current practice, oil and gas MLPs can seek private letter rulings from the IRS concerning the application of the broad statutory categories to their particular activities. The proposed regulations refine those broad statutory categories by providing an exclusive list of qualifying activities within each category, as well as “intrinsic activities,” as follows:

- Qualifying Activities-
  - Exploration - an activity performed to ascertain the existence, location, extent, or quality of any deposit of mineral or natural resource before the beginning of the development state of the natural deposit.
  - Development - an activity performed to make minerals or natural resources accessible.
  - Mining or production - an activity performed to extract minerals or other natural resources from the ground.
  - Processing or refining - generally, an activity that is done to purify, separate or eliminate impurities but industry-specific rules are given for the following industries: natural gas, petroleum, ores and minerals, and timber.
  - Transportation - the movement of minerals or natural resources and products produced from processing and refining, including by pipeline, barge, rail, or truck.
  - Marketing - the activities undertaken to facilitate the sale of minerals or natural resources or products produced from processing and refining.

- Intrinsic Activities - certain limited support activities intrinsic to section 7704(d)(1)(E) activities, which must be specialized to support, essential to the completion of, and require the provision of significant services to support the section 7704(d)(1)(E) activity.

10-Year Transition Period
The proposed regulations will apply to income earned in a taxable year that begins on or after the date on which the regulations are finalized. However, a 10-year transition period will also begin once the regulations are finalized. Existing MLPs that received a private letter ruling from the IRS prior to May 6, 2015 holding that a certain activity generates qualifying income will have 10 years until they can no longer rely on those determinations. MLPs that treated their activities as giving rise to qualifying income under section 7704(d)(1)(E) based on a reasonable interpretation of that statute will also have 10 years during which they can

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3 On March 28, 2014, the IRS announced a temporary pause on issuing private letter rulings concerning qualifying income activities but resumed its practice nearly a year later on March 6, 2015. The purpose of the pause was to give the IRS and the Treasury time to develop clearer rules.
New MLP Rules Provide Bright Lines and New Challenges

rely on those interpretations. Upon expiration of the 10-year transition period, these MLPs will need to satisfy the tests set forth in the regulations in order to maintain their tax treatment as MLPs.

Intrinsic Activities and the Oil and Gas Industry

Intrinsic activities are not listed in section 7704(d)(1)(E) but appear to be the IRS’ effort to incorporate the "integral to" doctrine used in past private letter rulings. Activities that taxpayers represented as "integral to" an activity listed in section 7704(d)(1)(E), but that otherwise may not have generated qualifying income independently, were treated as producing qualifying income. These letter rulings often involved taxpayers in the oil and gas industry and fall into two broad categories: (1) taxpayers that engaged in an activity that clearly fit within the list of section 7704(d)(1)(E) activities and also engaged in complementary services to those activities and (2) taxpayers that provided complementary services to customers engaging in section 7704(d)(1)(E) activities but that were not themselves engaging in those activities.

Even though the use of “intrinsic activities” in the proposed regulations appears to be an attempt to preserve the past "integral to" doctrine, the proposed regulations change and pare back activities that might have been informally considered to be qualifying activities in the past. One such area is fracking services. Examples in the proposed regulations show that a water delivery service for fracking will not be treated as an intrinsic activity unless the servicer also collects and treats the flowback. In those examples, the taxpayer owns natural gas pipelines but also built a water delivery pipeline to use in hydraulic fracturing. In contrast, PLR 201234005 concluded that a water delivery service was a qualifying activity, but the facts presented in the PLR do not indicate that collecting and treating flowback were part of the service. In this PLR, the taxpayer represented that its water delivery service was “integral to” the exploration and production of natural gas.

As noted above, an intrinsic activity must be one that is specialized to support, essential to the completion of, and requires the provision of significant services to support the section 7704(d)(1)(E) activity. An activity is specialized if the partnership’s personnel are provided to support a section 7704(d)(1)(E) activity and those personnel have received unique training that is of limited utility other than to support the section 7704(d)(1)(E) activity. An activity requires significant services if it must be conducted on an ongoing basis by the partnership’s personnel at the site of the section 7704(d)(1)(E) activity, or if offsite, the services are offered exclusively to those engaged in a section 7704(d)(1)(E) activity. The proposed regulations define as essential an activity that is required to physically complete a section 7704(d)(1)(E) activity.

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4 For example, in PLR 200909006, the taxpayer was engaged in the business of acquiring (both by conducting its own surveys and by purchasing existing surveys from third parties) and licensing seismic data to oil and gas producers. The taxpayer represented that its seismic data services were “integral to” exploration for oil and gas. Although any data produced by the taxpayer itself would have been easily classified as exploration of a mineral or natural resource, a section 7704(d)(1)(E) activity itself, income from licensing purchased data was also viewed as qualifying income. On its own, licensing purchased seismic data does not constitute a section 7704(d)(1)(E) activity.

5 In PLR 201226018, the taxpayer operated an extractive logistics business, providing several services to customers engaged in oil and gas drilling, including the delivery and sale of refined petroleum products, maintenance and inspection of drilling rig equipment, and the supply of fracturing fluid and tanks to well sites. The taxpayer's services on their own did not clearly fit within the section 7704(d)(1)(E) activities, but the taxpayer represented that its services were “integral to” the exploration, production, and development of oil and gas resources by others. The IRS determined that the taxpayer's income from its extractive logistics business was qualifying income but only to the extent attributable to its customers’ activities that would generally be expected to qualify as section 7704(d)(1)(E) activities. For example, income from the sale of products to farms and construction sites would not have been qualifying income.
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activity (“including in a cost effective manner, such as by making the activity economically viable”) or an activity required to comply with laws regulating the section 7704(d)(1)(E) activity. It is unclear how activities that contribute to cost effectiveness or efficiency (for example, by increasing the rate of mineral recovery) of an otherwise economically viable project will fare under the regulatory standard. Because the proposed regulations provide an exclusive list of qualifying activities, this proposed standard could prove to be a formidable obstacle for new methods and products.

Conclusion

The proposed regulations incorporate many of the IRS’ views from past private letter rulings, but some areas are more narrowly drawn. Existing MLPs and companies looking to form MLPs should review their current activities and make sure they fit within the proposed definitions of section 7704(d)(1)(E) activities or intrinsic activities. Given that the list of qualifying activities in the proposed regulations is exclusive, companies using processes not described in the proposed regulations or developing new technologies may wish to consider submitting comments to the IRS in an effort to expand the scope of the proposed regulations.

Authors:

J. Stephen Barge
steve.barge@klgates.com
+1.412.355.8330 (Pittsburgh)
+1.202.778.9852 (Washington DC)

David H. Sweeney
david.sweeney@klgates.com
+1.713.815.7351

Kenneth S. Wear
kenneth.wear@klgates.com
+1.412.355.6728

Christine M. Green
christine.green@klgates.com
+1.412.355.7476
FERC Policy Statement Regarding Pipeline Recovery of System Modernization Costs

By David L. Wochner, Sandra E. Safro, and Michael L. O’Neill

On April 16, 2015, the Federal Energy Regulatory Commission (“FERC” or the “Commission”) issued a Policy Statement on Cost Recovery Mechanisms for Modernization of Natural Gas Facilities (the “Policy Statement”), opening the door for interstate natural gas pipeline companies to recover system modernization costs from shippers through surcharges and tracker mechanisms. The Policy Statement, which will impact interstate natural gas pipelines and their shippers alike, will go into effect on October 1, 2015.

The Policy Statement, which was approved unanimously by the five commissioners, closely tracks the Commission’s November 20, 2014 Proposed Policy Statement, and is specifically intended to address costs incurred by pipelines related to pipeline safety and greenhouse gas emission ("GHGs"). FERC explicitly recognizes that allowing the surcharge mechanisms that fall within the purview of the Policy Statement represents a departure from its past practice. Historically, with narrow exceptions, the Commission has been reticent to allow regulated pipeline companies to establish surcharge mechanisms. However, as the Commissioners pointed out in their discussion at the April 16, 2015 meeting, including FERC’s newly installed Chairman, Norman Bay, the Policy Statement is aimed at incentivizing the modernization of U.S. interstate natural gas pipeline infrastructure in the face of emerging issues, like pipeline integrity and methane leakage.

One of the most critical aspects of the Policy Statement is that the Commission expressly declines to limit potential recovery to costs incurred in complying with existing laws and regulations. Instead, the Commission determined that “all prudent one-time capital costs that satisfy the eligibility requirements may be included in a cost modernization tracker, regardless of whether PHMSA, FERC, EPA, or some other government agency has adopted a regulation requiring incurrence of the cost.” In light of the substantial uncertainty surrounding federal and state GHG-related laws and regulations and multiple pending U.S. Pipeline and Hazardous Materials Safety Administration rulemakings, the absence of a tie to a specifically enacted law or implemented agency regulation may present an opportunity for pipelines to seek a more liberal recovery from shippers for voluntary system modernization initiatives.

Anticipating shippers’ concerns, however, the Commission confirmed that it will not approve a pipeline’s proposed surcharge mechanism if it finds that the costs were not prudent. Specifically, the Commission has included provisions that seek to ensure that any related surcharge mechanisms are narrowly tailored and do not become “runaway trackers.” To that end, the Commission will require interstate natural gas pipelines to satisfy five standards,

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2 Policy Statement at P 33.

3 Policy Statement at P 68 (emphasis added).
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described in greater detail below, to establish a system modernization surcharge mechanism.

Importantly, as noted above, the Commission explains that the Policy Statement is intended to benefit pipeline companies that take proactive measures to address certain issues even before government regulations imposing modernization requirements are finalized.4 Outgoing FERC Chairman Cheryl LaFleur noted in her comments at the April 16, 2015 meeting that such issues include increased reliance on natural gas, changing pipeline safety regulations, and an increasing emphasis on GHG emissions. Although the Commission declines to limit the regulatory initiatives for which pipelines may be able to recover related costs through a surcharge mechanism, the Policy Statement does specifically mention PHMSA’s pending pipeline safety regulations and the Environmental Protection Agency’s (“EPA”) anticipated GHG regulations. FERC references the high percentage of existing natural gas pipelines that were built prior to 1970, when PHMSA’s regulations went into effect, and the fatal September 2010 San Bruno, California pipeline incident.5 In response to the Pipeline Safety, Regulatory Certainty, and Job Creation Action of 2011, pending rulemakings will expand PHMSA’s jurisdictional reach by, for example, eliminating certain provisions that grandfathered pre-1970s pipelines and increasing other regulatory requirements for interstate natural gas pipelines. By all indications, the $2.5-3.5 billion in federal funding proposed by the Obama Administration in the Quadrennial Energy Review, released on April 21, 2015, to support states’ pipe replacement programs will focus on gas distribution systems, not interstate pipelines.6 Consequently, FERC’s surcharge and cost tracker mechanism appears to be the sole method for interstate pipeline operators to recover the costs of system modernization projects to comply with new pipeline safety requirements. In addition, the Policy Statement references EPA’s 2014 White Paper and the Department of Energy’s statements, both discussing methane leaks associated with natural gas compressors and related infrastructure.7

While the Policy Statement leaves room for the Commission to render decisions on proposed system modernization surcharges on a case-by-case basis, the language suggests an attempt to balance the need for flexibility to ensure that pipelines are able to recover their cost of service with the requirement to protect rate payers from pipeline over-collection. The contours of the surcharge mechanisms that will be permitted under the principles outlined in the Policy Statement will be defined over time, through rate cases under Section 4 of the Natural Gas Act (“Section 4 rate case”), both full and limited, and pipeline settlements with their shippers. Interstate pipeline companies seeking to implement surcharge mechanisms will need to work closely with shippers in order to try to gain support for such proposals. Shippers for their part will have to review closely the pipelines’ proposals to ensure the surcharge mechanisms meet the five standards FERC establishes in the Policy Statement.

Five Standards and Additional Considerations in the Policy Statement

The five standards set forth in the Policy Statement that pipelines will have to satisfy to establish a system modernization surcharge mechanism establish a foundation for the

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7 Policy Statement at PP 28-29.
FERC Policy Statement Regarding Pipeline Recovery of System Modernization Costs

implementation of an objective surcharge mechanism. These standards, described in greater detail below, are:

Standard 1: Review of Existing Rates;
Standard 2: Eligible Costs Must be Limited;
Standard 3: Avoidance of Cost Shifting;
Standard 4: Periodic Review of the Surcharge; and
Standard 5: Shipper Support.

The Commission also addressed questions related to accelerated amortization of capital costs included in a modernization surcharge mechanism, whether full or partial reservation charge credits will be required for service disruptions related to system modernization projects, and pipelines' return on equity. These issues are discussed in greater detail following the review of the five standards.

Standard 1: Review of Existing Rates.

In order to receive authorization for a modernization surcharge mechanism, a pipeline must have had its base rates publicly available in its FERC tariff recently reviewed to demonstrate that the existing base rates are just and reasonable. FERC notes that this could be accomplished either (1) through a general Section 4 rate case, during which all of the underlying costs and resulting rates are subject to review, or (2) through a “collaborative effort between the pipeline and its customers.”

The Policy Statement maintains the requirement that a pipeline seeking to establish a modernization cost surcharge demonstrate that its existing rates are just and reasonable. While a full Section 4 rate case is an option available to pipelines to satisfy this burden of proof, the Commission explains that it is also “open to considering alternative approaches,” and will make determinations on a case-by-case basis. As it has done in rate proceedings in the past, the Commission encourages pipelines seeking modernization cost recovery mechanisms to provide their shippers with robust supporting data and information. In light of the significant time and cost associated with full Section 4 rate cases, it is likely that many pipeline companies will seek to avail themselves of “alternative approaches,” whether through settlements with customers or through other methods.

Standard 2: Eligible Costs — One-Time Capital and Certain Non-Capital Costs Targeted at Regulatory Compliance, Safety, or Efficiency Goals.

Notably, as a threshold matter, the Commission declines to limit eligible costs to those incurred in compliance with already enacted laws and currently effective regulations. Instead FERC finds that it is in the public interest to encourage voluntary pipeline initiatives to improve safety and efficiency, regardless of whether such initiatives are in response to a government law or regulation.

On a more granular level, the costs that would be eligible for recovery through the mechanism generally must be one-time capital costs that are incurred to modify existing system infrastructure to (1) comply with new, more stringent regulations and/or (2) employ new technologies that reasonably increase safety and/or efficiency. The Commission maintains its existing position that ordinary capital maintenance costs should not be included
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in a cost recovery mechanism and, to this end, pipeline companies will be required to demonstrate that the costs included in the recovery mechanism do not fall within this category. Pipelines may seek to use a recent history of their ordinary capital system maintenance costs as a means for establishing a representative level of capital maintenance costs to exclude from a proposed modernization surcharge mechanism.

Although the Policy Statement is targeted at recovery of one-time capital costs, the Commission explains, albeit reluctantly, that pipelines may be able to recover certain non-capital costs, such as those “directly related to the modernization projects” on which the proposed surcharge mechanism is based, a statement that can be expected to lead to significant disputes between pipelines and their customers.

Finally, pipeline companies must identify specifically each capital investment to be recovered and an upper limit on the capital costs related to each project to be included in the recovery mechanism, although pipelines may be permitted to modify this list and the associated cost limits at a later time. Again, this flexibility in modifying the upper limit could result in challenges from shippers that certain costs were incurred imprudently.

**Standard 3: Avoidance of Cost Shifting.**

In keeping with Commission policy, interstate natural gas pipelines will be required to design the proposed recovery mechanism so that it protects its captive customers from cost shifts if the pipeline loses shippers or has to offer increased discounts to retain customers. The Policy Statement notes that one way to achieve this goal is for the pipeline to agree to a floor for the billing determinants that can be used to design the recovery mechanism.

**Standard 4: Periodic Review of the Surcharge.**

Pipeline companies will be required to include a method to allow for periodic review of the recovery mechanism and the pipeline’s base rates to ensure that they remain just and reasonable. The Commission notes that it will establish appropriate procedures to address any complaints that raise an issue of material fact regarding the continued justness and reasonableness of a pipeline’s base rate or surcharge. We expect pipelines may look to existing FERC-approved surcharge or tracker mechanisms for examples of how to structure any proposal.

**Standard 5: Shipper Support.**

Pipeline companies will be required to demonstrate that they worked collaboratively with shippers to seek support for the recovery mechanism. The Commission will not require 100% shipper support, which is consistent with the way that the Commission generally handles settlements in Section 4 rate cases.

**Additional Considerations**

In addition to the standards noted above, the Commission addressed the following:

**Accelerated Amortization.** The Commission will allow pipelines and shippers to determine whether accelerated or non-accelerated amortization of the capital costs included in the recovery mechanism is warranted.
Reservation Charge Crediting. Initially, the Commission will address on a case-by-case basis the issue of whether full or partial reservation charge credits should be provided when the pipeline must interrupt primary firm service to install or repair facilities related to the modernization surcharge mechanism. FERC policy requires that pipelines provide full reservation charge credits to primary firm customers when service is interrupted for a non-force majeure event and requires partial reservation charge credits during force majeure events. Over time, it is possible that a general Commission policy will emerge from the individual case determinations.

Return on Equity. While it declines to require an automatic reduction in a pipeline’s return on equity if the pipeline has a modernization surcharge mechanism, the Commission explains that it may take the surcharge mechanism into consideration when determining whether a pipeline’s level of recovery is just and reasonable.

Conclusion

The potential for significant added costs to a shipper’s overall transportation charges on interstate pipelines as a result of these potential new interstate natural gas pipeline surcharges, coupled with FERC’s decision not to tie the acceptance of modernization costs to enacted laws or implemented regulatory regimes, likely will result in significant challenges to individual pipeline’s proposals as they are filed with FERC. Moreover, the Commission likely will continue to draw boundaries around its Policy Statement as more and more pipelines seek FERC approval for proposed surcharge mechanisms to recover the modernization costs. As a result, interstate pipelines and shippers alike will have to follow multiple proceedings to discern the evolving parameters of FERC’s newly announced Policy Statement.

Authors:

David L. Wochner
David.Wochner@klgates.com
+1.202.778.9014

Sandra E. Safro
Sandra.Safro@klgates.com
+1.202.778.9178

Michael L. O’Neill
Michael.O’Neill@klgates.com
+1.202.778.9037
Lone Pine Loss: Supreme Court of Colorado Says State Rules Don’t Allow Use of Lone Pine Orders in Natural Gas Drilling Case

By Mark D. Feczko and Travis L. Brannon

Introduction

Earlier this week, the Supreme Court of Colorado issued its long-awaited decision in Antero Resources Corp. v. Strudley and held that the Colorado Rules of Civil Procedure do not allow a trial court to issue a modified case management order (known as a Lone Pine order) requiring a plaintiff to present prima facie evidence in support of a claim before full discovery is allowed.1 The decision is the first from a state supreme court holding that the Lone Pine case management tool is not allowed under their rules of civil procedure.

Given the unique nature of Colorado's procedural rules that limit a trial court's discretion, however, the decision may not foreclose the future use of Lone Pine orders in complex cases with multiple parties, including oil and gas contamination cases, in federal courts or in state courts with rules similar to the federal rules. Nonetheless, even plaintiffs in those courts will likely rely on this decision going forward in an attempt to avoid the issuance of Lone Pine orders.2

Lone Pine Orders

"Lone Pine" orders are modified case management orders designed to promote judicial efficiency and economy by requiring plaintiffs to produce a measure of evidence to support their claims early in a case, before or during discovery. Typically, the orders require plaintiffs to produce (1) evidence of exposure to chemicals (identity and quantity); (2) a diagnosis of disease, illness, or property damage; and (3) expert reports or affidavits supporting causation. Lone Pine orders are most often used in complex litigation to identify meritless claims and to streamline the litigation.

Courts most often rely on Federal Rule of Civil Procedure 16 or similar state rules as providing the authority for issuing Lone Pine orders. For example, Federal Rule of Civil Procedure 16(c)(2)(L) and analogous state rules allow the court to "consider and take appropriate action on . . . adopting special procedures for managing potentially difficult or protracted actions that may involve complex issues, multiple parties, difficult legal questions,

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or unusual proof problems.” Rule 16 also allows the court to take appropriate action for “simplifying the issues . . . and eliminating frivolous claims or defenses,” as well as “facilitating in other ways the just, speedy, and inexpensive disposition of the action.” Fed. R. Civ. P. 16(c)(2)(A) & (P).

Procedural History of Antero Resources Corp. v. Strudley

In Strudley, plaintiffs, Mr. and Mrs. Strudley and their two minor children, brought various tort claims against Antero Resources and other oil and gas related defendants seeking damages for personal injuries and property damage allegedly arising out of natural gas drilling operations near their home. After initial disclosures were served by both plaintiffs and defendants, defendants moved for a modified case management order requiring “the Strudleys to present prima facie evidence to support their claims before full discovery could commence.” Defendants emphasized the complex nature of the case and the associated costs to the parties during prolonged discovery. Plaintiffs, on the other hand, argued that under Colorado law, they had a right to discovery before the merits of their case were tested.

The court issued a Lone Pine order requiring plaintiffs to submit all of the information traditionally required by Lone Pine orders, including (1) expert reports identifying hazardous substances, general causation, details regarding exposure, medical diagnosis of disease or illness, and specific conclusion that any illness was caused by exposure; (2) all reports and studies finding contamination on plaintiffs’ property; (3) a list of all medical providers and a release of all medical records; and (4) the identity and quantity of contamination on plaintiffs’ real property attributable to defendants. Although plaintiffs responded with some limited information, the court dismissed their claims with prejudice for failure to comply with the Lone Pine order’s required submissions.

Plaintiffs appealed the dismissal to the Colorado Court of Appeals and that court, agreeing with plaintiffs, reversed the dismissal, stating that “such orders are not permitted as a matter of Colorado law.” The Court of Appeals focused on “substantial” differences between Rule 16 of the Federal Rules of Civil Procedure and Rule 16 of the Colorado Rules of Civil Procedure, which gives Colorado judges less discretion to issue such orders. Additionally, the Court of Appeals noted that Colorado case law disfavors a required prima facie showing before allowing discovery on matters central to a plaintiff’s claims. The Supreme Court of Colorado granted certiorari to determine whether a court in Colorado is barred as a matter of law from entering a modified case management order requiring the plaintiffs to produce evidence essential to their claims after initial disclosures but before discovery.

Supreme Court of Colorado Decision

In a 6-1 decision, the Supreme Court of Colorado agreed with the Court of Appeals and held that “Colorado’s Rules of Civil Procedure do not allow a trial court to issue a modified case order requiring the plaintiffs to produce evidence essential to their claims after initial disclosures but before discovery.”

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4 Id. at *2.
5 Id.
6 Id. at *3.
7 Id. at *8.
8 Id. at *4.
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management order, such as a *Lone Pine* order, that requires a plaintiff to present prima facie evidence in support of a claim before a plaintiff can exercise its full rights of discovery under the Colorado Rules.”

The Supreme Court of Colorado, like the Court of Appeals, focused heavily on the differences between Rule 16 of the Federal Rules of Civil Procedure and Rule 16 of the Colorado Rules of Civil Procedure.

Notably, the Supreme Court of Colorado stated that Federal Rule of Civil Procedure 16(c) “explicitly grants trial courts substantial discretion to adopt procedures to streamline complex litigation in its early stages.” As a result, the Court stated that (i) “Federal Rule of Civil Procedure 16(c) authorizes [the use of *Lone Pine* orders] in complex federal cases to reduce potential burdens on defendants, particularly in mass tort litigation,” and (ii) “federal courts have discretion to use such orders in complex cases when discovery would likely be challenging, protracted, and expensive.”

On the other hand, the Court stated that “[w]hile many revised Colorado Rules are patterned from Federal Rules, revised C.R.C.P. 16 contains critical differences from Fed. R. Civ. P. 16.” Specifically, the Court stated that “in revising C.R.C.P. 16 in 2002, we did not adopt a counterpart to Fed. R. Civ. P. 16(c), which explicitly grants trial courts substantial discretion to adopt procedures to streamline complex litigation in its early stages, ‘at any pretrial conference.’”

As a result, the Colorado Supreme Court held that Colorado Rule 16, unlike Federal Rule 16, does not authorize the use of *Lone Pine* orders. The Court stated that Colorado Rule 16 “provides a tool for the court to manage discovery while efficiently advancing the litigation toward resolution . . . [but] Rule 16 does not . . . authorize a trial court to condition discovery upon the plaintiff establishing a prima facie case.” The Court reasoned that its interpretation of the rule and its prohibition of *Lone Pine* orders under that rule is consistent with previous Colorado precedent regarding when a plaintiff can be required to present a prima facie case.

As a final matter, the Court pointed out that “this case involves only four family members, four defendants, and one parcel of land, yet the trial court labeled it a ‘complex tort action.’” As a result, the Court stated that “this case is not as complex as cases in other jurisdictions in which *Lone Pine* orders were issued.” Accordingly, the Supreme Court affirmed the Court of Appeals, and the case will now return back to the trial court.

**The Dissenting Opinion**

The dissent offered several counterpoints. First, the dissent emphasized that the “trial court’s [*Lone Pine* order] . . . was simply the trial court exercising its discretionary authority” under Colorado Rule of Civil Procedure 16(b) and “moving up the time for disclosures and
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moving back the time for the commencement of discovery. Second, the dissent viewed the existing Colorado precedent on Rule 16 and *prima facie* cases as inapposite because "when the court rendered those decisions, there was no language in Rule 16 giving trial courts the ability to change the timeline for disclosures and discovery." The dissent, therefore, would have upheld the use of *Lone Pine* orders in Colorado state court proceedings.

**Conclusion**

Although the Supreme Court of Colorado’s decision forecloses the use of *Lone Pine* orders in Colorado state court cases, its impact should necessarily be limited because it is based on the unique language of Colorado Rule of Civil Procedure 16. As a result, the decision should not impact the use of *Lone Pine* orders in federal courts and state courts that have procedural rules similar to the federal rules because even the Supreme Court of Colorado acknowledged that the Federal Rules of Civil Procedure explicitly authorize the use of *Lone Pine* orders. Accordingly, companies defending a complex case in Colorado state court should consider whether the case can be removed to federal court to preserve their right to seek a *Lone Pine* order.

Therefore, despite this decision, federal district courts and other state trial courts with rules similar to the federal rules should continue to consider requests to enter *Lone Pine* orders. Such orders can be particularly useful in oil and gas contamination cases that, like the seminal *Lone Pine* case, often involve complex issues, multiple parties, and the prospect of burdensome discovery for defendants and the court. As a result, companies facing such claims in federal courts and other states should still consider the careful and skilled use of this valuable but underutilized case management tool.

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**Authors:**

**Mark D. Feczko**
mark.feczko@klgates.com
+1.412.355.6274

**Travis L. Brannon**
travis.brannon@klgates.com
+1.412.355.7443

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19 *Id.* at ¶40.
20 *Id.* at ¶42.
Regulating Exploration on the Arctic OCS: U.S. Federal Regulators Propose Rules for Oil and Gas Exploratory Drilling on the Arctic Outer Continental Shelf

By Darrell L. Conner, Louisiana W. Cutler, David L. Wochner, Andrew J. Newhart, and Michael L. O’Neill

In recent years, the energy industry has expressed significant interest in investigating submerged lands on the U.S. Outer Continental Shelf (OCS) in the Arctic for commercial quantities of oil and natural gas. The challenging operational environment, distance from offshore infrastructure, and underdeveloped regulatory context have limited exploration and production (E&P) activities on the Arctic OCS to date. To further standardize regulatory requirements for operations on the Arctic OCS offshore Alaska, the U.S. Department of Interior’s Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) published a proposed rulemaking on February 20, 2015, entitled “Oil and Gas and Sulphur Operations on the Outer Continental Shelf - Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf” (Proposed Rulemaking).¹

Describing the challenges facing Arctic OCS exploration and production as “severe,” and citing different environmental considerations and the relatively remote geographic location of the Arctic OCS, BOEM and BSEE propose several administrative and operational requirements that will be more stringent than those required for other OCS locations and will increase costs for E&P operations. In particular, the Proposed Rulemaking would require E&P operators to have a spare relief rig and other equipment available to respond to any well control incidents. Although the Proposed Rulemaking contemplates the likelihood that operators would pool their resources to make this equipment available to the operators’ fleet on the Arctic OCS, this requirement could add substantial additional costs to E&P operations and discourage significant E&P efforts in the current low-price oil and gas market.

However, BOEM and BSEE will accept comments from the public for sixty days following publication in the Federal Register, so industry and other interested stakeholders will have an opportunity to work with BOEM and BSEE to shape the final rulemaking.

Background

The Outer Continental Shelf Lands Act (OCSLA) was enacted in 1953, and significantly amended in 1978. Congress established a National policy of making the OCS “available for expeditious and orderly development, subject to environmental safeguards in a manner which is consistent with the maintenance of competition and other national needs.”²

¹ Pending publication in the Federal Register, the Proposed Rulemaking is available here: http://www.bsee.gov/uploadedFiles/Proposed%20Arctic%20Drilling%20Rule.pdf.
² 43 U.S.C. § 1332(3).
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Congress also emphasized that the development of the OCS needs to be done, “by well trained personnel using technology, precautions and techniques to prevent or minimize the likelihood of blowouts, loss of well control, fires, spillages, physical obstruction to other users of the waters, or other occurrences which may cause damage to the environment or to property, or endanger life or health.”\(^{3}\) Additional amendments to the OCSLA have included the creation of an oil spill liability trust fund and a system of distributing a portion of the leasing proceeds to coastal states.

Under the OCSLA, the Secretary of the Interior is responsible for the administration of mineral exploration and development of the OCS. OCSLA, as amended, offers guidelines for implementing the OCS oil and gas exploration and development program. The Secretary has delegated most of the administrative and regulatory duties for the OCS oil and gas program to BOEM and BSEE. BOEM reviews individual Exploration Plans and the BSEE reviews the Application for Permit to Drill to determine whether the operator’s proposed activities meet the OCSLA standards that govern offshore exploration and development.

The Department of Interior (DOI) stated that it consulted with multiple stakeholders during the formation of this proposed rule including Alaska Natives, various environmental organizations and individual oil and gas companies, and considered Shell’s recent experience with exploratory drilling in the Chukchi Sea. The Administration believes the Proposed Rulemaking will help achieve the goals of protecting the unique Arctic ecosystem, respecting the needs and culture of the Alaska Natives, and reducing the country’s reliance on foreign oil.

The Proposed Rulemaking

Against this backdrop, and with specific recognition of the significant economically recoverable reserves on the Arctic OCS, BOEM and BSEE published the Proposed Regulations on February 20, 2015. These proposals include adjustments to existing regulations as well as entirely new regulatory provisions. As noted above, the Proposed Rulemaking contains additional operational and administrative requirements, many of which likely will impose significant costs on operators. The Proposed Rulemaking would apply to exploration operations on the Arctic OCS only, defined as the Beaufort Sea and Chukchi Sea Planning Areas,\(^{4}\) and aim to address the short operational season (during the Summer through early Fall), geographical remoteness, and environmental conditions like sea ice encroachment unique to the Arctic OCS.\(^{5}\) The proposed regulations will not apply to actual Development drilling activities. The agency makes clear in the proposed rule that it will address the appropriate regulations for commercial development of oil and gas resources on the Arctic OCS after it has gained experience from the exploration activities that are the subject of this rulemaking.

A brief outline of the key operational and administrative components of the Proposed Rulemaking follows.

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\(^{3}\) 43 U.S.C. § 1332(6).

\(^{4}\) Proposed Rulemaking at 41.

\(^{5}\) Proposed Rulemaking at 42.
Operational Requirements

As noted above, the key provisions in the Proposed Rulemaking, and the major driver of anticipated costs from this regulatory program, is the requirement that operators have a "relief rig" and other back-up equipment available on stand-by notice to assist in case of a loss of well control. Citing the response to the Gulf of Mexico Macondo oil spill of 2010, when the spill was ultimately stopped by the drilling of a relief well by another drilling rig, the Proposed Rulemaking would require operators to have a back-up or "relief rig" available to deploy in case of a similar loss of well control on the Arctic OCS. The Proposed Rulemaking would require operators to have a relief rig available to drill and complete a relief well within 45 days of a loss of well-control at an exploratory well site on the Arctic OCS.

In addition to the relief rig, the Proposed Rulemaking would also require operators to have Source Control and Containment Equipment ("SCCE") available for rapid deployment in case of a loss of well control. The SCCE required would include a capping stack, a cap and flow system, and a containment dome and is not currently required in other parts of the U.S. OCS. The capping stack technology advanced significantly in the aftermath of Macondo; many in the oil and gas industry believe that this should be adequate to address a loss-of-control event and that a separate requirement for a relief rig is unnecessary. DOI acknowledges in the proposed rulemaking that a relief rig is a redundancy but asserts that such a redundancy is necessary in light of the remote nature of the exploration activities and the lack of proximate infrastructure.

In an apparent effort to appease industry’s concerns, the proposed rule allows operators to request approval from the agency of alternative compliance measures as well, and specifically requests comments on such possible alternative technologies.

The proposed rule also imposes a requirement on operators to more frequently conduct pressure testing of the blowout preventer (BOP) system associated with the exploration activities. In particular, recognizing the concerns that industry has raised related to the efficacy of increasing the frequency of BOP testing, the agency concludes that given the challenging Arctic environment and the uncertainty of how the BOP equipment will perform in the Arctic conditions, it is prudent to require a BOP pressure test every 7 days, instead of the current standard 14 days. This was a significant issue in the aftermath of the 2010 Gulf of Mexico Macondo oil spill. DOI cites specifically to Shell’s 2012 proposal to DOI for Arctic operations, which include a 7-day pressure test cycle, for justifying this aspect of its proposed rule.

Finally, the Proposed Rulemaking includes a number of provisions to minimize environmental impacts of exploratory drilling activities, such as increased oil spill response testing, a requirement to capture all petroleum-based mud and associated cuttings from the drilling operations, and requirements to limit impacts on subsistence hunting activities.

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6 Proposed 30 C.F.R. § 250.472.
7 Proposed Rulemaking at 30, 36.
8 Proposed 30 C.F.R. § 250.472(b).
9 Proposed 30 C.F.R. § 250.471(a).
10 Proposed 30 C.F.R. § 250.90.
11 Proposed 30 C.F.R. § 250.300(b)(1).
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Administrative Changes

In addition to the Exploration Plan and the Application for Permit to Drill familiar to operators in other parts of the U.S. OCS, the Proposed Rulemaking would require an additional planning document, an Integrated Operations Plan (IOP), for E&P activities on the Arctic OCS. This document would require preliminary details for the proposed exploratory drilling program and would need to be filed with BOEM at least ninety days before submission of the Exploration Plan.\(^{12}\) BOEM will post all IOPs on its website to make them available to the public. By doing this in advance of an operator’s submission of an exploration plan (EP), which by law only affords the agency 30 days to review and either approve, disapprove, or modify an EP, it will provide the relevant agencies and the public greater opportunity to understand the proposed activities. Nonetheless, BOEM makes clear in the proposed rule that the IOP would be informational only and would not be subject to approval.

The Proposed Rulemaking contains other relatively minor changes to administrative requirements as well, including shorter reporting timelines for certain drilling incidents. Operators contemplating engaging in E&P operations on the Arctic OCS are encouraged to review these requirements carefully.

Implications

The timing and approach of the proposed regulations for Arctic OCS exploration activities appears to supplement other Obama Administration actions related to developmental activities in the Arctic region, in light of the increasing accessibility of the region due to melting ice cap. Recent announcements related to a National Arctic Strategy, commitments to reduce imports of foreign oil, and efforts to restrict some areas from oil and gas development, all appear to be designed by the White House to balance the competing interests of economic development in the region with national security interests and protection of the environment.

Recognizing not only the unique environmental conditions anticipated on the Arctic OCS but also the relative geographic remoteness of the Arctic OCS from traditional centers of offshore E&P infrastructure, the Proposed Rulemaking would require operators to have resources available for addressing potential environmental incidents that are similar to the resources available in more conventional production areas of the U.S. OCS. These requirements will demand operators to build up emergency response capacity and resources quickly, as opposed to a gradual increase in capacity seen in the Gulf of Mexico.

The requirements for relief rigs, as well as SCCE and oil spill response capabilities, likely will add significant costs to E&P operations. BOEM and BSEE recognize the efficacy of cooperative solutions, such as mutual aid agreements, to meet SCCE and relief rig capabilities of the Proposed Rulemaking. Developing these agreements and other cooperative programs will be critical to manage costs of compliance with the regulations in the Proposed Rulemaking.

The Proposed Rulemaking is open for comment, and stakeholders have an important opportunity to shape the final rule. BOEM and BSEE will accept comments for sixty days following publication of the Proposed Rulemaking in the Federal Register, and interested

\(^{12}\) Proposed 30 C.F.R. § 550.204.
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parties are encouraged to engage in the rulemaking process to ensure their interests and concerns are fully appreciated by the regulators.

Authors:
Darrell L. Conner
darrell.conner@klgates.com
+1.202.661.6220

Louisiana W. Cutler
louisiana.cutler@klgates.com
+1.907.777.7630

David L. Wochner
david.wochner@klgates.com
+1. 202.778.9014

Andrew J. Newhart
andrew.newhart@klgates.com
+1. 202.778.9014

Michael L. O’Neill
mike.oneill@klgates.com
+1.202.778.9037

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Supreme Court of Ohio Rejects Local Governments’ Attempts to Regulate Oil and Gas Activities

By Craig P. Wilson, Nicholas Ranjan, Bryan D. Rohm, and Leigh Argentieri Coogan

In the Appalachian basin, several states have recently faced the issue of whether local governments have the ability to regulate oil and gas operations, potentially causing a maze of varying rules and requirements from one township to the next. While court decisions in Pennsylvania and New York have permitted local governments to exercise such authority, the Ohio Supreme Court recently reached the opposite result. In State ex rel. Morrison v. Beck Energy Corp., the Supreme Court of Ohio held that the Home Rule Amendment to the Ohio Constitution does not grant a local government the power to enforce its own oil and gas ordinances over Ohio’s comprehensive regulatory scheme for oil and gas operations in Ohio’s oil and gas statute, R.C. Chapter 1509.

Although the Ohio Supreme Court’s decision in Morrison is limited to the specific ordinances in question, the decision provides indication that Ohio’s comprehensive regulatory scheme for oil and gas operations likely will control in the event of conflict between a municipality’s power under the Home Rule Amendment and the state’s oil and gas requirements.

What Happened in Morrison?

Beck Energy attained a state permit from a division of Ohio Department of Natural Resources (ODNR) to drill an oil and gas well in the city of Munroe Falls, pursuant to R.C. Chapter 1509. However, the city of Munroe Falls filed a request for injunctive relief preventing Beck Energy from drilling until it complies with five local ordinances. The first of the five ordinances “is a general zoning ordinance in Chapter 1163 that prohibits any construction or excavation without a ‘zoning certificate’ issued by the zoning inspector.” Additionally, the “remaining four ordinances [. . .] specifically relates to oil and gas drilling.” Moreover, “[a] person who violates any of the ordinances in [. . .] Munroe Falls Codified Ordinances is guilty of a first-degree misdemeanor and ‘shall be imprisoned for a period not to exceed six months, or fined not more than one thousand dollars ($1,000), or both.’"

The trial court granted an injunction in favor of the city, but “[t]he court of appeal reversed, holding that R.C. 1509.02 prohibited the city from enforcing the five ordinances.” The Supreme Court of Ohio accepted the city’s appeal.

Key Holdings and Analysis

The Supreme Court of Ohio held that R.C. 1509.02 supersedes the city of Munroe Falls’ ordinances under Mendenhall v. Akron’s three-step analysis for determining whether a municipal ordinance must yield to a state statute when a city exercises its Home-Rule power.

The city argued that its Home-Rule power allows a municipality to impose ordinances relating to oil and gas drilling and production notwithstanding state oil and gas law. However, under Mendenhall, “a municipal ordinance must yield to a state statute if (1) the ordinance is an exercise of the police power, rather than of local self-government, (2) the statute is a
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general law, and (3) the ordinance is in conflict with the statute.” Under this three-step analysis, the Morrison Court held that the city’s ordinances do not represent a valid exercise of its Home-Rule power.

The Ordinances Constitute an Exercise of Police Power

Ohio law makes clear that within the meaning of the Home Rule Amendment, “any municipal ordinance, which prohibits the doing of something without a municipal license to do it, is a police regulation.” The Court noted that, “[t]he city does not dispute that its ordinances constitute an exercise of police power rather than local-self government.” Furthermore, “the city’s ordinances do not regulate the form and structure of local government,” but rather, the ordinances go as far as criminalizing “the act of drilling for oil and gas without a municipal permit.”

R.C. 1509.02 Is a General Law

The Court held that R.C. 1509.02 is a general law under Mendenhall. The city argued against categorizing R.C. 1509.02 as a general law, because it cannot apply to the western part of the state where oil and gas drilling does not occur; thus, the city asserted, R.C. 1509.02 neither applies to all parts of the state alike nor operates uniformly throughout the state. The Court, however, rejected this argument, and held that regardless of where oil and gas drilling occurs within the state of Ohio, R.C. 1509.02 applies and operates uniformly throughout the state and, therefore, is a general law.

The Ordinances Conflict with R.C. 1509.02

Finally, the Court recognized that “[t]he city’s ordinances conflict with R.C. 1509.02 in two ways.” First, the ordinances prohibit state-licensed oil and gas production within Munroe Falls, which is what R.C. 1509.2 allows. The state permit Beck Energy obtained “expressly ‘granted permission’ to ‘Drill [a] New Well’ for ‘Oil & Gas’ within Munroe Falls. But the city ordinances would render the permit meaningless unless Beck Energy also satisfied the permitting requirements in Chapters 1163 and 1329 of the Munroe Falls Ordinances.” The city argued that the laws do not conflict, because the city and the state regulate two different areas of oil and gas activities: “the ordinances address ‘traditional concerns of zoning,’ whereas R.C. 1509.02 relates to ‘technical safety and correlative rights topics.’” The Court rejected this argument, and recognized that “[t]his is a classic licensing conflict under [the] home-rule precedent.” Furthermore, the “ordinances and R.C. 1509.02 unambiguously regulate the same subject matter—oil and gas drilling—and they conflict in doing so.”

The second conflict the Court identified related to the General Assembly’s intention “to preempt local regulation on the subject.” R.C. 1509.02 “not only gives ODNR ‘sole and exclusive authority to regulate the permitting, location, and spacing of oil and gas wells and production operations’ within Ohio; it explicitly reserves for the state, to the exclusion of local governments, the right to regulate ‘all aspects of the location, drilling, and operation of oil and gas wells, including ‘permitting relating to those activities.’” Furthermore, it “prohibits cities from exercising powers that ‘discriminates against, unfairly impedes, or obstructs’ the activities and operations covered by R.C. 1509.02.” Therefore, the city’s ordinances were found to conflict with R.C. 1509.02 and, because all three parts of Mendenhall’s analysis were met, the Court held that the city’s ordinances did not represent a valid exercise of its home-rule power.
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What is *Morrison’s* Impact?

Although the Ohio Supreme Court limited its ruling to the city’s five ordinances at issue in this case, the Court made it clear that “the Home Rule Amendment to the Ohio Constitution, Article XVIII, Section 3, does not allow a municipality to discriminate against, unfairly impede, or obstruct oil and gas activities and production operations that the state has permitted under R.C. Chapter 1509.” Going forward, if and where municipalities attempt to regulate oil and gas operations, oil and gas companies should closely evaluate whether the *Morrison* decision precludes those efforts.

Authors:

Craig P. Wilson
craig.wilson@klgates.com
+1.717.231.4509

Nicholas Ranjan
nicholas.ranjan@klgates.com
+1.412.355.8618

Bryan D. Rohm
bryan.rohm@klgates.com
+1.412.355.8682

Leigh Argentieri Coogan
leigh.argentiericoogan@klgates.com
+1.412.355.6377

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1 Slip Opinion No. 2015-Ohio-485.
2 Article XVIII, Section 3.
Can You Feel New Regulations in the Air?

EPA Announces Steps That It Will Take to Reduce Methane and VOC Emissions from Oil and Gas Sources

By Anthony R. Holtzman, Tad J. Macfarlan, Cliff L. Rothenstein, and David L. Wochner

In recent years, the proliferation of oil and gas production, transmission, and distribution activities in the United States has led to a number of regulatory initiatives by state and federal agencies designed to manage new and evolving issues associated with the growing industry. Continuing with this trend, the U.S. Environmental Protection Agency (“EPA”) announced on January 14, 2015 that it will take several steps to curb methane and volatile organic compound (“VOC”) emissions from oil and gas facilities. See EPA, Fact Sheet: EPA’s Strategy for Reducing Methane and Ozone-Forming Pollution from the Oil and Natural Gas Industry (Jan. 14, 2015) (“EPA Fact Sheet”).

Invoking the Clean Air Act (“CAA”), the EPA, in particular, announced that it will (1) issue new regulations to establish standards regarding methane and VOC emissions from new and modified oil and gas sources, (2) extend VOC reduction requirements to existing oil and gas sources that are located in ozone nonattainment areas and states in the Ozone Transport Region, and (3) expand its Natural Gas STAR program, which is designed to facilitate voluntary reductions of oil- and gas-related methane emissions.

The Obama Administration says that these steps, in conjunction with actions that other federal agencies will take,¹ will put the United States on a path to achieving the Administration’s newly announced goal of cutting “methane emissions from the oil and gas sector by 40–45 percent from 2012 levels by 2025.” The White House, Office of the Press Secretary, Fact Sheet: Administration Takes Steps Forward on Climate Action Plan by Announcing Actions to Cut Methane Emissions (Jan. 14, 2015).

New Emissions Standards for New and Modified Sources

First, relying on Section 111(b) of the CAA,² the EPA intends to craft new regulations that will establish standards related to methane and VOC emissions from certain new and modified oil and gas sources.

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¹ In addition to the EPA actions that are discussed in this article, the White House’s January 14, 2015 Fact Sheet indicates that other federal agencies will take the following actions to reduce methane emissions: (1) the Department of the Interior’s Bureau of Land Management (“BLM”) will update standards to reduce venting, flaring, and leaks of natural gas from new and existing oil and gas wells on public lands; (2) the Department of Transportation’s Pipeline and Hazardous Materials Safety Administration (“PHMSA”) will propose natural gas pipeline safety standards in 2015; and (3) the Department of Energy will issue energy efficiency standards for natural gas and air compressors; advance research and development to reduce the cost of detecting natural gas leaks; work with the Federal Energy Regulatory Commission to modernize natural gas infrastructure; and partner with the National Association of Regulatory Utility Commissioners and local distribution companies to accelerate pipeline repair and replacement at the local level.

² 42 U.S.C. § 7411(b).
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Under Section 111(b), the EPA may, by regulation, set “standards of performance” for new and modified sources of air pollutant emissions that fall within a category of stationary sources that it has judged and published to be one that “causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.” A “standard of performance,” in this context, is a standard for limiting air pollutant emissions that, “taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements,” is based on the “best system of emission reduction” that has been “adequately demonstrated.”

Relying on these principles, the EPA issued regulations in 2012 that establish new source standards of performance for VOC and sulfur dioxide emissions from various types of new and modified oil and gas sources. Those regulations, which the EPA most recently revised in December of 2014, are codified at 40 C.F.R. Part 60, Subpart OOOO (“Quad-O”) and set standards that address emissions from, in particular, the following sources: hydraulically fractured gas wells; certain fugitive equipment components at onshore gas processing plants; gas-sweetening units at those plants; and centrifugal compressors, reciprocating compressors, continuous-bleed pneumatic controllers, and storage vessels to the extent that, in each case, they are used in one or more industry segments.

The standard for hydraulically fractured gas wells, as one example, requires a well operator to use special equipment to separate gas, liquid hydrocarbons, and water that come from the well during the completion (or “flowback”) stage and then sell, reinject, or use the gas, or, if those things are not feasible, flare it.

In the January 14, 2015 announcement, the EPA says that it will “build on” the Quad-O standards “to achieve both methane reductions and additional reductions in VOCs.” The sources that will be covered by its new rulemaking, it explains, “could include completions of hydraulically fractured oil wells, pneumatic pumps, and leaks from new and modified well sites and compressor stations.” The agency says that, in developing the rulemaking, it will consult with the industry, states, and tribes and evaluate a “range of approaches that can reduce methane and VOC emissions” from those sources.

As the EPA notes in its announcement, it identified some of the potential approaches in a collection of draft white papers that it published in April of 2014. In one of those papers, for example, it addressed techniques for mitigating methane emissions from completion and recompletion operations at hydraulically fractured oil wells, including the use of reduced-emission completions, completion combustion devices, and “emerging control technologies for control of associated gas,” a category that includes natural gas liquids recovery, natural gas reinjection, and electricity generation for onsite use. In another one of the papers, the

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3 Id. § 7411(b)(1)(A).
4 Id. § 7411(a)(1).
7 See 40 C.F.R. § 60.5365.
8 See id. § 60.5375(a).
9 EPA Fact Sheet at 1.
10 Id.
11 Id.
12 See EPA, Oil and Natural Gas Sector Hydraulically Fractured Oil Well Completions and Associated Gas during Ongoing Production (April 2014) at 23–43.
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EPA discussed methods for reducing methane emissions from pneumatic devices that are used in oil and gas facilities, including, for pneumatic pumps, the use of instrument-air, solar power, or electricity as a power source, instead of gas. In a third white paper, the EPA addressed techniques for controlling methane leaks at oil and gas facilities, including the use of leak-detection equipment (such as portable analyzers, optical gas imaging cameras, acoustic leak detectors, and ambient monitoring devices) and methods for repairing leaks when they are discovered.

The EPA plans to issue proposed regulations in the summer of 2015 and final regulations in 2016.

Regulation of Existing Sources in Ozone Nonattainment Areas and the Ozone Transport Region

Second, the EPA plans to develop new Control Techniques Guidelines (“CTGs”) to reduce emissions from existing oil and gas facilities that are located in ozone nonattainment areas and states within the Ozone Transport Region (“OTR”). These guidelines would directly regulate VOC emissions, but would also have the effect of reducing methane emissions.

Under Section 182(b)(2) of the CAA, the EPA’s issuance of CTGs, which are guidance documents, triggers a requirement for States, as part of their State Implementation Plans (“SIPs”), to develop, and submit to the agency, rules that impose reasonably available control technology (“RACT”) requirements on covered sources. Each CTG includes a “presumptive RACT,” reflecting the EPA’s determination as to what constitutes an adequate level of VOC control for sources in the category. While State regulations can deviate from the presumptive RACT determination, the EPA’s approval of each SIP revision is ultimately required. Imposition of RACT would be a new layer of regulation for many oil and gas facilities that are located in ozone nonattainment areas and the OTR.

The OTR is comprised of eleven northeastern states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont), the District of Columbia, and Northern Virginia, and there is an outstanding petition to the EPA, submitted by several of these states, requesting the inclusion of nine others (Illinois, Indiana, Kentucky, Michigan, North Carolina, Ohio, Tennessee, Virginia and West Virginia). On November 25, 2014, moreover, the EPA proposed a downward revision to its national ambient air quality standards (“NAAQs”) for ozone, which, if adopted, would result in the designation of significantly more ozone nonattainment areas across the nation. Thus, the confluence of EPA’s planned

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13 See EPA, Oil and Natural Gas Sector Pneumatic Devices (April 2014) at 50–55.
14 See EPA, Oil and Natural Gas Sector Leaks (April 2014) at 36–54. The EPA also issued draft white papers on compressors and the liquids unloading process, respectively. See EPA, Oil and Natural Gas Sector Compressors (April 2014) and EPA, Oil and Natural Gas Sector Liquids Unloading Process (April 2014).
15 42 U.S.C. § 7511ar(b)(2); see also id. § 7511c(b)(1)(B).
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rulemakings has the potential to force meaningful emissions reductions from existing oil and gas facilities in many areas of the country.

EPA plans to proceed with the CTG rulemaking in accordance with the same timeline as the Section 111(b) rulemaking, with the issuance of proposed guidelines in the summer of 2015 and final guidelines in 2016.

Expansion of Natural Gas STAR Program

Third, the EPA plans to expand its Natural Gas STAR Program by “launching a new partnership in collaboration with key stakeholders later in 2015.”

The Natural Gas STAR Program is an initiative that is designed to encourage members of the oil and gas industry to voluntarily reduce methane emissions from their facilities.20 If a company opts to participate in the program, it signs a memorandum of understanding that reflects its intent to evaluate technologies and practices for reducing methane emissions, use them in its facilities when it is cost-effective to do so, and report to EPA on those efforts.21 The company, in turn, develops and executes a continuously evolving plan for implementing and tracking “non-regulatory” steps for reducing methane emissions from its facilities.22 And then, each year, it submits a “progress report” to the EPA in which it documents, for the year, the activities that it has undertaken, and emissions-reductions that it has achieved, under its plan.23

In the January 14, 2015 announcement, the EPA says that it will expand this program by “work[ing] with the departments of Energy and Transportation and leading companies…to develop and verify robust commitments to reduce methane emissions.”24 It is currently unclear what, in particular, this process will entail. Needless to say, the EPA emphasizes that “[a]chieving significant reductions through these voluntary industry programs and state actions could reduce the need for future regulations.”

Current Policy and Politics of Methane Regulation

Political reaction to the new effort to regulate methane emissions has been mixed. Although the EPA proposal primarily targets methane emissions from new and modified oil and gas sources, the oil and gas industry remains concerned that regulation of new sources could be a slippery slope leading to more expansive rules regulating methane emissions from existing sources nationwide. Given the environmental community’s negative reaction to the Obama Administration’s failure to tackle methane emissions from existing sources, it is reasonable to believe that environmental groups may dust off legal arguments asserting that once the EPA regulates new sources, the CAA requires corresponding existing source regulations. This is an important issue for the oil and gas sector and we expect it will be watched closely.

Regulating methane emissions from new oil and gas sources may present some challenges

21 Id.
22 Id.
23 Id.
24 EPA Fact Sheet at 2.
25 Id. at 3.
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to the industry; regulating existing oil and gas sources likely would expose it to even greater costs and burdens.

While much uncertainty over the specifics of methane regulation remains, with the Obama Administration announcing on January 14, 2015 that it will address methane leaks through action by the EPA, BLM and PHMSA, a couple of issues are now clear.

First, it is almost certain that the U.S. House of Representatives and newly Republican-controlled Senate will engage on the issue of methane regulation, resulting in what is expected to be a fierce debate over economic development and environmental regulation. The Republican majority in Congress has vowed to increase its oversight of the EPA and the agency’s issuance of new regulations, including any regulations governing methane capture. As noted by Senator James Inhofe (R-OK), the new chairman of the Senate Environment and Public Works Committee, upon learning of the EPA’s plan to issue regulations, “[t]he EPA has once again announced plans to impose a mandate designed to stifle our domestic energy industries despite successful voluntary steps made by U.S. oil and gas companies to reduce methane emissions.” In contrast, Democrats, led by Senator Barbara Boxer (D-CA), commended the administration, stating that, “[b]y cutting industrial methane pollution, we can protect our children and future generations from the worst impacts of climate change.” Moreover, agencies already dealing with critical issues that are the focus of Congressional attention and action, like PHMSA, which is confronting aging pipeline infrastructure and a number of fatal and environmentally damaging pipeline explosions and ruptures, are likely to come under further congressional scrutiny.

Second, it is clear that President Obama is doubling down on climate change, determined to make it a signature issue of the last two years of his administration. The new methane rules from multiple federal agencies are another part of his Climate Action Plan, which includes his November 2014 commitment, made with China, to cut greenhouse gas emissions in the United States 26-28 percent below 2005 levels by 2025.26

Finally, we expect that industry will continue to emphasize the significant voluntary efforts that oil and gas companies already are undertaking to reduce methane emissions from oil and gas operations. In light of a deep decline in crude oil prices over the last six to seven months, the industry can be expected to strongly resist new regulations that would likely increase operating costs and administrative burdens on upstream, midstream and downstream oil and gas market participants.

Conclusion

In January of 2015, the Obama Administration, and in particular the EPA, staked out a relatively aggressive, multi-prong strategy for effectuating additional reductions in methane and VOC emissions from oil and gas facilities. “While methane emissions from the oil and gas industry have declined 16 percent since 1990,” the EPA asserts, “they are projected to increase by about 25 percent over the next decade if additional steps are not taken to reduce emissions from this rapidly growing industry.”27

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27 EPA Fact Sheet at 1.
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As the EPA’s and other agencies’ processes unfold, members of the industry should carefully monitor and participate in it as focused and watchful advocates for their interests.

Authors:

Anthony R. Holtzman
anthony.holtzman@klgates.com
+1.717.231.4570

Tad J. Macfarlan
tad.macfarlan@klgates.com
+1.717.231.4513

Cliff L. Rothenstein
cliff.rothenstein@klgates.com
+1.202.778.9381

David L. Wochner
david.wochner@klgates.com
+1. 202.778.9014
The Sixth Circuit Holds That an Arbitration Clause in an Expired Contract Still Applies

By Thomas R. Johnson and David I. Kelch

Introduction

Does the duty to arbitrate survive the expiration of a contract? The United States Court of Appeals, Sixth Circuit recently held “yes.” The Sixth Circuit became the first federal appeals court to examine whether a contract’s arbitration clause continues to apply after the contract’s expiration, despite the arbitration clause not being listed in the survival clause.

In Huffman v. Hilltop Cos., LLC, 747 F.3d 391, 396-97 (6th Cir. 2014), the Sixth Circuit concluded—in light of the strong federal presumption in favor of arbitration—that the arbitration clause survived expiration of the contract because the parties did not clearly indicate that it was to expire with the contract.

The Facts and Procedural History of Huffman

In the district court, former employees of The Hilltop Companies (“Hilltop”) sued Hilltop alleging that it violated federal and state fair wage laws by requiring them to work overtime, but not compensating them accordingly.1 The employees had each signed a Hilltop-drafted employment contract that included both an arbitration clause and survival clause, which listed half of the contract’s paragraphs but not the arbitration clause.2 Hilltop attempted to compel arbitration arguing that the contract provided for arbitration of all disputes, even those that arose after the employment agreement expired.3 The district court denied Hilltop’s motion to compel arbitration, stating that the arbitration clause “had no post-expiration effect because the ‘more specific survival clause that excludes arbitration from survival trumps the more general arbitration clause in the contract[].’”4

Overturning the district court, the Sixth Circuit held that the contract’s arbitration clause survived the contract’s expiration because of the strong federal policy favoring arbitration and the absence of a clear intention by the parties to prevent survival of the arbitration clause beyond the expiration of the contract.5

Huffman’s Implications—Particularly for Oil and Gas Lease Disputes

The holding in Huffman has not yet been extended to other circuits. However, Huffman indicates that an arbitration clause is likely to survive the expiration of a contract unless the parties expressly provide otherwise. To avoid a contrary result, though, parties who favor

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1 Id. at 393.
2 Id.
3 Id. at 394.
5 Id. at 398.
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arbitration should consider specifically listing their arbitration clause in the contract’s survival provision. In the alternative, or additionally, a short survivability provision could be included in the arbitration clause itself.

This case is particularly helpful for oil and gas producers who favor the arbitration of lease disputes because it provides a basis for compelling arbitration even when the owner/lessor alleges the lease has expired. Lawsuits filed against natural gas producers have become increasingly common. For example, in Pennsylvania over the last several years, owners/lessors have filed a number of lawsuits seeking a judicial determination that gas leases have expired. In light of the costs and risks involved in lease dispute litigation, not to mention class action lease disputes, producers have begun including arbitration clauses in their oil and gas leases.

To avoid judicial adjudication of lease disputes where the owner/lessor alleges the lease has expired (whether after the primary term or the secondary term), it may be appropriate for the lease to include the arbitration clause in its survival provision and/or clearly state in the arbitration provision itself that it will survive termination of the lease.

As always, contracts and oil and gas leases should be reviewed by legal counsel with experience and competency in contract and oil and gas law and the law of arbitration.

Authors:

Thomas R. Johnson
tom.johnson@klgates.com
+1.412.355.6488

David I. Kelch
david.kelch@klgates.com
+1.412.355.7427

K&L Gates comprises more than 2,000 lawyers globally who practice in fully integrated offices located on five continents. The firm represents leading multinational corporations, growth and middle-market companies, capital markets participants and entrepreneurs in every major industry group as well as public sector entities, educational institutions, philanthropic organizations and individuals. For more information about K&L Gates or its locations, practices and registrations, visit www.klgates.com.

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Additional Risk: Does Your Company Have Additional Insured Coverage for Claims by Contractors’ Employees?

Pennsylvania Insurance Coverage and Oil & Gas Alert

By Jeffrey J. Meagher

One of the biggest risks oil and gas companies face is a blowout or other catastrophic event that causes serious injury or death. In the aftermath of such an event, companies often find themselves facing lawsuits by injured workers who are employed by contractors. Such workers are typically barred from suing their own employers by Pennsylvania’s workers’ compensation statute, which may lead them to file lawsuits against other parties. Many companies assume that they are protected from such liability by insurance provisions in their contract with the injured worker’s employer, but insurance companies may deny coverage under these circumstances by relying on a decades-old Pennsylvania Supreme Court decision. More recent Pennsylvania court decisions, however, favor insureds, and the Pennsylvania Supreme Court recently agreed to revisit the issue, so oil and gas companies operating in Pennsylvania should stay tuned.

Many oil and gas companies use master service agreements that include reciprocal or “knock for knock” indemnity provisions under which each party agrees to indemnify the other for liability arising out of bodily injury to their own employees. These agreements also typically require each party to name the other as an “additional insured” under their respective general liability insurance policies. Together, these provisions allocate risk between the parties and provide insurance for that allocation of risk. If an employee of either party is injured on the job and sues the other party, his or her employer’s insurance policy should provide coverage to the other party as an “additional insured” (provided the insurance policy at issue includes an appropriate additional insured endorsement).

Insurance companies, however, may deny coverage under these circumstances by relying on what is often called an “employer’s liability” exclusion. Most general liability policies contain some form of this exclusion, which precludes coverage for bodily injury to an employee of the insured. This exclusion makes sense if it is interpreted to preclude coverage for claims made by employees against their employers, but insurers sometimes argue that it also applies to claims made by employees of the named insured (usually the party that purchased the policy) against a party that is an “additional insured” under the policy. Insurers make this argument despite the fact that most policies contain a “Separation of Insureds” provision, which provides that the policy applies separately to each insured against whom a claim is made or suit is brought.

In making this argument, insurers typically rely on a decades-old Pennsylvania Supreme Court decision that, if applied as those insurers suggest, would dramatically limit the insurance coverage available to oil and gas companies in the wake of a catastrophic event. In Pennsylvania Manufacturers’ Association Insurance Company v. Aetna Casualty and Surety Insurance Company, 426 Pa. 453, 233 A.2d 548 (Pa. 1967) (“PMA”), the
Additional Risk: Does Your Company Have Additional Insured Coverage for Claims by Contractors’ Employees?

Pennsylvania Supreme Court held that an employer’s liability exclusion barred coverage for a claim brought by an employee of the company that purchased the policy against a company that was insured under an “omnibus” clause in the policy. The Supreme Court reached this decision despite the existence of a “Severability of Interests” provision that was similar (though not identical) to the “Separation of Insureds” provisions used in many policies today. More recent Pennsylvania court decisions have distinguished PMA, but some federal courts have mistakenly concluded that PMA controls.

The Pennsylvania Supreme Court recently agreed to revisit this issue when it agreed to hear an appeal of the Pennsylvania Superior Court’s decision in Mutual Benefit Insurance Company v. Politopoulos, 75 A.3d 528 (Pa. Super. Ct. 2013). In that case, a restaurant employee who was injured on the job sued the owner of the property where the injury occurred. The property owner sought coverage as an additional insured under the restaurant’s insurance policy, but the insurance company denied coverage by relying on the employer’s liability exclusion in the policy. The trial court reluctantly held that PMA controlled. The Superior Court distinguished PMA and reversed the trial court’s decision. The Pennsylvania Supreme Court agreed to hear the appeal to decide whether the Superior Court properly ruled that PMA did not control. The Court heard oral arguments on October 7, 2014, but it has not yet issued a decision.

Oil and gas companies operating in Pennsylvania should watch for a decision by the Pennsylvania Supreme Court on this issue. In the meantime, those companies should be aware of the issue, ensure that their contracts (and their contractors’ insurance policies) clearly provide for additional insured coverage and consult with coverage counsel when questions or claims arise.

**Author:**

Jeffrey J. Meagher  
jeffrey.meagher@klgates.com  
+1.412.355.8359

**Additional Contacts:**

David F. McGonigle  
david.mcgonigle@klgates.com  
+1.412.355.6233

Thomas E. Birsic  
thomas.birsic@klgates.com  
+1.412.355.6538
Avoiding “Gotcha” Moments: Excusing Non-Production to Address Mechanical Issues Under the Temporary Cessation of Production Doctrine

U.S. Oil and Gas Alert

By George A. Bibikos, Amanda R. Cashman, and Cleve J. Glenn

In Landover Production Company, LLC v. Endeavor Energy Resources, L.P., et al., the Texas Court of Appeals re-affirmed the application of the implied, “temporary cessation of production doctrine” to prevent an oil and gas lease from expiring during its secondary term when a lessee encounters mechanical issues that require a temporary break in continuous production.

Under the law of Texas and many other oil and gas producing jurisdictions, the general rule is that an oil and gas lease expires in its secondary term if a producing well stops producing.1

Leases sometimes account for this situation by expressly providing that a lease will not expire in its secondary term when an operator/lessee finds it necessary to take a well temporarily out of production. For example, some leases may address the stoppage of production during the secondary term by, for example, specifying the circumstances that justify a break in production and specifying a period of time in which production must resume before the lease expires.

When leases are silent on this point, many oil and gas producing jurisdictions, including Texas, have recognized an implied, “temporary cessation of production” doctrine.2 Absent lease language to the contrary, a temporary cessation of production does not automatically terminate a lease. Courts evaluate several factors to determine whether the doctrine should apply to save the lease, including (1) the length of cessation of production; (2) the cause of the cessation; (3) the lessee’s efforts to restore production.

The rationale for the doctrine is that, during its life cycle, a well is bound to stop producing at some point for some reason – e.g., for reworking, stimulation, or repairing (to name a few). Courts in many oil and gas producing jurisdictions presume that the parties contemplated this situation when they entered the lease, so the courts read the temporary cessation of production doctrine into the lease as a practical way to avoid the harsh result of automatic termination for lack of production during the secondary term.

In Landover Production, the Texas Court of Appeals affirmed the application of this doctrine in a case involving a period of non-production in the secondary lease term due to equipment malfunction.

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1 Watson v. Rochmill, 137 Tex. 565, 155 S.W.2d 783, 784 (Tex. 1941).
Avoiding “Gotcha” Moments: Excusing Non-Production to Address Mechanical Issues Under the Temporary Cessation of Production Doctrine

By way of background, Endeavor owned the working interest in an oil and gas lease covering 80 acres. Endeavor operated a well on the property during the secondary term of the lease. Landover held a “top lease” on the same 80 acres, which would take effect if Endeavor’s “base lease” expired.3 The Endeavor lease included the following language (referred to as the “savings clause”):

If at the expiration of the primary term oil and gas is not being produced on said land but Lessee is then engaging in drilling or re-working operations thereon, the lease shall remain in force so long as operations are prosecuted with no cessation of more than thirty (30) consecutive days….

The Endeavor lease was in its secondary term when, in May of 2001, Endeavor discovered a hole in its “heater-treater” (a device that separates water from oil). As a result of that mechanical issue, the heater-treater leaked, such that Endeavor could not separate the water from the oil and the oil was rendered unmarketable. Endeavor made several attempts to repair the leak, requiring it to suspend well production while repairs were pursued. After several unsuccessful repair efforts, delayed by rainy weather, Endeavor successfully repaired the well equipment and resumed production in August of 2001.

Landover sued Endeavor, claiming that the Endeavor lease terminated due to the cessation of production. At trial, the jury found that the period of non-production was excused under the temporary cessation of production doctrine. Landover appealed the trial court’s entry of judgment for Endeavor, arguing that the jury’s finding was not supported by evidence.

On appeal, the appellate court concluded that Endeavor’s lease did not expire.

As a threshold matter, the court interpreted the Endeavor lease’s savings clause as applicable only to the primary term of the lease and found no other provision of the lease protecting the lessee’s interest during the secondary term.

The court, however, applied the temporary cessation of production doctrine under Texas law, requiring that the lessee demonstrate:

(i) that the “cessation of production after the primary term [was] temporary and [that it was] due to sudden stoppage of the well, some mechanical breakdown of the equipment used in connection therewith, ‘or the like,’” and

(ii) that the lessee acted with diligence and remedied the cause and resumed production in a reasonable time.

The court found “ample evidence” that Endeavor had proven to the trial court that the “cessation of production after the primary term was temporary and that the temporary cessation of production was the result of a sudden stoppage of the well” due to the mechanical failure of the heater-treater. The court rejected Landover’s argument that Endeavor had some burden to use reasonable production alternatives in order to keep the lease alive. Given that Landover’s appeal did not challenge Endeavor’s diligence in addressing the mechanical issue and resuming production, the court did not pass on the legal or factual sufficiency of the case on these grounds.4

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3 A “top lease” is a lease granted for property on which a lease already exists, whereby the “top lease” would become effective upon the termination or expiration of the existing “base” lease.

4 The court further noted that even if it had held that there was an error of law regarding application of the temporary cessation of production doctrine, Endeavor still held title over the leasehold estate by adverse possession.
Avoiding “Gotcha” Moments: Excusing Non-Production to Address Mechanical Issues Under the Temporary Cessation of Production Doctrine

The court’s application of the temporary cessation of production doctrine in Landover re-affirms the additional protection and certainty that lessees should enjoy under a lease without an express savings clause when operating wells that stop producing during the secondary term. As the court held, a lessee should not suffer the harsh result of having its lease expire when a legitimate mechanical issue causes a break in production and the lessee works diligently to re-establish production, even in the absence of an express provision in a lease that governs that situation.

Although the outcome in Landover favored the lessee, the decision serves as a reminder that operators should review their leases to identify and understand their obligations when production ceases in the secondary term and, in the absence of lease language, take steps to assure they are complying with the factors courts consider when deciding to apply the implied doctrine. In most cases, operators that experience mechanical issues with their wells or other related equipment should take appropriate and diligent action when production must be suspended during the secondary term in order to avoid lease expiration claims.

Authors:

George A. Bibikos
george.bibikos@klgates.com
+1.717.231.4577

Amanda R. Cashman
amanda.cashman@klgates.com
+1.412.355.6331

Cleve J. Glenn
cleve.glenn@klgates.com
+1.713.815.7327
New UK Mandatory Energy Assessment Scheme

UK Environment, Corporate and Real Estate Alert

By Sebastian Charles and Jake Ferm

On 17 July 2014, the Energy Savings Opportunity Scheme ("ESOS") came into effect, which implements various elements of the EU Energy Efficiency Directive 2012. ESOS requires companies over a minimum size threshold and some other organisations in the UK to carry out mandatory energy saving assessments. Participants are required to calculate their total energy consumption, carry out energy audits, identify where energy savings can be made and notify the Environment Agency that they have complied with the scheme. These measures are part of the EU’s strategy to cut greenhouse gas emissions by 20% by 2020.

Is my company required to carry out an assessment?

The ESOS scheme will apply to companies (and some other undertakings) which either employ at least 250 people or have an annual turnover of over €50 million and a balance sheet of over €43 million, based on their most recent annual financial statements. Companies meeting these criteria on 31 December 2014 will fall within the scope of the scheme. In addition, any other undertakings within the same group will fall within the ESOS scheme, even if they would not meet the minimum size threshold themselves, although a corporate group may carry out one assessment for all of its undertakings. Overseas companies are not required to participate in ESOS, but if an overseas parent has a UK subsidiary which qualifies for the ESOS scheme, that subsidiary and any other UK undertakings within that group will be required to participate in ESOS. This approach is similar to that used to determine group undertakings under the CRC Energy Efficiency Scheme, and poses similar challenges to companies with complex group structures.

Who else?

Trusts, partnerships, some joint ventures, some funds, unincorporated associations, not-for-profit bodies engaged in a trade of business and some universities will have to comply with the scheme if they meet the minimum size threshold or if they are in the same group as an undertaking that meets the minimum size threshold.

When does my company have to start to carry out an assessment?

ESOS assessments have to be carried out for each "compliance period", which take place every four years. Qualifying organisations must carry out their first ESOS assessment and notify the Environment Agency that they have complied by 5 December 2015. Following this first assessment, further ESOS assessments will have to be carried out every four years.

What does my company need to do to carry out an assessment?

Carry out an ESOS energy audit and appoint a lead assessor

Companies should arrange for an ESOS energy audit to be carried out which measures their total energy consumption over a continuous 12-month reference period. Total
New UK Mandatory Energy Assessment Scheme

energy consumption consists of energy supplied to the company, energy consumed by the assets it holds and energy used in the course of its activities. This includes energy consumption in buildings, transport and industrial processes. Landlords will have to include energy supplied to the common parts of buildings and, in some cases, energy supplied to their tenants.

Companies should try to use verifiable data. Where this data is not available, they should make a reasonable estimate, notify the Environment Agency and record how the estimates were calculated and why verifiable data was not used. Participants that have a current certified ISO 50001 energy management system, and buildings with display energy certificates or that have been assessed under the Green Deal, will be exempt from the scheme.

ESOS energy audits must be carried out, overseen or reviewed by recognised lead assessors registered with a professional body. In most cases, the audit must be signed off by a director or by an equivalent senior manager within the company. Companies do not have to file the audit itself, but they must notify the Environment Agency that they have complied with the scheme.

**Determine areas of significant energy consumption**

Companies may identify areas of significant energy consumption, which must account for at least 90% of total energy consumption. Once these areas have been identified, a company is required to carry out an ESOS assessment on these areas. An undertaking does not have to identify areas of significant energy consumption, but if it does not, its entire energy consumption will be subject to ESOS compliance requirements.

**Identify energy saving recommendations**

The energy audit should analyse the company’s energy consumption and energy efficiency and make recommendations for reasonably practicable and cost-effective ways to improve them. There is currently no requirement to implement these recommendations.

**What are the sanctions for non-compliance?**

The Environment Agency has powers to publish details of companies’ non-compliance, serve enforcement notices on companies that are in breach of the scheme and issue civil financial penalties. For example, the Environment Agency may issue a penalty of up to £50,000 for failing to carry out an energy audit and may charge additional financial penalties for continuing non-compliance.

There are a number of legal and practical issues that need to be considered when complying with these regulations which may present particular challenges for foreign parents with multiple UK subsidiaries and other groups with complex structures. Our experience in advising clients on complying with similar requirements (e.g. the CRC Energy Efficiency Scheme in the UK) makes us well placed to advise on the legal requirements of this new scheme.
Supreme Court of Texas Clears the Path for Future Real Property Damage Calculations

By Paul R. Genender, John R. Hardin, Bryan D. Rohm, and Travis L. Brannon

In *Wheeler v. Enbridge Pipelines*, the Supreme Court of Texas provided guidance to midstream companies on the proper calculation of damages to real property stemming from the breach of a pipeline right-of-way agreement (“ROW”). Although *Wheeler* arose from operations on a pipeline ROW, the decision has implications well beyond the oil and gas industry and provides guidance for all future real property damage calculations in Texas.

Texas Courts of Appeals have struggled with how property damages that result from a breach of contract should be calculated in the absence of an express contractual provision. Some courts applied the traditional “temporary-versus-permanent” distinction from tort law, while others applied differing methods outside of the traditional framework. Further complicating the analysis, the “temporary-versus-permanent” distinction has been interpreted differently throughout Texas, with some courts employing specialized exceptions.

The *Wheeler* court provides guidance on the following major areas of discussion:

- As a general rule, temporary injury is compensated by the cost of property restoration, while permanent injury is compensated by the loss in the fair market value to property.
- The “temporary-versus-permanent” distinction is a question of law and applicable to breach of contract claims as well as tort.
- The definitions for “temporary” and “permanent” injury.

Texas now expressly recognizes the application of the economic feasibility exception to temporary injury for real property damages, which provides that when the cost of restoration exceeds the property’s loss in value, the damages are no longer feasible and the temporary injury will be deemed permanent.

- The intrinsic value of trees exception to permanent injury can apply when the destruction of trees on real property results in no or very little diminishment of the property’s fair market value, but the landowner may still recover the intrinsic value of the trees lost.

What Happened in Wheeler?

Enbridge contractually agreed to preserve the trees on the Wheeler property during pipeline installation; however, Enbridge’s contractor was not informed of the agreement and clear-cut several hundred feet of trees. Wheeler sued for breach of contract and trespass. The trial court did not submit a jury question asking whether the damage to the real property was temporary or permanent. The jury awarded Wheeler $300,000 for the reasonable cost to restore the property under breach of contract and $288,000 for the intrinsic value of trees destroyed. The Court of Appeals rendered a judgment in Enbridge’s favor because the Wheelers failed to secure a finding on the temporary or permanent nature of their injury. Wheeler petitioned for review.
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Key Holdings and Analysis

Application to Breach of Contract Claims
The Court held that classifying injury to real property as either permanent or temporary applies to breach of contract and tort claims. While contracting parties are free to specify how damages will be calculated, when they do not, “both courts and parties benefit from the application of general principles with respect to calculating damages for such injury.”

Definitions of Temporary and Permanent Injury
For clarity, the Court defined temporary and permanent injury:

• “An injury to real property is considered permanent if (a) it cannot be repaired, fixed, or restored, or (b) even though the injury can be repaired, fixed, or restored, it is substantially certain that the injury will repeatedly, continually, and regularly recur, such that future injury can be reasonably evaluated.”

• “Conversely, an injury to real property is considered temporary if (a) it can be repaired, fixed, or restored, and (b) any anticipated recurrence would be only occasional, irregular, intermittent, and not reasonably predictable, such that future injury could not be estimated with reasonable certainty injury.”

“Temporary-versus-Permanent” as a Question of Law
The Court held that “whether an injury is temporary or permanent is a question of law for the court to decide.” However, “when the facts are disputed and must be resolved to correctly evaluate the nature of the injury, the court . . . must present the issue to the jury, relying on the definitions we have provided in this opinion.” In this case, the Court held that the injury to the Wheeler property is permanent because of: (i) the parties’ agreement and acquiescence in the briefs, and (ii) the economic feasibility exception (discussed below) converts the injury from temporary to permanent.

Economic Feasibility Exception
The economic feasibility exception provides that, when the cost of restoration exceeds the property’s loss in value, the damages are no longer feasible and the temporary injury will be deemed permanent. Prior to Wheeler, the Supreme Court of Texas had not formally recognized the economic feasibility exception, although it had applied similar concepts to prevent overcompensation to landowners. In Wheeler, the court expressly adopted the exception and applied it because the diminution in the fair market value of the land was between $0 and $3,000, while the cost of restoration was $300,000.

Intrinsic Value of Trees Exception
Generally, the Court affirmed the “intrinsic value of trees” exception in Texas and clarified that it could apply, even if the diminution to the property value was nominal. Again, the court compared the $3,000 diminution in value to the $383,000 fair market value of the property, and concluded that the exception was appropriate for the circumstances in Wheeler.
Supreme Court of Texas Clears the Path for Future Real Property Damage Calculations

Following the above analysis and holdings, the Court reversed the Court of Appeals and remanded the case to that court to address any remaining issues in a manner consistent with the opinion.

What is Wheeler’s impact?

Wheeler clarifies how to value real property damages arising from pipeline ROWs. Wheeler makes it difficult (if not impossible) for landowners to recover damages that exceed the fair market value of the property. Although Wheeler clarified the damages calculation if an agreement is silent, the best way to address the issues remains a clear contract provision that delineates the calculation and valuation of timber and/or surface damages. To the extent timber or other surface damages are not expressly provided for in a ROW, midstream companies may wish to consider either: (i) revising standard ROW forms to include a clear contract provision addressing timber and real property damages or (ii) for existing ROWs, entering into side-letter agreements with landowners to specify the calculation and payment of timber and/or surface damages prior to conducting surface operations.

Authors:

Paul R. Genender
paul.genender@klgates.com
+1.214.939.5660

John R. Hardin
john.hardin@klgates.com
+1.214.939.5612

Bryan D. Rohm
bryan.rohm@klgates.com
+1.412.355.8682

Travis L. Brannon
travis.brannon@klgates.com
+1.412.355.7443
Supreme Court of Texas Clears the Path for Future Real Property Damage Calculations


See Porras v. Craig, 675 S.W.2d 503, 504 (Tex. 1984) (creating the exception to compensate landowners for the loss of the aesthetic utilitarian value that trees confer on real property).
CO₂ Separation Anxiety—Is the cost of separating CO₂ from casinghead gas a “production” or “post-production” cost for purposes of calculating royalties in Texas?

By George A. Bibikos, Cleve J. Glenn and Travis L. Brannon

In a recent decision, the Supreme Court of Texas concluded that the cost of removing carbon dioxide (“CO₂”) from casinghead gas after completing enhanced oil recovery operations is a “post-production” cost, thus clarifying that royalty owners may be charged their proportionate share of such costs before receiving royalties.

In most states, including Texas, the general rule is that royalties are free of “production” costs (i.e., the costs incurred by the lessee for activities necessary to extract oil or gas).i However, absent lease language to the contrary, both the lessor and lessee may share proportionately in any “post-production” costs (i.e., those costs incurred for activities at any point between the wellhead on the surface and the sales point that render oil or gas more marketable).ii The classification of the cost of activities as either production or post-production costs triggers many disputes between royalty owners and their lessee-operators.

The distinction between production and post-production is particularly significant with respect to enhanced oil recovery projects that involve injecting CO₂ into reservoirs to aid in the extraction of oil. In certain oil fields with wells that have experienced a decline in production rates, operators sometimes engage in enhanced oil recovery operations by injecting CO₂ into the reservoirs to increase well productivity. As a consequence of the recovery operation, however, wells sometimes produce “casinghead gas” (gas associated with recovered oil) that may be heavily laden with CO₂ that should be removed.

Until recently, it was unclear whether the removal of CO₂ from casinghead gas after enhanced oil recovery qualified as a production cost or a post-production cost. In French v. Occidental Permian Ltd., --- S.W.3d ---, 2014 WL 2895999 (Tex. June 27, 2014), the Supreme Court of Texas resolved the question.

The French case involved oil and gas leases that granted the lessors royalty “on gas, including casinghead gas or other gaseous substance produced fromsaid land and sold or used off the premises or in the manufacture of gasoline or other product therefrom” equal to “the market value at the well of one-eighth (1/8th) of the gas so sold or used.” In addition, one of the leases at issue granted a royalty of “1/4 of the net proceeds from the sale” of “gasoline or other products manufactured and sold” from casinghead gas “after deducting [the] cost of manufacturing the same.”

Under both leases, the lessors shared in the post-production costs associated with the sale of casinghead gas. In addition, the lessee pooled the leases in 1954 pursuant to a unitization agreement which gave the lessee the discretion to use casinghead gas as part of
CO₂ Separation Anxiety—Is the cost of separating CO₂ from casinghead gas a “production” or “post-production” cost for purposes of calculating royalties in Texas?

its enhanced recovery operations.iii As is typical of many royalty clauses regarding gas use, the parties agreed that no royalty would be paid on the use of such gas for operations.iv

The lessee in French initiated a tertiary recovery operation in 2001 to stimulate oil wells and remedy the long decline in production in the oil field that included the leased properties at issue. As a result of this process, the wells resumed economically viable production, and the operator recovered oil that would have been lost otherwise. However, as a consequence of the recovery operation, the wells produced casinghead gas that was heavily laden with CO₂. The lessee entered into an agreement with a third party, whereby the third party would process the gas and extract a majority of the CO₂. The lessee agreed to pay the third party a monetary fee and an “in-kind” fee equal to 30 percent of the natural gas liquids and all of the residue gas extracted from the stream. When the lessee paid royalties, it deducted the value of the in-kind payment in proportion to the royalty owners’ interest as it would with other post-production costs.

The royalty owners sued, alleging the lessee underpaid royalties by deducting the value of the in-kind fee. They claimed that royalties should have been paid on all the gas that came out of the well and not the gas remaining after the CO₂ was removed (which was a much smaller quantity of gas).

The trial court agreed with the royalty owners and awarded $10.5 million in compensation for underpaid royalties.

The Texas Eleventh Court of Appeals reversed the decision of the trial court and the $10.5 million judgment. Among other rulings regarding the sufficiency of expert testimony to estimate market value of casinghead gas infused with CO₂, the court treated the CO₂ extraction as a post-production activity that may be shared by the royalty owners. The court reasoned as follows: “Because we have held that it is necessary to render the stream marketable, we also hold that it is a cost of manufacturing that must be deducted in order to determine the net proceeds from the sale, and thus the royalty.”v

The Supreme Court of Texas granted the royalty owners’ petition for review in January 2014vi on whether the costs of removing the CO₂ deducted by the lessee were properly considered to be production costs or post-production costs.vii

Noting that the issue was one of first impression, the Supreme Court affirmed the appellate court’s conclusion that the CO₂ separation is a post-production activity that may be shared by royalty owners and lessees if the lease so provides. The court noted that the injected CO₂ remained the lessee’s property and the royalty owners were entitled to a royalty based only on the non-CO₂ portion of the casinghead gas.viii The court reasoned that, “under the parties’ agreements, [the royalty owners], having given [lessee] the right and discretion to decide whether to reinject or process the casinghead gas, and having benefitted from that decision, must share in the cost of CO₂ removal.”ix As a result, the lessee properly deducted the value of the in-kind payment from royalties.

CO₂ floods, and other enhanced recovery projects, are integral to the successful management and production of valuable oil and gas resources in the state of Texas and in other jurisdictions. The French decision clarifies how those costs should be treated when calculating royalty payments pursuant to a lease that authorizes the parties to share in post-production costs. The decision reflects the potential challenges that lessees may face when
CO₂ Separation Anxiety—Is the cost of separating CO₂ from casinghead gas a “production” or “post-production” cost for purposes of calculating royalties in Texas?

sharing costs with royalty owners for necessary operations that enhance the value of production but do not fit neatly into the “production” category or “post-production” category.

In addition, while the issue may be resolved in Texas, the question remains open in other jurisdictions. Lessees may wish to consider a review and analysis of their leases to identify possible areas of dispute with royalty owners over proper cost-sharing for activities that fall into a gray area between production and post-production.

Authors:
George A. Bibikos
goose.bibikos@klgates.com
+1. 717.231.4577

Cleve J. Glenn
cleve.glenn@klgates.com
+1. 713.815.7327

Travis L. Brannon
travis.brannon@klgates.com
+1. 412.355.7443

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2 Delta Drilling Co. v. Simmons, 338 S.W.2d 143, 147 (Tex. 1960).

iii French, 2014 WL 2895999 at *2.

iv Id.

v Id. at 224.

CO₂ Separation Anxiety—Is the cost of separating CO₂ from casinghead gas a “production” or “post-production” cost for purposes of calculating royalties in Texas?

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vii French, 2014 WL 2895999 at *1.

viii Id. (citing Humble Oil & Refining Co. v. West, 508 S.W.2d 812, 816-19 (Tex. 1974) (holding natural gas stored in a reservoir to prevent destruction of the field was not subject to a royalty interest upon its production with native natural gas).

ix Id. at *7-8.
Unmanned Aircraft Systems and Oil and Gas Operations—Q and A

By Edward J. Fishman, James B. Inscò II, Martin L. Stern and Thomas R. DeCesar

The desire to use unmanned aircraft systems (UAS) in commercial operations is steadily building. A wide variety of businesses would like to use these devices to improve efficiency and safety, and reduce costs. One field that will likely see significant benefits from the use of unmanned aircraft is oil and gas operations. In the rapidly-developing landscape of unmanned aircraft used for commercial purposes, it is important to understand the salient issues and how they may affect your business. This alert provides a straightforward overview of some of the fundamental legal and regulatory topics related to the use of UAS in oil and gas operations.

What are unmanned aircraft systems?

UAS, as they are referred to by the Federal Aviation Administration (FAA), are also known as remotely piloted aircraft (RPA) or unmanned aerial vehicles (UAV). In the mainstream news and popular culture, these devices are often referred to as drones. They are aircraft—usually small planes or helicopters—that do not have an on-board pilot, but are instead operated remotely. These devices can range from very small (less than 5 lbs.) to very large (e.g., UAS used in military operations), and operate at different speeds and altitudes. They can be equipped with cameras, video transmission devices and a variety of sensor packages that can perform, for instance, air, biological, chemical, or radioactive sampling, or geophysical surveying.

How could UAS be used by oil and gas companies?

The potential uses of UAS include pipeline and/or right-of-way monitoring/investigation, surveying (including geophysical surveys), environmental monitoring, and drill site inspection. Unmanned aircraft can also help provide situational awareness for first responders, if needed. In fact, the only two commercial UAS operations currently approved by the FAA are being used for surveying and pipeline monitoring related to oil drilling operations in Alaska.

Are companies allowed to use UAS in their businesses?

The FAA has not adopted regulations on the use of commercial UAS, but it has issued policy statements specifying that unmanned aircraft may not be used for commercial or business purposes without FAA authorization. As mentioned above, only two commercial operations have been authorized to operate UAS. Several individuals and companies operating UAS for commercial purposes without FAA authority have received cease and desist letters from the FAA. The FAA has also sought penalties from unmanned aircraft operators in two instances. Therefore, the safest course is to seek some form of FAA authorization before conducting commercial UAS operations.
Unmanned Aircraft Systems and Oil and Gas Operations—Q and A

But can’t companies just use model aircraft used by hobbyists?

There’s no “yes or no” answer to this question. While the FAA and federal law generally authorize the use of model aircraft for hobby or recreational purposes (where the aircraft weighs less than 55 lbs. and is flown lower than 400 feet within the operator’s line of sight and in areas away from airports), FAA policy is that this exemption is not available when model aircraft are used for commercial or business purposes. In other words, according to FAA policy guidance, the exemption is limited to hobby or recreational use, and a business using what is otherwise a model aircraft for a commercial or business purpose, cannot take advantage of the exemption. That said, an administrative law judge with the National Transportation Safety Board (NTSB) recently dismissed an FAA enforcement action against a commercial videographer who was allegedly flying a model aircraft in an unsafe manner, on the grounds that the FAA has not adopted formal rules extending its various aircraft regulations to model aircraft used for commercial or business purposes, and only has sought to do so through informal policy statements and guidance. That decision is currently on appeal to the full NTSB.

How could a company obtain authorization from the FAA to conduct UAS operations?

Companies interested in employing UAS in their businesses can seek a “Section 333 exemption” from the FAA under the FAA Modernization and Reform Act of 2012 (the “Act”). Pursuant to this Act, the FAA was directed to publish a final rule on small UAS (i.e., unmanned aircraft weighing less than 55 lbs.) by August 2014. The FAA will not meet this deadline, and a proposed rulemaking will likely be initiated in fall of 2014. However, in the interim, Section 333 of the Act allows the FAA to grant exemptions and permit certain unmanned aircraft to be operated before a final rule is promulgated. The FAA recently announced for the first time that it will be considering several Section 333 exemption requests filed by companies and industry groups seeking FAA authorization to use UAS for commercial purposes. For instance, one pending exemption request seeks authority to employ unmanned aircraft for aerial surveys that can be used for agriculture and mining. While there is no formal Section 333 exemption process, exemption requests must demonstrate that the petitioner’s UAS operations are in the public interest and will not adversely affect safety. Because the Section 333 exemption requests will be focused on small UAS, we believe companies are more likely to gain clearance when their exemption requests correspond with the existing guidelines applicable to hobbyists. That said, given the fact that no Section 333 exemption requests have been ruled on yet and the FAA’s conservative stance on UAS operations generally, it is difficult to predict with certainty how quickly the FAA will act or likely outcomes for particular applications.

Are Section 333 exemptions time-sensitive?

Yes. The FAA has made unofficial statements that after it releases its proposed rule on small UAS, it will no longer consider Section 333 exemption requests. Instead, these requests will be construed as comments on the FAA’s proposed rule. Therefore, this only provides a small window of opportunity (about three to five months) to apply for a Section 333 exemption. On the other hand, if companies act soon, they may be able to get ahead of their competition in this area.
What if someone else tries to view our business operations using UAS—do we have any recourse?

Since the proliferation of UAS in society is so new, many of the issues related to the parameters of acceptable UAS usage have not been worked out. In fact, privacy concerns have been cited as a major roadblock slowing the FAA’s rulemaking process. FAA commentary indicates that privacy issues will likely be dealt with in the FAA’s final small UAS rules. Until those rules are promulgated, companies could consider the possibility of civil actions for trespass, nuisance, invasion of privacy, and illegal wiretapping. Some states and local governments have also passed specific restrictions on unmanned aircraft operations that may be applicable. If a public entity is operating the UAS, there could be additional statutory, regulatory, or constitutional protections at play. A company’s response to such an action by a third party would largely depend on the particular circumstances surrounding the intrusion.
“2 Sign or Not 2 Sign:” Which Statute of Frauds Governs Oil & Gas Leases?

By George A. Bibikos and David I. Kelch

In a recent decision, the Pennsylvania Superior Court resolved an open question of state law regarding which one of two alternative statutes of frauds apply to oil and gas leases, in the process making clear that for an oil and gas lease, only the grantor of the interest must sign.

In Nolt v. T.S. Calkins & Assoc., et al., ---A.3d---, No. 1214 MDA 2013, 2014 PA Super 141 (Pa. Super. Ct. July 7, 2014), the court concluded that the “general” Pennsylvania statute of frauds—rather than the statute of frauds in the Pennsylvania Landlord and Tenant Act—applies to oil and gas leases, such that their validity cannot be challenged solely on the basis that the lessee’s signature is missing.

The “general” statute of frauds in Pennsylvania applies to conveyances of interests in real property and requires that instrument be “signed by the party” granting the interest (i.e., by the grantor or, in the case of an oil and gas lease, the lessor). 33 P.S. § 1.

On the other hand, the Pennsylvania Landlord and Tenant Act requires that a lease of “real property” for a term of three years or more must be signed by “the parties making or creating the same” (i.e., the lessor and the lessee must sign), or the lease is one at-will only (and, thus, potentially terminable by either party at any time). 68 Pa.C.S. § 250.202.

Although oil and gas leases are universally understood to create an arrangement far different from that of a typical landlord and tenant, the commentary to the Landlord Tenant Act suggests that its version of the statute of frauds (as opposed the “general” statute) applies to leases of any “interests in land,” including “the right to extract oil, coal, stone, iron, ore, etc.”

In Nolt, the lessors invoked the statute of frauds in the Landlord and Tenant Act to challenge the validity of their oil and gas lease. They claimed that, although they signed the oil and gas lease, the statute of frauds in the Landlord Tenant Act requires that both the lessor and lessee sign (the lessees had not signed the lease at issue, as is typical of many oil and gas leases.).

The Superior Court rejected the lessors’ claim and concluded that the “general” statute of frauds applies to oil and gas leases. The court reasoned that “an oil and gas lease, despite the use of the term ‘lease,’ actually involves the conveyance of property rights[,]” The Court noted that the law in Pennsylvania “unequivocally establish[es] that rights to oil and gas are to be treated as transfers of estates in property and not leaseholds.” Because the lessee signed the instrument granting the oil and gas rights to the lessee, the lease satisfied the applicable statute of frauds despite the fact that the lessee had not signed it.

At this point, the Superior Court’s decision forecloses the use of the statute of frauds as a basis for challenging the validity of an oil and gas lease as long as the lessor signed it. If the lessors seek appeal of the decision to the Pennsylvania Supreme Court, however, the industry will want to keep careful watch and consider friend of the court involvement on the
“2 Sign or Not 2 Sign:” Which Statute of Frauds Governs Oil & Gas Leases?

proceedings, as a contrary result could call into question many thousands of leases in Pennsylvania that contain only the signature of the lessor.

Authors:
George A. Bibikos
george.bibikos@klgates.com
+1.717.231.4577

David I. Kelch
david.kelch@klgates.com
+1.412.355.7427

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The UK government are currently inviting responses to the consultation paper issued in May into their proposals to introduce a statutory right of access to underground land (at a depth of 300 metres or below) in England in order to extract shale gas. This is the latest proposal by central government to support energy companies in the exploration and extraction of shale gas in order to improve energy security in the UK and will be followed by the launching of a new licensing round offering companies the rights to drill across the UK.

At present a company is required to obtain a right of access for underground drilling from the owner of the land, even though the owner has no mineral rights to the gas, which are vested in the Crown and thus no right to a share of revenues, generated by the development. Any company who fails to obtain such rights by agreement with the owner or through the courts will, according to recent case law (Bocardo SA v Star Energy UK Onshore Ltd 2010) commit a trespass if they commence drilling. This becomes problematical in the case of shale gas where typically drilling is both vertical and horizontal, as the need to negotiate with a number of landowners can frustrate, delay and/or significantly increase the cost of the development.

The legislative framework within which other industries including coal and electricity, obtain rights of access from landowners is set out in the consultation paper. A number of options considered by the government for obtaining rights of access underground to extract shale gas are highlighted in the consultation paper, ranging from do nothing, to the extension of compulsory purchase rights and the inclusion of this type of development as a nationally significant infrastructure project under the Planning Act 2008.

The consultation paper concludes that a statutory right of access to underground land, analogous to that enjoyed by the coal industry under s51 of the Coal Industry Act 1994 is the best solution. Under this Act licenced coal operators have the right of access to underground land for the purpose of coal mining operations without the requirement to pay compensation. It is proposed within the consultation paper that any statutory right of access to underground land for the extraction of shale gas would be subject to the payment of a one off voluntary contribution of £20,000 by the operators to the community, for each horizontal well extending more than 200 metres laterally. This would be coupled with an obligation to notify the public about the relevant area of underground land to be accessed. It is anticipated landowners will receive a nominal payment for these rights as land below depths of 300 metres underground is considered to be of little or no use to them.

An operator would only be able to exercise its statutory right to access underground land (300 metres or below) for the exploration of surface works or extraction of shale gas if all the necessary consents, including planning permission for the drilling rigs and other surface works and environmental permits e.g. for dealing with waste water have been obtained for
Underground Drilling: Consultation on Proposal for Underground Access for the Extraction of Gas, Oil or Geothermal Energy

the development from the appropriate regulators. Any drilling works above 300 metres will still require agreement with the owner or a court order granting such rights to an operator.

The government have invited consultation responses to the paper by 15 August 2014. Any legislative changes will be included in the Infrastructure Bill which was announced in the Queens Speech on 4 June 2014.

Should you require further information about any of the matters contained within this alert or any advice on how these reforms may impact on your development proposals, please contact the authors or your usual K&L Gates contacts.

Authors:

Jane Burgess
jane.burgess@klgates.com
+44.(0).20 7360 8271

Sebastian Charles
sebastian.charles@klgates.com
+44.(0).20 7360 8205

Paul Tetlow
paul.tetlow@klgates.com
+44.(0).20 7360 8101
“Houston, We May Have a Problem!” — Surface Owner Who Put up “Roadblock” to Oil Driller’s Use of Property to Service Wells in a Pooled Unit Arrives at Texas Supreme Court

By John F. Sullivan III, George A. Bibikos, Cleve J. Glenn, Bryan D. Rohm

Introduction—A Road Less Traveled

The Texas Supreme Court’s anticipated ruling in the case of Key Operating Equipment Inc. v. Will Hegar and Loree Hegar could significantly impact the ability of oil and gas producers to gain access to wells that are part of pooled units. The key issue before the Court is whether a landowner whose minerals had been severed and later leased and pooled with oil and gas leases on adjacent property can prevent a lessee-operator from using a road owned by the landowner to service wells on an adjacent property, where those wells are part of the same pooled unit. A court of appeals in Houston answered “yes,” affirming the trial court’s injunction that prevented Key Operating Equipment Inc. (“Key Operating”), a lessee-operator, from using the road owned by Will and Loree Hegar (the “Hegars”) to access its wells on the adjacent property.

The Texas Supreme Court, having recently heard oral argument, is now reviewing the court of appeals’ decision. Industry experts and stakeholders are concerned that the court of appeals’ decision, if allowed to stand, would result in extraordinary burden and expense to lessees whose wells in pooled units would become “trapped” by surrounding properties and also undermine clear Texas jurisprudence on the rights of dominant mineral estates in pooled units vis-a-vis the rights of servient surface estate owners.

Given the recent boom in domestic oil production, the implications of the Texas Supreme Court’s forthcoming decision could be far-reaching. The United States is on track to become one of the largest oil-producing countries in the world by 2015, and the State of Texas accounts for 36% of domestic oil production. An industry expert estimates that as much as 60% of the state’s production is from pooled units. Therefore, the legal rights of mineral lessees to access wells on pooled units are critical to the country’s oil and gas industry as a whole, not to mention the State of Texas and its economy.

Factual Background—The Rocky Road to the Highest Court in Texas

Key Operating produces oil on two adjacent tracts referred to as the “Richardson tract” and the “Rosenbaum–Curbo tract.” Since 1987, Key Operating has operated wells on the Richardson tract pursuant to an oil and gas lease.
“Houston, We May Have a Problem!” — Surface Owner Who Put up “Roadblock” to Oil Driller’s Use of Property to Service Wells in a Pooled Unit Arrives at Texas Supreme Court

The Curbo Tract and the Road

In 1994, Key Operating obtained an oil and gas lease on the Rosenbaum–Curbo tract (the “Rosenbaum–Curbo Lease”) from Randy Boatright. After acquiring the Rosenbaum–Curbo Lease, Key Operating built a road across the Curbo tract; the Curbo tract is a subpart of the Rosenbaum–Curbo tract. Since 1994, Key Operating has used the road to operate wells located on the Curbo and Richardson tracts.

When the well on the Curbo tract ceased production, the Rosenbaum–Curbo Lease terminated. Key Operating’s owners, brothers Thomas and Kenneth Key, then acquired Randy Boatright’s one-sixteenth interest in the Curbo tract mineral estate. The Key brothers then leased their mineral interest in the Curbo tract to Key Operating.

Key Operating Pools its Mineral Interests

In 2000, Key Operating created a 40–acre pooled unit by pooling its mineral leasehold interests in the Richardson and Curbo tracts. The pooled unit is comprised of 30 acres from the Richardson tract and 10 acres from the Curbo tract. Key Operating produces from the pooled unit via wells located on the Richardson tract, which it accesses by using the road across the Curbo tract.

The Hegars Purchase the Curbo Tract

In 2002, the Hegars purchased the surface estate and a one-fourth mineral interest in the Curbo tract. The Hegars built a new house and used part of the road as a driveway to access their home. The Hegars knew when they bought the property that it was subject to oil and gas leases and that Key Operating used the road to service its wells on the adjoining Richardson tract. The Hegars tolerated Key Operating’s use of the road until Key Operating drilled a new well on the Richardson tract that increased its use of the road.

What Happened at Trial?

The Hegars sued Key Operating for trespass and sought a permanent injunction against Key Operating’s continued use of the road. After a bench trial, a judge issued an injunction against Key Operating using the road. Key Operating appealed, and in October 2011, a Court of Appeals in Houston initially reversed the trial court’s judgment and rendered judgment for Key Operating. The Hegars filed a motion for rehearing, however, and the court of appeals withdrew its opinion and issued a new decision affirming the trial court’s judgment for the Hegars.

The Houston Court of Appeals’ Decision

The crux of the court of appeals’ opinion lies in its handling of the Hegars’ argument that Key Operating’s use of the surface estate is limited to those rights that existed when the Boatright mineral estate was first severed from the surface estate. That event occurred before the Hegars purchased the Curbo tract and before the Key brothers leased their mineral interests in the Curbo tract to Key Operating with the pooling clause.
“Houston, We May Have a Problem!” — Surface Owner Who Put up “Roadblock” to Oil Driller’s Use of Property to Service Wells in a Pooled Unit Arrives at Texas Supreme Court

The court reasoned that “[i]f the Key brothers’ lease, which authorizes Key Operating to pool the Curbo tract, had been executed before or at the time the mineral and surface estates were severed, this lease would have been part of the Hegars’ chain of title and the Hegars would have taken their title to the surface estate subject to the lease…” The court opined further that “in the absence of a pooling or similar agreement to which the Hegars … consented or to which they or their title are otherwise subject, Key Operating has no right to use the roadway across the Hegars’ land [i.e., the Curbo tract] to produce oil exclusively from the Richardson tract.”

According to the court of appeals, the central issue was “whether Key Operating can use the road in a manner that is indivisible and reasonably necessary for both the Curbo and the Richardson mineral estates.” The court of appeals concluded “… that Key Operating has the same implied easement for use of the Hegars’ surface estate that existed when it became a lessee of the Curbo tract’s mineral estate: ‘the Hegars may not interfere with Key Operating’s right to use the servient estate for the purposes of the easement—i.e., for the purpose of exploring and producing oil from the Curbo tract.’” The appellate court held that “… subject to the accommodation doctrine, Key Operating’s common law surface easement gives it the right to use the road on the Curbo tract to produce oil from the Richardson–Curbo pool so long as that production includes production from the Curbo tract.”

Arguments Presented to the Texas Supreme Court

In the Texas Supreme Court, Key Operating argues that the court of appeals erred in applying the “accommodation doctrine” because it was neither raised nor proved by the Hegars. Key Operating argues further that the Hegars had notice in their chain of title that the mineral estate on the Curbo tract had been conveyed to Boatright. Thus, the Hegars purchased the surface estate subject to all of the rights conveyed to Boatright who, in turn, could convey all those rights to his successors in interest, namely, the Key brothers and Key Operating. Finally, Key Operating contends that there are competing rights of use of the surface estate and that the Hegars bore the burden of establishing a greater right of use but failed to do so. In particular, Key Operating asserts that the Hegars failed to introduce the necessary evidence (i.e., the severing document to Boatright) to determine whether the pooling rights of Key Operating had been circumscribed; therefore, the Hegars’ trespass claim must fail.

In response, the Hegars contend that the court of appeals did not base its decision on the accommodation doctrine but instead relied on certain determinative findings of fact, including the key finding that no minerals were being extracted from beneath the Curbo tract by wells located on an adjacent tract.

The Hegars argue further that the Key brothers (i.e., the prior owners of the mineral interests now owned by Key Operating) never acquired, owned or leased any portion of the surface estate, and therefore, it “cannot burden an estate that they have never owned any part of.” Finally, the Hegars allege that Key Operating cannot rely on its absence of the severing document argument because Key Operating raised this argument for the first time in its petition for review with the Texas Supreme Court.

The Texas Oil & Gas Association (“TXOGA”) filed an Amicus Brief in the Texas Supreme Court arguing that the court of appeals’ opinion is fundamentally flawed in its treatment of the
right of mineral lessees to access wells via surface estates in pooled units. The TXOGA argues that the court of appeals’ requirement that a lessee must prove with “geologic certainty” that the well is draining minerals from the beneath the acreage it wishes to use to access the well in a pooled unit is not only inconsistent with the established body of oil and gas law in Texas, but would also cause uncertainty in the industry, considerable litigation and significant expense to mineral lessees producing from pooled units.

The Road Ahead

The Texas Supreme Court is expected to issue an opinion in a few months. While it is difficult to predict how the Court will rule, a favorable ruling for the Hegars could have a significant impact on lessees across the state. Such a ruling could embolden landowners in pooled units to more frequently challenge the access rights of lessee-operators and require them to provide evidence of actual production from beneath the landowners’ properties. This increased level of risk for lessee-operators may lead to an overall increase in operation costs, making it economically unfeasible for some lessee-operators to maintain operations in certain pooled units. Other lessee-operators may try to pass the cost increases along to lessors in the form of lower royalty payments.

Bottom line, the Texas Supreme Court’s ruling could have broad implications for lessees and lessors of mineral interests, surface owners and the oil and gas industry as a whole. Oil and gas industry participants should therefore closely monitor this case.
“Houston, We May Have a Problem!” — Surface Owner Who Put up “Roadblock” to Oil Driller’s Use of Property to Service Wells in a Pooled Unit Arrives at Texas Supreme Court

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1 See http://www.search.txcourts.gov/Case.aspx?cn=13-0156
2 Pooling involves the bringing together of small tracts sufficient for the granting of a well permit under applicable spacing rules and is important in the prevention of drilling unnecessary and uneconomic wells which result in physical and economic waste. See Patrick H. Martin & Bruce M. Kramer, Williams & Meyers, Oil and Gas Law, 780 (15th ed. 2012). The primary legal consequence of pooling is that production and operations anywhere on the pooled unit are treated as if they have taken place on each tract within the unit. See Southeastern Pipe Line Co., Inc. v. Tichacek, 997 S.W.2d 166, 170 (Tex. 1999). A well located in a pooled unit is deemed to be a well on each pooled tract, and production from the unit well is deemed to have taken place on all pooled leases. See id.
4 See Brief of Amicus Curiae of Texas Oil & Gas Association, Key Operating Equipment, Inc. v. Will Hegar and Loree Hegar, Case No. 13-0156, at p. 2-5 (November 20, 2013).
6 Id. “In fact, several publications have dubbed the state ‘Saudi Texas,’ referring to Saudi Arabia, which has always been the oil and gas world giant, but that title is moving closer and closer to Texas.” Id.
7 See Brief of Amicus Curiae of Texas Oil & Gas Association at p.5, fn. 8.
8 See Brief of Amicus Curiae of Texas Oil & Gas Association, at p. 2-5.
9 Key Operating & Equipment, Inc., 403 S.W. 3d at 322–323.
10 Id. at 323.
11 Id.
12 Id.
13 Id.
14 Id.
15 Id.
16 Id.
17 Id.
18 Id.
19 Id.
20 Id.
21 Id.
22 Id.
23 Id.
24 Id.
25 Id.
26 Id. Will Hegar testified, “We’re trying to raise a family and we can’t do it with a highway going through our property.” Id. at 323.
27 Key Operating & Equipment, Inc., 403 S.W. 3d at 324.
28 Id. at 322.
29 Id.
30 Id. at 325.
31 Id. at 326.
32 Id. at 336.
33 Id. at 331–332.
34 Id. at 332 (emphasis added).
35 Id. at 327 (emphasis added).
36 Under the accommodation doctrine, when a mineral estate lessee’s intended use of the surface estate would preclude or impair an existing use of the surface by the surface owner, the rules of reasonable usage require the mineral estate owner to adopt an alternative means of exploration or production if such an alternative is available under established industry practices. See Lesley v. Veterans Land Bd. of State, 352 S.W. 3d 479, 492 & n. 79 (Tex. 2011); Tarrant Cnty. Water Control, 854 S.W. 2d at 911; Getty Oil Co. v. Jones, 470 S.W. 2d 618, 621 (Tex. 1971).
38 Id., at p. 8-12.
39 Id., at p. 16.
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40 Id., at p. 16.
42 Id., at p. 11.
43 Id., at p. 5.
44 Brief of Amicus Curiae Texas Oil & Gas Association, at p. 1-6
45 Id. “This court has never adopted the novel rule announced in the court’s Opinion, and, as the preeminent authority in oil and gas law, both in Texas and beyond our borders, this Court should not permit to stand uncorrected any opinion that so egregiously misstates and misconstrues basic oil and gas principles, including the rule of capture and the laws of pooling, particularly a holding so incompatible with established Texas commercial oil and gas practices.” Id. at 5 (citing, Ernest E. Smith, Implications of a Fiduciary Standard of Conduct for the Holder of Executive Right, 64 Tex. L. Rev. 371, 375 (1985)).
46 In light of the court of appeals’ opinion and the uncertainty of how the Texas Supreme Court will rule, it might even be prudent for some lessees to review their leases and well locations in pooled units and take appropriate steps to ensure that they will still have access to wells if the Texas Supreme Court affirms the court of appeals’ decision.

By Clive Cachia, Eric Fethers and Jo Garland

Summary of What's New in 2014

The year 2014 brings a number of regulatory changes for Australia's offshore petroleum industry that will affect domestic and international investors, operators and owners. Key changes include:

- proposal for a 'one stop shop' for environmental approvals - expected to be approved by the Minister at the end of February 2014
- amendments to improve and clarify environmental management – expected to be finalised by February 2014
- revised cash-bidding system – effective from 14 December 2013
- revised National Plan for Maritime Environment Emergencies - due to come into force mid 2014
- changes in registration fees and levies – effective from 1 November 2013 and 1 January 2014 respectively.

Streamlining of Environmental Approvals

A proposal to create a one stop shop for offshore petroleum environmental assessments (Streamlining Proposal) is expected to be approved by the Minister for the Environment at the end of February 2014. Currently, environmental assessment of offshore petroleum activities occurs at both a State and Commonwealth level. Under the Streamlining Proposal NOPSEMA would be the sole environmental regulator of offshore petroleum activities.

The Streamlining Proposal is in response to several independent reviews (including the Productivity Commission's Report on Mineral and Energy Resource Exploration dated September 2013) recommending streamlining of the State and Commonwealth regulatory requirements. Consultation on the key documents closed on 20 December 2013. A supplementary report and, if necessary, a revised program taking into account the comments received will soon be provided to the Minister for the Environment for approval.

Amendments to Environment Regulations

Proposed amendments to the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations), additional to those under the Streamlining Proposal, are expected to be finalised by February 2014. The amendments seek to improve and clarify the regulation of environmental management of offshore petroleum and greenhouse gas storage activities.
Australian Offshore Petroleum – What’s New in 2014

The following are proposed key amendments to the Environment Regulations.

- Shifting the responsibility for compliance with the Environment Regulations from the operator to the titleholder. While the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGSA) places responsibility on the titleholder to control, clean up and remediate any damage to the environment, the operator (not the titleholder) is responsible for compliance with the Environment Regulations. This disjoint has been flagged as a major design weakness in the Environment Regulations as the operator may not have the level of resources or control necessary to comply with the Environment Regulations. Accordingly, shifting responsibility to the titleholder has been proposed.

- Requiring the Regulator to publish proposed activities on receipt of an environment plan by the titleholder.

- Clarifying the definition of ‘petroleum activity’ so that ordinary maritime activities (such as pipeline route surveys) are not captured within the definition and therefore not subject to an environment plan.

- Giving the Regulator power to request further information when assessing environment plans.

- Clarifying what is a ‘recordable incident’.

Consultation on the amendments closed on 20 December 2013 and submissions will be taken into account when finalising the amendments in February 2014.

Amendments to Cash Bidding Model

The cash bidding model under the OPGGSA was amended with effect from 14 December 2013.

The following are a number of key changes that have been implemented to the cash bidding model.

- Limiting the discretion of the highest bidder to refuse an offer of a permit. A 10% deposit is payable upon placement of a cash bid and is forfeited if the offer is refused or full payment of the cash bid amount is not made by the due date.

- Allowing a reserve price to be set for each of the areas being released. The reserve price may or may not be disclosed in advance of bid applications.

- Allowing a pre-qualification assessment of potential bidders prior to cash bids being placed.

- Where the two highest cash bids are equal, further cash bids are invited with the highest further bid being offered the permit (or where both further bids are also tied, the first bid received will be offered the permit).

Consultation on Energy White Paper

The Department of Industry (DoI) has released an ‘Energy White Paper - Issues Paper: to inform preparation of a White Paper (December 2013)’ (Issues Paper) for public comment.

The Issues Paper is the beginning of consultation on the Energy White Paper that will be developed by DoI. The Issues Paper outlines the scope of the Energy White Paper, maps
Australian Offshore Petroleum – What’s New in 2014

links to other related policy and regulatory developments, and seeks comment on issues to be considered in a Green Paper that will outline possible policy approaches.

Comments on the Issues Paper should be sent to the DoI by 7 February 2014.

The resulting Green Paper is expected to be released for consultation in May 2014, with the final Energy White Paper expected to be completed in September 2014.

More information on the Issues Paper can be found in our Legal Insight ‘New Energy White Paper Process Commences’.

Revised National Plan for Maritime Environmental Emergencies

A revised National Plan for Maritime Environmental Emergencies is due to come into force mid 2014. The revised National Plan results from a significant review and lessons learned from major Australian and international incidents.

Cessation of Registration Fees under OPGGSA

Registration fees under the OPGGSA were abolished effective from 1 November 2013. Fees have now been replaced with application fees reflecting the costs incurred in undertaking NOPTA’s relevant work. Importantly, there is now a flat application fee for the approval of a transfer or dealing (rather than a fee based on the value of the permit).

Increased Safety Case and Environment Plan Levies

On 1 January 2014 the safety case levies rose by 13% and the environment plan levies rose by 20%.


Authors:

Clive Cachia
Clive.Cachia@klgates.com
+61.2.9513.2515

Eric Fethers
Eric.Fethers@klgates.com
+61.8.9216.0922

Jo Garland
Jo.Garland@klgates.com
+61.8.9216.0914
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The Eyes of Texas are upon a Subsurface Trespass Case

By John F. Sullivan, Anthony F. Newton and Cleve J. Glenn

Introduction

The Texas Supreme Court is now poised to decide whether subsurface migration of fluids from an approved injection well may constitute an actionable trespass under Texas common law. Recently accepting a petition for review in Environmental Processing Systems, L.C. v. FPL Farming Ltd.,¹ the Court’s decision could impact how oil and gas producers dispose of waste products from hydraulic fracture stimulation and other related activities in Texas and could affect how courts in Texas and elsewhere evaluate common-law claims of subsurface trespass.

The Initial Dispute: Environmental Processing Challenges the Texas Commission on Environmental Quality’s Injection Well Permit

The case before the Texas Supreme Court arises from a dispute over an alleged subsurface trespass by Environmental Processing Systems, L.C. (“Environmental Processing”), a waste disposal company, onto the mineral interests owned by FPL Farming Ltd., a rice farmer (“FPL”).

This dispute dates back to 1996, when Environmental Processing sought a permit from the Texas Commission on Environmental Quality (“TCEQ”) to operate an injection well on land that was adjacent to two tracts of land owned by FPL. Environmental Processing planned to inject nonhazardous industrial wastewater 8,000 feet below the surface and 875 feet from FPL’s property line.² FPL’s predecessor in title (J.M. Frost III) objected to the application, but later settled with Environmental Processing for $185,000 and withdrew its objection.³

In 1999, Environmental Processing sought an amendment to its TCEQ permit to increase the fluid injection rate.⁴ FPL objected and a contested hearing before an administrative law judge was held. FPL argued that if the TCEQ allowed the leaking to continue—and in fact to accelerate with increased injection—it would “impair” its “existing rights” in its property in violation of Chapter 27 of the Texas Water Code.⁵ Following the hearing, the administrative law judge concluded that since FPL had not shown any harm from Environmental Processing’s wastewater plume, it had failed to show impairment.⁶ The TCEQ, therefore, granted Environmental Processing’s amended permit request to increase the injection rate.⁷

¹ See http://www.search.txcourts.gov/Case.aspx?cn=12-0905
³ Id.
⁴ Id.
⁵ Id. at *3.
⁶ Id. at *1.
⁷ Id. at *5.
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FPL appealed to the Travis County district court, which affirmed the TCEQ’s order. FPL then appealed to the Third Court of Appeals in Austin, which also affirmed the TCEQ’s order. The Court of Appeals concluded that the amended permit did not cause impairment of FPL’s then-existing subsurface property rights; however, it did not foreclose the possibility of FPL bringing a separate trespass claim against Environmental Processing. The Court of Appeals noted that if the wastewater plume eventually migrated into FPL’s subsurface and caused recognizable harm, it could seek damages from Environmental Processing. In essence, the Court of Appeals invited FPL to bring a subsequent challenge to Environmental Processing’s operation with better evidence of harm.

The Subsequent Dispute: FPL Sues Environmental Processing for Damages

In 2006, FPL sued Environmental Processing, alleging that its wastewater leaked into its property, causing damage. It sought injunctive relief and damages based on three alternative theories of liability: trespass, nuisance, and unjust enrichment.

A. What Happened at Trial?

The trial was vigorously contested, primarily on the issues of consent, damages, and whether Environmental Processing’s waste plume had crossed the property line. While FPL did not contend that Environmental Processing’s waste plume migrated to the surface or affected FPL’s drinking water, FPL’s expert (a geotechnical consultant), testified that Environmental Processing’s waste plume migrated beneath FPL’s land. Despite this evidence, the jury rejected all of FPL’s claims and the court entered judgment for Environmental Processing. FPL, therefore, appealed to the Ninth Court of Appeals in Beaumont.

B. The First Appeal

The Court of Appeals also found against FPL but did so on a threshold issue it raised on its own, without even reaching FPL’s substantive challenges. The court held that it could not review the merits of FPL’s trespass claims because Environmental Processing’s TCEQ permit conclusively shielded it from tort liability. In the court’s view, “[w]hen a state agency has authorized deep subsurface injections; no trespass occurs when fluids that were injected at deep levels are then alleged to have later migrated at those deep levels into the deep subsurface of nearby tracts.” Having lost again, FPL appealed to the Texas Supreme Court.

8 See FPL Farming, Ltd., 2003 WL 247183, at *2.
9 Id. at *5.
11 Id.
13 FPL Farming, Ltd., 351 S.W.3d at 309.
14 Id.
16 Id. at 745.
17 Id. at 745.
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C. The Texas Supreme Court’s First Review

In 2011, the Texas Supreme Court overruled the Ninth Court of Appeals, holding that a person possessing a permit issued by the TCEQ was not shielded “from civil tort liability that may result from actions governed by the permit,” and remanded the case to the Beaumont Court of Appeals to address the merits of FPL’s trespass claim.\(^{19}\) The Texas Supreme Court stated that “[w]e do not decide today whether subsurface wastewater migration can constitute a trespass, or . . . whether it did so in this case.”\(^{20}\)

On remand, the Ninth Court of Appeals reversed the jury verdict and remanded the case for a new trial on FPL’s trespass claim. In so doing, the court held that FPL has an ownership interest in the water beneath its surface, and therefore, has standing to bring a trespass action where Environmental Processing’s wastewater plume migrated into the subsurface of FPL’s property. The Ninth Court of Appeals further held that the trial court misplaced the burden of proof on consent to the trespass, which should have been Environmental Processing’s burden.

D. The Texas Supreme Court will Review the Case a Second Time

On January 18, 2013, Environmental Processing filed its petition for review, which was accepted by the Texas Supreme Court on November 22, 2013. This time, the Texas Supreme Court is expected to decide whether a cause of action exists in Texas for subsurface trespasses when underground water migrates to another tract of land or mingles with an adjacent subsurface pool of water. It is possible, however, that the Texas Supreme Court could pass on the trespass question and choose instead to address whether FPL impliedly consented to the trespass in 1996 when its predecessor in title (J.M. Frost III) settled with Environmental Processing by accepting $185,000 and withdrawing its request for a contested case hearing.

E. Summary of Arguments

In its petition for review, Environmental Processing primarily argues that the Beaumont Court of Appeals’ decision should be overturned for public policy reasons. It emphasizes the extensive use of injection wells across Texas by a variety of industries\(^{21}\) and argues that the ubiquitous threat of trespass liability would hold the State’s permitting system hostage and interfere with Texas’s economic development.\(^{22}\) Environmental Processing seeks a categorical abolishment of any cause of action for trespass arising from wastewater migration below the surface.\(^{23}\) It argues that, at the very least, the Court should require plaintiffs to demonstrate harm from the encroachment or interference with their reasonable and foreseeable use of the deep pore space.\(^{24}\)

In response to Environmental Processing’s arguments, FPL also presents several public policy arguments. First, it responds to Environmental Processing’s claim that this decision could undermine the injection well permitting regulatory scheme by arguing that this is no

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19 *FPL Farming, Ltd.*, 351 S.W.3d at 315.
20 Id. at 314 - 315.
22 Id. at *11–12.
23 Id. at *7–8.
24 Id. at *2.
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different than claiming that a permit should immunize its holder from tort liability which the Texas Supreme Court already rejected.25 FPL acknowledges that prospective trespass liability will force operators to obtain leases from their potentially affected neighbors, but notes that this is an appropriate result and will not hold up the permitting system.26

Potential Implications of the Texas Supreme Court’s Decision

It is difficult to predict how the Texas Supreme Court will address and resolve the subsurface trespass issue. Even if the Texas Supreme Court were to rule in favor of FPL, the case would still need to go back to a jury trial, where expert testimony would be required to establish whether fluids from the injection operations migrated onto FPL’s subsurface property.

In the case of Coastal Oil & Gas Corp. v. Garza Energy Trust,27 the Texas Supreme Court previously ruled that royalty interest owners were precluded from recovering damages on a trespass claim against a well operator engaged in hydraulic fracturing on an adjacent tract of land. The Garza case, however, is factually distinguishable from the present case. As mere royalty interest owners, the Garza plaintiffs lacked a possessory interest in the subject property. FPL, however, holds title to the property at issue in the present case. Without a possessory interest, the Garza plaintiffs could not establish standing to bring a standard trespass action, and as a result, were limited to “trespass on the case,” a remedy available to contingent interests.28 The Texas Supreme Court said that because drainage stimulated by hydraulic fracturing falls under the rule of capture, the Garza plaintiffs could not show actual, physical harm to the property—a key element of a trespass on the case claim.29

That said, even if the Texas Supreme Court affirms the cause of action exists for subsurface trespasses where fluids migrate, the court may add a proof of tangible harm requirement. Under such a test, a plaintiff would only recover if it could demonstrate that the trespass either: (1) is presently causing demonstrable harm; or (2) will substantially interfere with its reasonable and foreseeable future use of the affected part of the subsurface. This is the approach being urged by the Texas Oil & Gas Association and other industry groups and one that has been adopted by a number of courts outside Texas.30

The Texas Supreme Court Hears Oral Argument

Oral argument was heard by the Texas Supreme Court on January 7, 2014. During oral argument, the Justices inquired as to how traditional trespass rules would operate in the context of subsurface trespass cases. The Court noted that other jurisdictions considering subsurface trespass cases have required plaintiffs to demonstrate some type of harm or interference with the reasonable and foreseeable future use of the affected part of the subsurface. The Justices also inquired as to whether a right to preclude subsurface trespass should be absolute, or if courts should attempt to balance private and public interests.

26 Id. at *10–11.
27 268 S.W.3d 1 (Tex. 2008).
28 Id. at 9–10.
29 Id. at 10–11, 17.
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It is unclear how the Court will ultimately rule. In any event, oil and gas industry participants and other industries that rely on subsurface injection for waste disposal should closely monitor this case.

Authors:

John F. Sullivan
john.sullivan@klgates.com
+1.713.815.7330

Anthony F. Newton
anthony.newton@klgates.com
+1.713.815.7330

Cleve J. Glenn
cleve.glenn@klgates.com
+1.713.815.7327
Hydraulic Fracturing in Illinois: Draft Regulations to Protect Chemical Proprietary Information

By Christopher A. Bloom, Robert J. Best, Daniel I. Hwang

Last month, the Illinois Department of Natural Resources ("IDNR") published its first draft of the regulations (62 Ill. Adm. Code 245) (the “HFRA Draft Regulations”) under the Illinois Hydraulic Fracturing Regulatory Act (225 ILCS 732/1-1 et seq.) (the "IHFR Act"). The IHFR Act requires applicant companies to provide chemical disclosures of proppant and water mixtures that are injected into shale formations as part of the hydrocarbon extraction process. Because applicant companies may consider their mixtures proprietary, the Act contains provisions designed to allow the applicant companies to protect disclosures of trade secrets. The HFRA Draft Regulations would place a substantial burden on companies to establish and protect their information, even if trade secret protection is, in fact, warranted. The HFRA Draft Regulations also permit the government and health professionals to access the proprietary information. The IDNR will be revising these regulations after the public comment period, which will remain open until January 3, 2014. Companies who may be concerned about trade secret protection for hydraulic fracturing fluids should consider providing comment on the HFRA Draft Regulations.

Shale Oil and Gas: Hydraulic Fracturing

Shale oil and gas production companies use the hydraulic fracturing process to access hydrocarbons from underground shale formations. The process involves drilling into shale formations, creating extraction veins in the formation, and subsequently injecting proppant and water mixtures including sand (or other proppants) and chemicals to expand and maintain the veins. Although production companies in Illinois have been using the hydraulic fracturing process for years, the increase in shale oil and gas production nationally encouraged Illinois lawmakers to pass the IHFR Act. At the time of the IHFR Act’s signing in June 2013, Governor Quinn touted Illinois’ hydraulic fracturing regulatory program as the strongest in the country.

Under the newly-issued HFRA Draft Regulations’ Permit Application Requirements, applicants for a hydraulic fracturing permit must disclose the details of each operation or project, including a chemical disclosure report which must identify “each chemical and proppant anticipated to be used in hydraulic fracturing fluid for each stage of the high volume horizontal hydraulic fracturing operations,” including the following:

a) for each stage, the total volume of water anticipated to be used in the high volume horizontal hydraulic fracturing treatment of the well or the type and total volume of the base fluid anticipated to be used in the high volume horizontal hydraulic fracturing treatment, if something other than water;

b) each hydraulic fracturing additive anticipated to be used in the hydraulic fracturing fluid, including the trade name, vendor, a brief descriptor of the intended use or

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- The function of each hydraulic fracturing additive, and the Material Safety Data Sheet (MSDS), if applicable;
- Each chemical anticipated to be intentionally added to the base fluid, including, for each chemical, the Chemical Abstracts Service number, if applicable; and
- The anticipated concentration in the base fluid, in percent by mass, of each chemical to be intentionally added to the base fluid.

HFRA Draft Regulations Section 245.210(a)(8).

Most shale production processes use a similar group of chemicals for their water mixtures. However, the exact composition used in the hydraulic fracturing process can differ from company to company and from well to well. Applicant companies may view specific compositions as a competitive advantage and wish to protect these as proprietary trade secrets. In order to protect the information as proprietary under the HFRA Draft Regulations, the applicant company would have the burden of establishing that the information in its chemical disclosure is a trade secret.

Trade Secrets
Under the Illinois Trade Secrets Act (“ITSA”), technical data, formulas, and methods or processes ordinarily will qualify for trade secret protection. Accordingly, information in the chemical disclosure report can be protected as a trade secret under the ITSA if the information is:

1) “sufficiently secret to derive economic value, actual or potential, from not being generally known to other persons who can obtain economic value from its disclosure or use” and

2) “the subject of efforts that are reasonable under the circumstances to maintain its secrecy or confidentiality.”

As long as such information remains secret, the rights in the trade secret are enforceable. However, if the “secret” operative components of a chemical formula can be reverse-engineered, independently discovered, or is otherwise publicly disclosed, a company cannot prevent others from using the information.

Trade secret protection can also be forfeited by the owner’s disclosure of the information to a third party without appropriate protection. Under the IHFR Act, the chemical disclosure report must be filed with the IDNR and the IDNR is required to post each applicant company’s chemical disclosure to its website - making each disclosure publicly available. Absent a mechanism to assure continued confidentiality, this disclosure alone would forfeit trade secret protection. Like the IDNR, many government regulatory agencies must balance the competing interests of providing government accountability through access to public records and providing adequate safeguards for applicant companies’ competitive positions. Courts have recognized this problem and recognized the importance to the public of regulatory bodies being properly able to protecting the confidential information the agency needs for effective government oversight. The inability to properly safeguard confidential information disclosed to a government agency may impair the government’s own ability to

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2 765 ILCS 1065/2(d).
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obtain necessary information in the future. Courts further recognize that disclosing parties have a property interest in confidential data provided to government agencies, and have found that the government’s failure to protect such information from public disclosure “would constitute a Fifth Amendment taking, requiring payment of compensation by the government.”

Trade Secret Protection in Illinois HFRA Regulations: Section 245.720

Mindful of these trade secret issues, the IHFR Act and the HFRA Draft Regulations attempt to balance the competing needs of effective regulatory disclosure and to protect trade secret information. However, applicant companies need to be aware that assertion of a claim for trade secrets requires specific steps at the time of filing and proper justification of the trade secret claim. Under the IHFR Act, the IDNR must post any copies of the master lists of the chemical disclosures it receives within 21 days of receipt. Under the HFRA Draft Regulations, applicant companies would be able to protect their trade secret chemical disclosure information if that information is submitted under a claim of trade secret and the applicant company submits with its disclosure a redacted copy of the chemical disclosure report deleting specific trade secret information:

> When an applicant, permittee, or person performing high volume horizontal hydraulic fracturing operations furnishes chemical disclosure information to the Department … under a claim of trade secret, the applicant, permittee, or person performing high volume horizontal hydraulic fracturing operations shall submit redacted and unredacted copies of the documents identifying the specific information on the master list of chemicals claimed to be protected as trade secret.\(^5\)

The IDNR shall use the redacted copy when posting the master list of chemicals on its website if it determines that the trade secret claim is properly justified.

Justification Requirements

In addition to making a claim of trade secrets and providing a redacted copy of the chemical disclosure report, the applicant company must provide a justification of the claim of trade secret as part of the applicant company’s claim, or within five (5) days of making its claim.\(^6\) The justification shall include:

1) a detailed description of the procedures used by the person to safeguard that portion of the information on the master list of chemicals for which trade secret is claimed from becoming available to persons other than those selected by the person to have access to the information for limited purposes;

2) a detailed statement identifying the persons or class of persons to whom that portion of the information on the master list of chemicals for which trade secret is claimed has been disclosed;

3) a certification that the person has no knowledge that the portion of the information on the master list of chemicals for which trade secret is claimed has ever been

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\(^4\) HFRA Draft Regulations Section 245.720(a).

\(^5\) HFRA Draft Regulations Section 245.720(b) (emphasis added).

\(^6\) HFRA Draft Regulations Section 245.720(c).
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published or disseminated or has otherwise become a matter of general public knowledge;

4) a detailed discussion of why the person believes that the **portion of the information on the master list of chemicals for which trade secret is claimed** is of competitive value; and

5) any other information that shall support the claim of trade secret.7

For the most part, these justification requirements are consistent with the trade secret requirements of the ITSA. First, the applicant company needs to provide an affirmative statement describing that the policy and procedures it uses to protect trade secret information are "reasonable under the circumstances to maintain its secrecy or confidentiality."8

Second, the applicant company must provide an affirmative statement that there is value to the information "from not being generally known to other persons who can obtain economic value from its disclosure or use."9 The ITSA limits the relevant class of persons for the purposes of determining whether or not information is a trade secret to, "other persons who can obtain economic value from [the information's] disclosure."10 The HFRA Draft Regulations do not differentiate between the applicant company’s disclosure to a certain class of employees and/or relevant personnel in the industry versus its disclosure to potential business partners irrelevant for purposes unconnected to the IHFR Act. For example, if an applicant provided the subject trade secret information to a potential investor under a nondisclosure agreement, is the applicant company required to provide information on that person or persons in its justification disclosure? This requirement could lead to potential conflict with the applicant’s duties under such a nondisclosure or confidentiality agreement.

Third, the applicant company must also provide an affirmative statement identifying the specific information (technical data, formula, method, or process) that is "sufficiently secret."11 This justification requirement is unclear as to how an applicant company will certify that the compositions of its proppant and water mixtures are trade secrets. As mentioned above, a number of regular and known chemicals are used in the relevant processes and an applicant company’s protected interest will lie in the actual recipes for its proppant and water mixtures.

Fourth, the applicant company must provide reasons for why "the portion of the information on the master list of chemicals for which trade secret is claimed is of competitive value." This appears to mirror the requirement of a trade secret under ITSA that the information is "sufficiently secret to derive economic value, actual or potential, from not being generally known"12 in the industry. In addition, there is a catchall for applicant companies to provide any other justification information they believe would support their trade secret claim.

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7 HFRA Draft Regulations Section 245.720(c).
8 765 ILCS 1065/2(d).
9 765 ILCS 1065/2(d).
10 765 ILCS 1065/2(d).
11 765 ILCS 1065/2(d).
12 765 ILCS 1065/2(d).
IDNR Determination of Trade Secrets Status

The filing of the claim of trade secret and accompanying justification information alone does not automatically confer trade secret status. After the justification information is provided, the IDNR will then determine whether or not the justification demonstrates that the chemical disclosure shall be protected as a trade secret.\textsuperscript{13} A denial shall be appealable.\textsuperscript{14} Further, even if trade secret status is conferred, any person requesting to inspect IDNR records of chemical disclosure information granted trade secret protection may file a request to review the propriety of the IDNR’s trade secret grant.\textsuperscript{15} Under the IHFR Act and HFRA Draft Regulations, the IDNR is required to maintain any information furnished under a claim of trade secret as confidential until it “receives official notification of a final order by a reviewing body with proper jurisdiction that is not subject to further appeal rejecting a grant of trade secret protection for that information.”\textsuperscript{16}

It appears that the IDNR will protect valid trade secrets from disclosure if an applicant company makes the proper justification for the same. Applicant companies should be ready to provide each of the justification requirements at the time of application: a detailed description of the trade secret policy and procedure, the list of persons to whom the trade secret information has been disclosed, a certification that the specific claimed trade secret information has not become a matter of general public knowledge, and a detailed discussion of the competitive value of the trade secret information.

Trade Secret Disclosures to Health Professional: Section 245.730

Even if the IDNR determines an applicant company’s trade secret claim is valid, disclosure may still occur through the IDNR’s duty to health professionals. The IDNR is allowed to disclose an applicant company’s trade secret information to a health professional for the purpose of determining what health care services are necessary for treatment of an affected patient.\textsuperscript{17} A health professional must complete and submit a request to obtain trade secret chemical information which shall:

1) state a need for the information and articulate why the information is needed;

2) identify whether the affected patient requires emergency or nonemergency health care services; and

3) identify the name and profession of the health professional and the name and location of the facility where the affected patient is being treated.\textsuperscript{18}

The HFRA Draft Regulations provide that the health professional shall not use the confidential information for any purpose other than the health needs asserted in the request.\textsuperscript{19} As soon as circumstances permit, the health professional must inform the trade secret owner of the names of all health professionals to which the information was disclosed, and the trade secret owner can request a confidentiality agreement from them.\textsuperscript{20}

\textsuperscript{13} HFRA Draft Regulations Section 245.720(d).
\textsuperscript{14} HFRA Draft Regulations Section 245.720(e).
\textsuperscript{15} HFRA Draft Regulations Section 245.720(f).
\textsuperscript{16} HFRA Draft Regulations Section 245.720(g).
\textsuperscript{17} HFRA Draft Regulations Section 245.730.
\textsuperscript{18} HFRA Draft Regulations Section 245.730(a)(1-3)(emphasis added).
\textsuperscript{19} HFRA Draft Regulations Section 245.730(g).
\textsuperscript{20} HFRA Draft Regulations Section 245.730(f).
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the IHFR Act and HFRA Draft Regulations have several gaps. There is no requirement in this initial request for the health professional to undertake a duty to keep any information received as confidential nor does it protect any information disclosed by the health professional to non-health professionals. Further, although a confidentiality requirement may be requested, there is no requirement that the health professional enter into such an agreement as a condition of requesting the information. This presents a potential for public disclosure. IDNR may want to consider adding such a requirement. It also might want to consider suggesting a form confidentiality agreement.

Immediate Response Time for Requests for Information by Health Professionals

Applicant companies must be prepared to react quickly to requests by health professionals even though the HFRA Draft Regulations do not expressly protect an applicant company that discloses its information to a health professional without a confidentiality agreement. In non-emergency situations, the trade secret holder must respond within the same business day.\(^\text{(21)}\) In emergency situations, the health professional can request a chemical disclosure directly from the applicant company at any time (24/7), and the applicant company within two (2) hours, by any means determined by the applicant company as a secure means of disclosure.\(^\text{(22)}\)

Implementation

The public comment period ends January 3, 2014, and the IDNR may ultimately resolve these issues when it revises the draft regulations. K&L Gates will be playing an active role in reviewing the entirety of the draft regulations and comments during the public comment period. Further, K&L Gates is in a position to actively assist clients in drafting and submitting comments: (i) generally in favor of buttressing or strengthening the current trade secret and confidentiality provisions of the regulations, and (ii) responding to specific public requests favoring weakening or altogether deleting those provisions.

Authors:

Christopher A. Bloom
christopher.bloom@klgates.com
+1.312.807.4370

Robert J. Best
robert.best@klgates.com
+1.312.807.4274

Daniel I. Hwang
daniel.hwang@klgates.com
+1.312.807.4381

\(^{21}\) HFRA Draft Regulations Section 245.730(c)(2)

\(^{22}\) HFRA Draft Regulations Section 245.730(b)(2).
OVERVIEW
For the past twenty-nine years, Mr. Paciaroni has concentrated his law practice in the area of commercial litigation with emphasis on engineering and construction law and international commercial transactions. He has extensive experience with construction disputes worldwide with a particular focus on projects in South America and the Middle East. In the construction field, his practice includes representation of owners, engineers, general contractors and specialty subcontractors in matters involving the offshore oil & gas, petrochemical, steel, heavy & highway, pulp and paper, power generation and general building construction industries on matters ranging from $1 million to $4.7 billion. Mr. Paciaroni’s experience includes both private and public works projects, bonding and insurance claims, mechanic’s liens and Miller Act claims, government contracting and the drafting and negotiation of construction contracts.

PROFESSIONAL BACKGROUND
- K&L Gates. 1986-date, partner since 1994
- Project Engineer with LTV Steel Corporation 1981-1984

PUBLICATIONS
Richard F. Paciaroni (continued)

PRESENTATIONS

- Panel Speaker – Engineer’s Society of Western Pennsylvania Program on Project Development: “Failure is an Option,” Pittsburgh, PA, April 17, 2013.
- Guest Lecturer, Construction Law, Luiss University, Rome, Italy, Masters Program in Construction Management. 2010.

PROFESSIONAL/CIVIC ACTIVITIES

- Selected for inclusion in the 2012 edition of The Best Lawyers in America in the practice area of Litigation-Construction.
- Member of Engineers’ Society of Western Pennsylvania
- Pennsylvania Bar Association (Construction Litigation Section, Civil Litigation Section, Federal Practice Section)
- Allegheny County Bar Association (former Chair, Construction Law Section)
Richard F. Paciaroni (continued)

- American Bar Association (Forum Committee on the Construction Industry, Tort and Insurance Practice Section)
- International Bar Association
- Member of AAA National Panel of Arbitrators since 1991

ADMISSIONS
- Supreme Court of Pennsylvania
- Supreme Court of the United States of America
- U.S. Court of Appeals, Third, Fifth and Tenth Circuits
- U.S. District Courts for the Western District of Pennsylvania, the Central District of Illinois and the Central District of Colorado
- Pro Hac Vice admission to state and federal courts throughout the United States including Texas, Massachusetts, New Jersey, California, Ohio and Kansas

EDUCATION
J.D., Duquesne Law School, 1986 (cum laude; Senior Staff Member, Duquesne Law Review)
B.S. Civil Engineering, Drexel University, 1981

REPRESENTATIVE ENGAGEMENTS - CONSTRUCTION
- Counsel to owner of the largest refinery in Libya in connection with disputes with crude oil supplier and breaches of the Feedstock Supply Agreement. The matter is currently in arbitration under the auspices of the ICC. The seat is in Paris, Libyan law applies.
- Counsel to Emirati conglomerate against its co-venturer with respect to disputes and breaches of a Shareholder’s Agreement. The dispute relates to the ownership and control of an oil refinery in Libya. The matter is currently in arbitration under the auspices of the ICC. The seat is in Paris, English law applies.
- Lead construction claims counsel to international EPC Consortium in connection with claims arising out of the construction of an ammonia/urea fertilizer plant located in Nangal, India.
- Lead counsel to Italian EPC contractor in connection with claims arising out of the construction of two polyolefin plants (PE and LLDPE) located at Dahej, Gujarat, India.
- Lead counsel to an Italian EPC contractor in connection with claims arising out of the construction of a new AGRP (Acid Gas Removal Plant) and revamp of existing AGRP located at the Mina Al Ahmadi refinery in Kuwait.
- Counsel to German electrical equipment manufacturer in connection with subcontractor claims arising out of the design and construction of two high voltage electrical substations in Doha, Qatar. This matter was in arbitration under the auspices of the ICC. The seat
was in Doha, Qatar and Qatari law applied. Claims were settled in a manner favorable to the client prior to evidentiary hearings.

- Advise international EPC consortium in connection with disputes with its main subcontractor on a $4.7 Billion gas processing plant currently under construction in Abu Dhabi.

- Counsel to German EPC contractor in connection with the construction of a gas condensate processing plant currently under construction in Oman.

- Advise U.S. based contractor (joint venture) with respect to claims arising out of the construction of a 6.5 mile section of a new $250 million toll road (Manor Expressway) located in Austin, Texas.

- Advise U.S.-based general contractor with respect to liability arising from the failure and collapse of concrete formwork/shoring which resulted in injuries and one fatality.

- Lead counsel for a U.S.-based EPC contractor in connection with claims arising out of the design and construction of a materials handling system for a coal mine located in Pennsylvania.

- Lead counsel to a U.S.-based engineering firm in connection with claims arising out of the design of a new electric furnace melt shop facility constructed in Alabama.

- Lead counsel to an international EPC consortium in connection with claims arising out of the construction of a $2.8 Billion Polyolefin and LDPE plant currently under construction in Abu Dhabi.

- Lead counsel to an international EPC consortium in connection with claims in excess of $350 million that arose out of the construction of a 600 MW power plant and associated 30mm gal./day seawater desalination plant located in Qatar. The matter went to arbitration under the auspices of the ICC. Seat was Manama, Bahrain, Qatari law applied. Language was English. Initial hearings were held in Paris, France. Claims were settled in a manner favorable to the consortium prior to evidentiary hearings.

- Lead counsel for an international EPC consortium with respect to claims arising out of the construction of a $1.4 billion polyethylene/polypropylene/butene plant located in Saudi Arabia.

- Lead counsel for an international EPC contractor in connection with claims arising out of the construction of a 3,700 MTPD methanol plant located in Egypt.

- Counsel to a French EPC contractor in connection with the construction of certain blast furnace equipment and an air separation plant for a steel mill located in Santa Cruz, Brazil.

- Lead counsel to an Italian EPC contractor in connection with claims arising out of the construction of five hydroelectric power plants in southwestern Brazil. The dispute went to arbitration under the auspices of the ICC. Seat is Cuiaba, Brazil, Brazilian law applies. Language was Portuguese. First phase of hearings was completed in 2012 resulting in a substantial award in favor of the EPC contractor. Second phase of hearings is scheduled for late 2014.
Richard F. Paciaroni (continued)

- Counsel to the owner of the world’s largest wind power project located near Mojave, California.
- Lead counsel for EPC contractor in connection with claims arising out of the construction of the world’s largest hydrogen production plant located in Richmond, California.
- Lead counsel for an international EPC contractor with respect to claims arising out of the construction of two 370 MW coal-fired power plants constructed in Chile.
- Lead counsel for U.S.-based contractor in connection with claims arising out of the construction of a materials handling system for a 1.5 million TPY coke oven battery that was built in Vitoria, Brazil. Matter went to arbitration under the auspices of the ICC. Seat was Rio de Janeiro, Brazil, Brazilian law applied. Language was English. The claims were settled prior to hearings.
- Lead construction claims counsel to an international consortium which acted as the EPC contractor for the design, construction and start-up of an $800 million chemical complex located in Rio de Janeiro, Brazil.
- Counsel for multinational contractor with respect to over $1 billion in claims arising out of one of the world’s largest offshore oil and gas projects with an initial contract price of over $2.5 billion.
OVERVIEW
Ms. Petronio is experienced in representing clients in a large variety of complex commercial litigation matters in federal, bankruptcy and state courts, as well as before domestic and international arbitration tribunals. She has specialized experience in complex, business litigation, including business fraud and deal litigation, oil & gas, healthcare, and insolvency matters on behalf of both plaintiffs and defendants. Ms. Petronio also has experience in matters related to legal malpractice defense, ethics and professional responsibility.

Ms. Petronio’s practice emphasizes:
- Complex commercial litigation
- Domestic and international arbitration
- Bankruptcy
- Business fraud and insolvency litigation

PROFESSIONAL/CIVIC ACTIVITIES
- American Bar Association
- Dallas Bar Association
- Dallas Bar Foundation
- Board Member, Creative Arts Center of Dallas, 2006

ADMISSIONS
- Texas
- United States Court of Appeals for the Fifth Circuit
- United States Court of Appeals for the Second Circuit
- Northern District of Texas
- Southern District of Texas
- Western District of Texas
- Eastern District of Texas
Beth W. Petronio (continued)

EDUCATION
J.D., University of Texas, 1996 (with honors, Managing Editor, The Review of Litigation, Member, American Journal of Criminal Law)
B.A., Texas Christian University, 1993 (magna cum laude)

ACHIEVEMENTS
Ms. Petronio has received numerous honors, including:

- Harold F. Kleiman Award, 2003
- Star of Justice Award, Texas Access to Justice Commission, 2003
- Special Services Award, Dallas Volunteer Attorney Program, 2003
- President’s Award, State Bar of Texas, 1998

REPRESENTATIVE WORK

- Representation of Astra Oil Trading NV in connection with confirmation of $639 million arbitration award against Petrobras American, Inc. and related litigation matters, resulting in recovery by Astra of more than $820 million.
- Representation of operator in international arbitration regarding propriety of AFEs.
- Representation in international arbitration of US-based manufacturer of equipment used to grow synthetic sapphire.
- Representation of oil & gas equipment supplier in various litigation matters.
- Representation of major telecommunications company in various related arbitration proceedings regarding the sale and refurbishment of cell phones.
- Representation of various hospitals in connection with claims pursuant to the Texas Prompt Pay Act and related to underpayment of out-of-network healthcare claims.
- Representation of major telecommunications company in litigation alleging False Claims Act liability regarding collection and payment of sales taxes.
- Representation of equipment fabricator in connection with indemnification and contractual claims related to refinery equipment.
- Representation as outside general counsel of DII Industries Asbestos PI Trust, a $2.6 billion post-bankruptcy trust funded by Halliburton and related subsidiaries.
- Representation of major bank in various litigation matters, including business fraud litigation arising out of the syndication of a $500 million loan.
Beth W. Petronio (continued)

- Representation of VarTec Telecom in connection with various litigation and bankruptcy matters, including successful defense in a $500 million arbitration matter and prosecution of business fraud claims arising in connection with VarTec’s $225 million acquisition of Excel Telecommunications from Teleglobe, Inc. and its parent, BCE, Inc.
- Representation of litigation trustee in ATM Online bankruptcy in pursuit of causes of action against third parties.
- Representation of Tyler Technologies in connection with trade secret, breach of contract and business fraud litigation related to $80 million acquisition.
- Representation of a large investment company in connection with breach of contract and tort claims related to $200 million transaction.
- Representation of clients in connection with fraud and related allegations arising out of tax shelter issues.
- Representation of a variety of bondholders including Fidelity Investments and Cerberus Capital Management, LP in connection with class action claims against former officers, directors, accountants and underwriters of Livent, Inc.
- Representation of the Official Committee of Unsecured Creditors in the Livent bankruptcy in connection with claims against Canadian Imperial Bank of Commerce.
- Representation of numerous former owners of roofing companies nationwide in connection with the approval of an asset sale in the bankruptcy court, as well as in litigation against former officers, directors and professionals.
- Representation of Jewel Recovery, L.P., the litigation trust for the bankruptcy estate of Zales and Gordon Jewelry Co., including the successful prosecution of one of the largest leveraged layout fraudulent transfer actions in U.S. history.
- Representation of a global provider of technology-based business solutions and two of its executives in connection with securities class action litigation filed in New York, California and Texas.
- Representation of a large land developer and a private individual in connection with bankruptcy litigation arising in the Nelson Banker Hunt bankruptcy case.
- Representation of major telecommunications company in connection with various litigation and arbitration proceedings.
- Representation of numerous nationally known law firms in connection with the defense of legal malpractice actions and related claims.
- Representation of former Olympic athlete in connection with litigation against the former owner of a sports nutrition center, who had made allegations against the former athlete related to steroid and drug use.
- Representation of an international company in connection with the defense of defamation actions related to communications sent to the board members of a trade organization.
OVERVIEW

Mr. Richey's practice is concentrated in the areas of construction and engineering, general commercial, bid protests, oil and gas and renewable energy. For more than 20 years, his work has involved both dispute resolution (litigation, arbitration and mediation) and contract drafting. During this time, Mr. Richey has worked on local engagements as well as matters in over 30 different states, Asia, Africa, Europe, Australia and South America representing companies both large and small.

**Construction & Engineering.** Mr. Richey has worked on disputes and contracts involving multi-million dollar construction projects, including material handling systems, petrochemical, methane, LNG, polypropylene, polyethylene (low and high density), transportation (rail, road and air), power generation (including coal fired power plants), health care, civil construction, residential homes, airports and sewage treatment plants.

**Bid Protests.** Mr. Richey has a unique focus on bid protest related to state and local government contracts throughout the country. Perhaps no practitioner in the country has been involved in handling bid protests in as many jurisdictions as Mr. Richey and his team.

**Oil and Gas.** Mr. Richey has been involved in disputes regarding oil and gas pipelines, off shore oil and gas rigs (FPSOs), welding issues and the supply of line heaters and separators.

**General Commercial.** Mr. Richey's experience in commercial litigation has occurred through his work in representing the World Wrestling Entertainment, Inc., PPG Industries, Inc. and other commercial clients. This work has involved dealing with breach of contract, real estate litigation (of all kinds), Article 2 of the Uniform Commercial Code (sale of goods), civil rights, tort, consumer protection act, employment, defamation and wrongful death claims.

**Renewable Energy.** Over the past decade, Mr. Richey has been at the forefront of dealing with dynamic legal issues involved in the wind and solar industries in both dispute resolution and contract drafting.

Above all else, Mr. Richey prides himself on his hard work ethic, ability to provide cost effective legal services to clients no matter how small or large the legal matter and his overall determination to bring his clients' legal matters to a successful conclusion.

RECENT ARTICLES AND PUBLICATIONS

Jason L. Richey (continued)


SPEAKING ENGAGEMENTS

PROFESSIONAL/CIVIC ACTIVITIES
- Selected for inclusion in the 2015, 2014 and 2013 edition of Pennsylvania Super Lawyers
- Certified Arbitrator for the American Arbitration Association (AAA); Attended the AAA University for Arbitrators
- Member of AWEA
RECENT PUBLISHED COURT OPINIONS

- Campfield v. State Farm Mutual Automobile Insurance Company, 532 F.3d 1111 (10th Cir. 2008).

ADMISSIONS

- All Commonwealth of Pennsylvania Courts
- U.S. Court of Appeals for the Third and Tenth Circuits
- U.S. District Court for the District of Colorado
- U.S. District Court for the Western District of Pennsylvania
- Pro Hac Vice admission to state and federal courts throughout the United States, including California, Connecticut, Louisiana, Florida, New Jersey, West Virginia, Georgia, Michigan, Indiana, New York, Ohio, Texas, Arizona, Arkansas, Delaware, Maryland, New Mexico, Missouri and Minnesota.

EDUCATION

J.D., The Ohio State University Moritz School of Law, 1996

B.A., Allegheny College, 1993 (magna cum laude, Phi Beta Kappa, three-time NCAA Academic All American Wrestler)

REPRESENTATIVE WORK

Dispute Resolution

- Represent developer of the Phoenix Sky Train project at the Phoenix International Airport in dispute against engineers and contractors.
- Counsel to a large natural gas processor in connection with dispute against prime contractor for a natural gas pipeline project in West Virginia.
- Counsel to scrap metal company in ICC arbitration, involving a breach of contract dispute over the purchase of goods in Venezuela.
- Counsel for inmate telephone provider as well as construction contractors in bid protests throughout the country, including in Pennsylvania, Connecticut, New Mexico, Missouri, Indiana, Ohio, Michigan, New York, New Jersey, Virginia, Oregon, Maryland, Kentucky, Illinois, New Hampshire, California, Arizona and Louisiana. In handling such
Jason L. Richey (continued)

representation over the past decade, Mr. Richey has developed an extensive record of successes in resolving such disputes in favor of his clients.

- Represented numerous wind farm owners in disputes, including but not limited to, disputes over the supply of defective turbines and other goods, whether the wind farm noise and flicker constituted a nuisance or trespass under the law, liability related to a weather event that decimated the wind farm and disputes over the actual location of the wind turbines and which parties have entitlement to the corresponding royalties.

- Successfully represented major U.S. EPC Contractor in dispute regarding whether it supplied a defective gas turbine transformer that had a catastrophic failure at a Combined Cycle Generation Facility in the Dominic Republic. Owner complained that contractor and/or its suppliers provided a transformer not compatible with the tropic conditions found in the Caribbean. The matter was subject to ICC arbitration with the seat being in Miami.

- Counsel to an Italian EPC contractor in connection with claims arising out of the construction of five (5) hydroelectric power plants in southwestern Brazil. The total project cost is approximately R$500 million and the amount in controversy exceeds R$250 million. The contractor terminated the contract for non-payment and the owner has counter claimed for cost to complete, liquidated damages, lost revenue and lost profits. There are two ongoing ICC arbitrations relating to the claims. The seat of both arbitrations is in Cuiaba, Brazil and the governing law for both arbitrations is Brazilian law.

- Represented numerous clients in disputes and through consultation on matters related to the supply of goods and materials governed by Article 2 of the Uniform Commercial Code.

- Represented major Spanish contractor in Crescent Dunes Solar Project located in Tonopah, Nevada in an action filed by a potential subcontractor where an ex parte injunction was issued halting contractor’s progress prior to our retention. As a result of our representation, the lawsuit was dismissed and contractor’s progress continued. The Crescent Dunes project will be the largest power plant of its kind in the world and be the nation’s first commercial-scale solar power facility with fully integrated energy storage. It involves one 540-foot solar power tower and a field of thousands of large mirrors which reflect sunlight toward a receiver on the tower.

- Successfully represented a large United State EPC Contractor related to dispute regarding delays and defective work in the Tren Urbano mass transit project in Puerto Rico.

- Counsel for an international EPC contractor in connection with claims arising out of the construction of a 3,700 MTPD methanol plant under construction in Egypt. We submitted claims on behalf of the contractor which led to a successful resolution of the matter for our client.

- Counsel for an international EPC consortium with respect to claims arising out of the construction of a $1.4 Billion polyethylene/polypropylene/butane plant located in Saudi Arabia. We submitted claims against the owner as well as defending against the owner’s claim for delay damages. All disputes were to be resolved in ICC arbitration in London, England. The matter settled prior to arbitration with the owner dropping all of its claims for liquidated damages.
• Counsel for international EPC contractor with respect to claims arising out of the construction of two 370 MW coal-fired power plants currently under construction in Chile. We identified and presenting contractor’s claims against the project owners. A partial settlement with the owner recently resulted in a 28 month time extension for the client along with relief from all LD’s and cash payments from owner to client totaling $28 million. Any remaining disputes will be subject to ICC arbitration in Paris, France or Santiago, Chile under Chilean law.

• Represented PPG, which was a subcontractor, in an arbitration proceeding filed with the American Arbitration Association regarding construction disputes related to the construction of a fiberglass facility located in Clarksville, Tennessee. PPG supplied technology and certain services to the general contractor and owner in connection with the facility. The matter resulted in a favorable outcome for PPG in part, as a result of K&L Gates’ ability to obtain summary judgment and dismissal of a majority of owner’s damages claim against PPG due to a consequential damages provision.

• Counsel in five-year long successful defense of PPG subsidiary against antitrust, consumer protection and tort claims where Plaintiffs claimed damages of approximately $200 million. Plaintiff filed a complaint in the United States District Court for the District of Colorado alleging that Defendants violate the Sherman Act, committed unfair and deceptive trade practices in violation of Colorado’s Consumer Protection Act (“CCPA”) and committed tortious interference with actual and prospective contractual relations. The Court granted in part a motion to dismiss filed by K&L Gates, dismissed Plaintiffs’ Sherman Act claims and allowed discovery to proceed on Plaintiffs’ CCPA and tort claims. After the conclusion of discovery, K&L Gates moved for summary judgment on the remaining claims. The Court granted the motion, entered judgment in favor of our client. The Tenth Circuit affirmed the District Court’s dismissal of Plaintiffs’ antitrust, CCPA and tort claims.

• Lead counsel for US-based contractor, in connection with claims arising out of the construction of a new 1.5 million TPY coke oven battery that was built in Vitoria, Brazil. Taggart provided all of the coal and coke handling equipment for the Project. Mr. Richey is responsible for the prosecution of the claims against the owner, securing local counsel in Brazil and managing a team of lawyers and client engineers who are working on the case. The matter is currently in ICC arbitration, with hearings to be held in Rio de Janeiro, Brazil and conducted under Brazilian law.

• Counsel for multinational contractor with respect to over $1 billion in claims arising out of one of the world’s largest offshore oil and gas projects with an initial contract price of over $2.5 billion. The engagement spanned a period of three years. While all disputes were subject to ultimate resolution under the UNICITRAL Arbitration Rules (1976), all disputes were resolved through a series of settlements without the necessity of formal arbitration proceedings. The disputes involved issues concerning engineering and construction changes, claims of cardinal change, liquidated damages for delay, schedule analysis with claims for time and money entitlement, international letters of credit, value added tax (VAT) claims, force majeure claims and project finance issues in connection with a worldwide syndicate of commercial and national banks. The matter was settled before arbitration resulting in a nearly two year time extension and additional compensation in excess of $200 million.
Jason L. Richey (continued)

- Counsel for Plaintiff in Weirton Steel Corporation v. TECO-Westinghouse Motor Company, Case No. 5:00CV-88-S in the United States District Court for the Northern District of West Virginia. We represented the owner of a steel mill, Weirton Steel Corporation, against defendant TECO-Westinghouse Motor Company. The case was a civil action wherein Weirton Steel sought damages from TECO arising out of the defective design and assembly of two 7,000 H.P. Reversing Rougher Mill motors. The case was settled with a nearly two million dollar payment made to Weirton Steel.

- Counsel for contractor in dispute over whether contract for work at LAX airport had been properly terminated for convenience or whether the contract had been abandoned. The matter was resolved in the California state court system.

- Represented Construction Manager on disputes regarding numerous hotel and hospitality construction projects in North America.

- Represented non profit health care facility for the elderly and disabled against both the construction contractor and architect for extensive delays on the project as well as defective work. The strategy involved successfully resolving AAA arbitration with contractor and then suing the architect in Pennsylvania State Court. Suit against architect resolved favorably after prevailing at the summary judgment phase of the litigation.

- Represented Pennsylvania hospital related to disputes surrounding delays and defective work on the construction of an emergency room in a multi-prime contract situation.

- Counsel for the owner of an 800 mw combined cycle power plant, MEP Pleasant Hill LLC (“MEP”) in a dispute with the EPC Contractor, Black & Veatch Corporation (“Black & Veatch”) arising out of a force majeure claim submitted by Black & Veatch. The claim arose when key HRSG components (worth about $30 million) were damaged when the ship carrying the parts got caught in a typhoon while en route from Japan to Houston, TX. The dispute was settled amicably and the Project was completed on time.

- Counsel for Owners in construction dispute in the Court of Common Pleas of Armstrong County, Pennsylvania. The action sought recovery of $500,000 from the Defendants as a result of their defective design and construction of a 138 KV power transmission line. Early on in the case K&L Gates obtained a default judgment against one of the defendants for its failure to answer the complaint. Later, the entire case was successfully mediated in one day, resulting in a favorable outcome for the client.

- Represented contractor that specializes in the construction of waste water treatment plant in numerous disputes throughout the Commonwealth of Pennsylvania.

- Counsel for a multinational engineering and construction company regarding an onshore gas-to-liquids project located in Africa with an original value of approximately $1.7 billion value. Assisted the client in obtaining a change order in the amount of approximately $250 million. Thereafter, assisted the client in converting the contract from a lump sum pricing structure to a cost reimbursable structure.

- Counsel for contractor in claim recovery action after contractor had been terminated for convenience from a Texas State Highway contract.
Represented large natural gas producer in jury trial in the Northern District of Ohio in dispute over whether supplier had produced defective line heaters and three phase separators used in the Marcellus Shale.

Part of legal team that obtained a jury verdict for compensatory and punitive damages on behalf of the estate of a young woman in a wrongful death action against her former fiancé, a municipal police officer. Focusing on the problem of domestic violence by a police officer, the trial team obtained what is believed to be the only jury verdict in American legal history holding another person responsible for causing a suicide.

Represented company in the entertainment industry regarding various disputes over different leases of studios in New York City utilized for popular television shows.

Successfully represented WWE in the Delaware Chancery Court in an action brought by USA Network seeking to enjoin his client from accepting an offer for their programming from another network and obtained an affirmance before the Delaware Supreme Court of the trial court’s decision permitting WWE to accept the competing offer.

Part of legal team that obtained a defense verdict from a jury on behalf of WWE against a charge of sexual harassment brought by a former female performer in the Eastern District of New York.

Part of legal team that obtained a defense verdict in proceedings before the American Arbitration Association on behalf of WWE in a case involving claims by an ex performer that he was totally disabled as a result of post concussion syndrome.

Represented consumable water company in action filed in Pennsylvania state court to determine who owned 1,200 acres of land with water aquifiers. Claims in the action included claims for quiet title, ejectment, trespass and adverse possession.

Represented largest roofing contractor in the United States in numerous roofing related disputes around the country.

Counsel for subcontractor in an ICC arbitration arising out of the design, supply, installation, commissioning, check-out and testing of a two stand reversing mill and equalizing furnace for a flat roll products mini mill in Ostrava, Czech Republic. The subcontractor asserted claims in the aggregate amount of approximately $20 million for unpaid invoices, additional work, and value added tax. In addition, the contractor asserted counterclaims in the amount of approximately $12 million. Following the hearings conducted in Vienna, Austria, the arbitration panel rendered an award favorable to the subcontractor.

Successfully represented large U.S. contractor regarding claims from neighbors that contractor negligently performed remediation of fly ash around their houses from slope failure and/or that remediation work somehow caused a nuisance. The case was litigated in Allegheny County, Pennsylvania Court of Common Pleas.

**Contract Drafting/Consultation**

- Drafted, reviewed, revised and negotiated numerous EPCs for solar power facilities in Canada and the United States (Hawaii, California, New Jersey, Arizona). In addition to
EPCs, we have worked on many other types of construction contracts for solar power facilities (such as subcontracts, design contracts and supply contracts).

- Conducted a comprehensive analysis, review and revision process for a large EPC Contractor's suite of construction contracts (including subcontracts, design contracts and supply contracts) for use on large projects in numerous states, including Indiana, Illinois, West Virginia, Ohio and Kentucky.
- Reviewed, revised and drafted an EPC for a large international construction company for the construction of the first ever off-shore wind facility (involving over 100 turbines) in United States as well as drafted numerous other contracts for the construction of on-shore wind-energy facilities for a variety of clients.
- Counseled numerous contractors on the issue of whether or not they need to be licensed as a contractor in numerous states throughout the country.
- Represented an international construction company in drafting contracts for the construction of a large data center and integrated cogeneration facility.
- Drafted numerous contracts for use by oil and gas companies including master services agreements and drilling equipment contracts.
- Drafted and negotiated a design contract for a large test bench facility for an international manufacturer of gearing for mining and wind industry.
- Drafted a contract for the design and installation of a complex comprehensive steel mill control/processing system for a large steel company.
- Drafted numerous miscellaneous contracts for a large comprehensive commercial roofing and flooring contractor in the United States.
- Drafted a Lease/Purchase Agreement for four oil-drilling rigs to be transported from Oklahoma for use in Texas.
- Drafted an engineering supervision contract for large Spanish Contractor for project which involved a high density computer center powered by a 240 MW co-generation plant to be located in Delaware, New Jersey or Pennsylvania.
- Drafted an early works agreement for a Project in Cerro Verde, Guatemala project where large Spanish Contractor was the EPC contractor for an Open Cycle Dual Fuel Combustion Turbine Power Station.
OVERVIEW
Mr. Smith focuses on advising on UK and international transport, energy and infrastructure projects and disputes. He has more than 18 years experience in advising on construction and infrastructure projects and has acted for owners, contractors and consultants on many different disputes utilising many different forms of dispute resolution including litigation, arbitration, adjudication and mediation. He also has significant experience of insurance matters relating to construction and energy projects and advises owners, contractors and consultants on various forms of insurance.

He regularly advises on procurement strategy and contractual arrangements for major infrastructure projects, particularly those utilising the New Engineering Contract. He is frequently requested to lecture on the subject and holds one day workshops on the use of the NEC.

He also has extensive experience drafting bespoke contracts for owners, consultants and contractors and amending standard forms of contract, including FIDIC, JCT, ICE, IChemE, LOGIC and AIPN and the RIBA appointments, GC Works and the PSC and ACE conditions, to suit particular projects and negotiating contract terms.

He is recommended in Chambers 2012 for his "enthusiasm, attention to detail and plain speaking."

PROFESSIONAL BACKGROUND
Mr. Smith has been a lawyer with the firm since 2000. He qualified as a lawyer in 1995.

PUBLICATIONS
He contributed several chapters to Construction Insurance and UK Construction Contracts (Second Edition), published by Informa in September 2008. He has published articles in journals on a range of matters including the NEC, construction insurance and health and safety issues.

PRESENTATIONS
- FIDIC Americas Conference 'Successfully Resolving International Disputes under FIDIC' New York, 4th October 2012;
- ‘Construction Risk Management for Major Projects' Joint Marsh/K&L Gates Conference Dubai, 26 September 2012;
Matthew Smith (continued)

- ‘Successfully Resolving International Construction Disputes' Arbitration Club, 2 October 2012
- NEC LinkedIn Conference "When it all goes wrong: A spirit of mutual mistrust and non-cooperation?" 25 June 2012;
- ‘NEC: Compensation Events and Programme' Issues K&L Gates client workshop 7 June 2012;
- NEC: Warranties and Defects' K&L Gates client workshop 24 May 2012;
- ‘FIDIC Claims: Time Bars and Documentation' FIDIC Regional Conference Warsaw 26-27 April 2012;
- 'Construction Act Amendments: Payment and Adjudication' K&L Gates client workshop 22 September 2011;
- 'Limitations of Liability: Recent Case Law' K&L Gates seminar 29 March 2011;
- ‘NEC: Compensation Events and Design Issues' K&L Gates client workshop 22 March 2011;
- 'Construction Insurance' K&L Gates seminar 25 May 2010;
- ‘NEC Contract Skills: Administration and Management of Compensation Events under the NEC' K&L Gates client workshop 15 September 2010;
- ‘NEC Contracts: Commercial Items and Defects' K&L Gates client workshop 1 September 2010;

PROFESSIONAL/CIVIC ACTIVITIES
- NEC Users Group
- MDBF Corporate Panel Member, Dispute Board Federation
- FICACIC (Member)
- Society of Construction Law (Member)
- Technology and Construction Solicitors' Association (Committee Member)
- Arbitration Club (Executive Committee Member)
- Building Regulations Advisory Committee 2001-2003; advising the Deputy Prime Minister on legal issues relating to Building Regulations
- Qualified Solicitor Advocate (Higher Rights of Audience)
Matthew Smith (continued)

EDUCATION
CPE, College of Law, Lancaster Gate, 1992
LSF Royal College of Law, London, 1993
BSc, University of Bristol, 1991 (Hons)

ACHIEVEMENTS
- Selected as a 2013 London Super Lawyer

REPRESENTATIVE MATTERS
- Acting for a major high profile transport undertaking advising on the main construction works tender for a £700m infrastructure upgrade project
- Preparing amendments to the NEC3 Engineering and Construction Contract and Professional Service Contract standard terms and conditions for 13 Framework Agreements for procuring major projects
- Advising on standard amendments to the FIDIC Yellow, Red and White Books for a project in Beijing, China, and liaising with local lawyers to amend them to suit local conditions
- Defending a £37m adjudication in relation to rolling stock performance
- Advising on main construction contracts forming part of a major £1bn infrastructure project using a modified NEC3 Option C target cost contract
- Acting for a cement manufacturer in arbitration proceedings against a structural and geotechnical engineer relating to late completion of a cement works in Ewekoro, near Lagos, Nigeria
- Advising on a £300m project using the NEC3 Engineering and Construction Contract including amendments to the mechanisms for payment and tender procedure
- Acting for an energy company in relation to claims by contractor for additional payment and damages concerning a project to construct a process plant in Mozambique.
- Acting for a contractor preparing and negotiating LOGIC contracts for a €30 million project to supply pipes for an oil pipeline
- Advising a Joint Venture between two major contractors on various multi-million pound disputes with the employer, the electrical and the mechanical sub-contractors involving both adjudications and proceedings concerning the major refurbishment of a hotel in Paddington, London
- Advising a contractor on the effect of provisions in onshore and offshore contracts relating to a $1.7bn Gas to Liquid Project in Nigeria
- Acting for a property company in relation to a series of disputes arising from the construction of a golf resort, hotel and leisure complex;
Matthew Smith (continued)

- Acting for a joint venture in proceedings against an insolvent firm of mechanical and electrical engineers, and six different insurers. The joint venture sought declarations in relation to the insurers reservation of rights concerning the coverage provided by primary and excess layer insurance policies.

- Acting for an international logistics company in proceedings against a main contractor under a warranty concerning late completion and defective works in a warehouse and distribution centre.

- Acting for an engineer in proceedings by a construction manager relating to late completion of a shopping centre development in Bristol.

- Acting for an engineer in proceedings in relation to delays to the construction of a motorway service station caused by unforeseen ground conditions.

- Developing the new integrated project insurance policy in conjunction with the UK Office for Government Commerce and the Strategic Forum for Construction. This is a "no fault" insurance policy for the construction industry which will tested on several pilot projects in the public sector.
OVERVIEW
Steven Sparling is a partner in the firm’s Washington, D.C. and Houston offices. Mr. Sparling has a comprehensive understanding of the global LNG and oil industries—legal, operational and commercial. He has represented clients in connection with the strategic assessment, project development and optimization of over 30 projects in the Americas, Asia, and Europe.

In addition, he works proactively to advise on charterparties, marine operation, marine services agreements, tug services agreements, risk management and liability issues, safety and oil spill preparedness, as well compliance matters involving U.S. anti-boycott laws, sanctions programs, customs, trade classifications and Jones Act requirements.

His clients include national oil companies, international oil companies, oil and gas marketers, utilities, financial institutions, project developers, project operators, and shipping companies.

PROFESSIONAL BACKGROUND
Prior to joining K&L Gates, Mr. Sparling was a member of the energy and environmental practice group at a Washington, D.C. law firm. Prior to practicing law, Steven served as an officer in the U.S. Navy aboard the USS Barry (DDG 52).

PROFESSIONAL/CIVIC ACTIVITIES
- Member, Association of International Petroleum Negotiators
- Member, Society of Petroleum Engineers

ADMISSIONS
- District of Columbia
- Texas
- Virginia

EDUCATION
J.D., George Mason University School Law, 2000 (magna cum laude)
B.A., University of Pennsylvania, 1990
Steven C. Sparling (continued)

LANGUAGES
- English

REPRESENTATIVE WORK

Strategy
- Developing LNG strategy options for oil and gas companies, project developers and financial institutions.
- Analyzing and advising major concerns on the viability of LNG projects in Africa, the Americas, Asia and Europe.
- Advising state and national government officers on LNG project development.

Project Development
- Advising oil and gas companies, financial institutions, utilities, shipping companies and project developers on large and small scale LNG liquefaction projects throughout North America.
- Counseling project developers, oil and gas companies, and utilities on the development of onshore and offshore regasification terminal projects in the Americas and Europe, including site assessments, waterway suitability, environmental issues, regulatory processes and commercial agreements.
- Advising major concerns in small-scale LNG and LNG bunkering projects.
- Counseling major companies on LNG liquefaction and regasification terminal safety, security and operations.
- Developing LNG stakeholder engagement strategies for major concerns.
- Advising project developers on LNG liquefaction and regasification terminal services agreements.

Terminal Access
- Negotiating and drafting terminal use and throughput agreements for European and North American LNG, LPG and oil terminals for major concerns.
- Advising major concerns on interruptible and third-party access to LNG terminals in the Americas, Asia and Europe.
- Counseling major concerns on rights and obligations under governing regulations, contracts, settlements and terminal procedures.
- Advising major concerns on LPG, crude oil and oil product terminal agreements.

Supply and Services Contracts
- Negotiating and drafting over 100 master, long-term and short-term LNG, LPG, oil and products sales and purchase agreements for buyers and sellers.
Steven C. Sparling (continued)

- Leading workshops to train commercial teams at oil and gas companies on sale and purchase agreements.
- Negotiating and drafting onshore and offshore oil field, LNG and LPG services contracts for major concerns.

**Multiple Shipper**

- Analyzing and modeling multiple-user terminal operations for major concerns.
- Negotiating and implementing complex intershipper agreements that address LNG vessel schedules, inventory management, as well as storage and send-out coordination.
- Developing multiple-shipper vessel scheduling procedures.

**Marine**

- Acting as the lead counsel for the internal investigation team at Transocean Offshore Deepwater Drilling Inc. on the 2010 Macondo Well oil spill in the U.S. Gulf of Mexico.
- Advising a global commodities trading company and serving as part of its emergency response team for several marine oil spills.
- Drafting emergency response plans for national oil companies, commodities traders and a New England state for oil, oil products, LPG and LNG stored and transported both onshore and offshore.
- Preparing and executing tabletop exercises and day-long incident drills for oil companies, commodities traders and ship operators.
- Counseling major concerns about LNG, oil and products lightering and barging.
- Negotiating and drafting tug services and cost-sharing agreements at numerous LNG terminals.
- Drafting marine operations manuals at 5 LNG terminals for import and export operations.
- Advising major concerns on the coordination of shipping schedules and operations at Asian, European and North American LNG terminals.
- Draft and negotiate time and voyage charterparties for LNG, LPG, crude oil and product tankers.
- Advising master limited partnership on a “drop down” of marine assets.

**Safety and Security**

- Advising a New England governor and state agencies concerning LNG issues, including state emergency response plans, consequence assessments, FERC proceedings, and U.S. Coast Guard evaluation of safety and security.
- Representing LNG terminal stakeholders in U.S. Coast Guard procedures to develop safety and security plans for numerous U.S. LNG terminals.
PRESENTATIONS

- Speaker and Moderator, International Oil and Gas Seminar (October 21, 2014)
- Speaker, Workshop on Structuring, Negotiating and Managing LNG Projects, Tanzania (October 13, 2014)
- Speaker, Seoul LNG Seminar (March 25, 2014)
- Speaker, Tokyo LNG Seminar (September 10, 2013)
- Speaker, “US LNG Exports – Impacts on Alaska and Beyond” K&L Gates Second Annual Alaska Oil & Gas Conference (July 10, 2013)
- Speaker, “Floating LNG: Commercial and Technical Drivers for Liquefaction and Regas Projects,” 12th Annual World LNG Summit (November 14-17, 2011)
- Speaker, “New Directions in Liquefaction, from the LNG ‘Hub’ to Offshore Liquefaction,” 2011 Offshore Asia Conference (March 29-31, 2011)
- Speaker, “Multiple User LNG Terminal Insights” CWC World LNG Summit (November 29-December 2, 2010)

PUBLICATIONS

- United States Coast Guard Guidance May Encourage Use of Liquefied Natural Gas as a Marine Fuel, Liquefied Natural Gas Alert, March 20, 2015
- Ocean Tanker Transport in 8 Energy Law and Transactions ch. 86 (David J. Muchow & William A. Mogel eds.), 2014
- LNG Firms Struggle With Investments in Volatile Market, Oil & Gas Journal, December 18, 2009
- Co-author, “Marine CNG Opens Alternate Production, Delivery Options,” Oil & Gas Journal (February 23, 2009)
- Author, “LNG Firms Struggle With Investments in Volatile Market,” Oil & Gas Journal (December 18, 2008)
OVERVIEW

John F. Sullivan III litigates complex commercial disputes. His practice focuses on energy-related matters typically involving the oil and gas industry. Mr. Sullivan has over 28 years experience resolving disputes for clients through trials, arbitration or alternative dispute resolution. Particular areas of experience include joint operating agreements, mineral development agreements, indemnities, trade secrets, unfair competition, shareholder oppression and fiduciary duties. Mr. Sullivan also has significant experience handling tort litigation, including cases arising from catastrophic accidents such as plant explosions.

Mr. Sullivan is a skilled and passionate advocate for his clients, having tried over 50 cases and litigated high-stakes arbitrations. He has also represented clients successfully in class certification proceedings, injunction hearings and on appeals in both the federal and state systems. He is certified by the Texas Board of Legal Specialization as a specialist in civil trial law as well as personal injury trial law.

In addition to his litigation practice, Mr. Sullivan devotes considerable time and effort to human rights causes, such as the representation of human trafficking victims, immigrants seeking asylum and the protection of children in the legal system.

PROFESSIONAL BACKGROUND

Prior to joining K&L Gates’ Houston Office in the fall of 2013, Mr. Sullivan was a partner at Watt Beckworth Thompson Henneman & Sullivan LLP. From 1987 to 2008, Mr. Sullivan practiced law at Fulbright & Jaworski LLP, where he was a partner.

PRESENTATIONS AND PUBLICATIONS

- "Injection Wells and Seismic Events: How are Courts and Regulators Reacting to this Emerging Issue?," Presented at the 35th Annual Energy & Mineral Law Foundation Institute, The Greenbriar, White Sulphur Springs, W.Va., June 1, 2014
- “Protecting, Overcoming and Distinguishing the Work Product Privilege in Texas,” University of Texas CLE Land Use Conference, March 27, 2014
- “Texas Surface Rights Will Be Tested In Pooling Case,” (co-author), Law360, March 17, 2014
John F. Sullivan III

- ““Houston, We May Have a Problem!’ — Surface Owner Who Put up ‘Roadblock’ to Oil Driller’s Use of Property to Service Wells in a Pooled Unit Arrives at Texas Supreme Court,” Oil and Gas Alert, February 27, 2014

- Testimony before Federal Civil Rules Advisory Committee on proposed revisions to Federal Rules of Civil Procedure, Dallas, Texas, February 7, 2014

- “The Eyes of Texas are upon a Subsurface Trespass Case,” Oil and Gas Alert, January 13, 2014

- “A Litigator’s Perspective on the Current State of, and Recent Developments in, Arbitration,” (co-author), presented at 37th Annual Page Keeton Civil Litigation Conference, The University of Texas School of Law — CLE, Austin, TX, October 24-25, 2013


- “Ins and Outs of Indemnity,” 35th Annual Page Keeton Civil Litigation Conference, October 28, 2011


- “Litigating Against DHS on Arbitrary Denials of Specific Consent,” by AILA, December 7, 2007

- “What is Pro Bono and Why Do We Do It?,” ACCDFW/Fulbright & Jaworski Pro Bono Summit, March 8, 2007

- “Stock Options Backdating,” State Bar of Texas CLE Webcast, February 6, 2007

- “The Enron Trial Verdict: What We Can Learn from this Landmark Case,” June 20, 2006

- “Corporate Governance Roundtable,” by H.S. Grace & Co., October 5, 2006

- “Stock Options Backdating,” The Houston Bar Association Securities and Arbitration Section, November 16, 2006


- “The Odyssey of a Pro Bono Attorney Representing Unaccompanied Immigrant Children,” Key Note Speaker, Bi-National Conference on Procedures, Protections & Due Process for Unaccompanied Children, April 20, 2006

- “Corporations Under Siege; Juror Perspectives of Large Companies,” May 2005
John F. Sullivan III

- “Gandy: What Practitioners Would Like to Tell the Supreme Court,” by the State Bar of Texas, November 2004

PROFESSIONAL/CIVIC ACTIVITIES
- American Bar Association
- Texas Bar Association
- Houston Bar Association
- Texas Oil & Gas Association
- Texas Bar Foundation, fellow
- Houston Bar Foundation, fellow
- Lawyers Against Human Trafficking
- The Institute for Transnational Arbitration (Advisory Board)
- FORGE for Families (Board of Directors)
- Boys and Girls Country (Board of Directors)
- Loving His Lambs (Chairman of Board of Directors)
- Mountain Child (Board of Directors)
- National Christian Foundation Houston (Advisory Board)
- Grace Bible Church (Partner)

ADMISSIONS
- Bar of Texas
- Supreme Court of the United States
- United States Court of Appeals for the Fifth Circuit
- United States Court of Appeals for the Second Circuit
- United States Court of Appeals for the Third Circuit

EDUCATION
J.D., University of Houston Law School, 1987 (cum laude) (Member of the Order of Coif, associate editor of the Houston Law Review. Admitted to practice law in Texas in 1987.)
John F. Sullivan III

B.B.A. (Finance), University of Oklahoma, 1984 (*magna cum laude*) (Member of *Beta Gamma Sigma* business honor society)

ACHIEVEMENTS

- Selected to “Top Lawyers of Houston (Business Litigation),” *Texas Magazine*, May 2015
- Selected to “Top 100 Attorneys in Houston,” *Texas Monthly Magazine*, October 2014
- Selected to 2013 *Top Rated Lawyers* in Commercial Litigation (Martindale Hubbell and American Law Media)
- “AV Preeminent” Rating — Martindale Hubbell Peer and Client Review Rating for Ethical Standards and Legal Ability
- *Who’s Who in American Law*
- *Who’s Who in America*
- *Who’s Who in South and Southwest*
- Featured in *The American Lawyer Magazine*: “The Asylum Wars” (February 2006)
- Child Advocacy Award Recipient 2006 (American Bar Association’s Young Lawyers Division)
- Featured in *Houston Lawyer Magazine*: The Year of the Volunteer, Local Heroes (May-June 2007)
- American Immigration Lawyers Association Pro Bono Award Recipient (2006)
- The Pro Bono College of the State Bar of Texas, Member (2008)

ADDITIONAL INFORMATION

In addition to involvement in his church and various ministries, Mr. Sullivan is an outdoor sports enthusiast and enjoys competitive tennis, recreational golf, fishing, snow skiing, cycling, hiking and attending sporting events. When he is not playing or watching sports, he enjoys cooking, reading and traveling. His wife, four daughters and adopted son also enjoy sports and travel.

REPRESENTATIVE WORK
With more than 28 years’ legal experience, Mr. Sullivan's practice has encompassed many areas of litigation. Below are representative matters:

**Contracts**
- Representation of a contract operator in suit against lessee for breach of mineral development agreement
- Representation of an oil company in suit to recover for breach of JOA
- Representation of an information technology staffing company sued by a competitor for alleged breach of an asset purchase agreement
- Representation of owner of petrochemical plant on anticipatory breach of long term supply contract by supplier
- Representation of a large hotel chain in a suit for breach of a joint venture agreement by the purchaser of the rights of the joint venture partner
- Representation of a major chemical company in breach of contract and UCC action for failure to supply styrene
- Representation of a privately held company and some of its officers in a suit by discharged employees for alleged breach of shareholders’ agreement
- Representation of a financial investment firm in a contract dispute with a consultant
- Representation of an engineer over an alleged oral contract to pay a multi-million dollar developer’s fee for relocation of a purified terephthalic acid plant from France to India
- Representation of a commercial builder sued by his partner for the alleged breach of the partnership agreement
- Representation of an individual in a suit over breach of an oral partnership agreement to start new company
- Representation of a manufacturer of ethanol in a suit for breach of contract and conversion against purchaser
- Representation of a principal in defense of an alleged breach of a shareholder agreement
- Representation of a commercial property developer in a suit over an asset purchase agreement
- Representation of a telecommunications company in a breach of contract suit relating to development of a software system

**Oil & Gas**
- Representation of a contract operator in a suit brought under a mineral development agreement to recover unpaid joint interest billings, COPAS and for fraud
- Representation of an oil and gas company in a lawsuit that alleged breach of JOA and fraud and seeking over $100 million in damages
John F. Sullivan III

- Representation of a manufacturer of ceramic proppant used for fracking operations in a dispute against a storage facility
- Representation of an oil and gas company on breaches of processing and handling and farm-out agreements
- Representation of oil and gas company to provide analysis of litigation risk for deduction of post-production costs
- Representation of an oilfield supply company on claims for breach of agreement, fraud and piercing the corporate veil
- Representation of an oil field service company in defense of a suit over a damaged well
- Representation of a major oil and gas producer on claims of groundwater and soil contamination and issues of remediation, as well as indemnification rights
- Representation of a major oil and gas pipeline company in a dispute over diminution in value of real property because of an alleged leak
- Representation of a manufacturer of high pressure vessels for offshore oil and gas production platform in defense of multimillion dollar breach of contract action
- Representation of an oil and gas company on a breach of operating agreement and mineral development agreement
- Representation of an oil and gas company on claims to recover damages caused by defective fracking equipment
- Representation of a major oil and gas exploration and production company over the death of a contractor on a production platform off the coast of Equatorial Guinea
- Representation of a major oil and gas company in defense of hundreds of claims arising from catastrophe in Austria allegedly caused by defect in downstream product
- Representation of a manufacturer of a component used in a petroleum refinery in Texas City that suffered an explosion
- Representation of a major oil and gas company in defense of breach of warranty claims for property damage to their trucking fleet and loss of business for an allegedly defective lubricant
- Representation of a major oil and gas production company in defense of claims by joint implant patients over allegedly defective lubricants used in the manufacturing process
- Representation of a joint venture of petroleum companies to develop specialty chemicals for drilling
- Representation of an operator in a dispute over AFEs issued under a JOA

Officers and Directors

- Represented the management of oil and gas company against claims alleging misappropriation of funds in the joint account of joint interest partners
John F. Sullivan III

- Representation of the directors of a publicly traded company in shareholder derivative actions as a result of a going-private transaction
- Representation of the directors of a closely held corporation in defense of shareholder oppression claims
- Representation of the president of a company to joint venture in defense of claims brought by the joint venture partner’s principals alleging fraud and misappropriation of assets
- Representation of the officers and directors of online furniture company in defense of breach of fiduciary duty claims
- Representation of the officers and directors of a Fortune 500 company sued after merger agreement was announced

**Intellectual Property**
- Representation of an international security company in a lawsuit over ownership of intellectual property used to detect the presence of a human heartbeat in a closed container
- Representation of a telecommunications company in a breach of contract suit relating to development of a software system
- Representation of a joint venture of two major petroleum companies to develop specialty chemicals on claims against a former employee and a competitor for misappropriation of trade secrets and tortious interference
- Representation of an employees over the alleged misappropriation of trade secrets relating to prior employment with a global industrial valve manufacturer
- Representation of a technology company sued for trademark infringement

**Class Actions**
- Representation of an insurance company in the defense of a putative class action seeking damages for the company’s deductible reimbursement practice
- Representation of a retail sporting goods store in a putative class action relating to the sale of an allegedly unlawful product
- Representation of an insurance company in a putative class action for its manner of issuing salvage titles after a total loss of vehicles

**Unfair Competition, Non-Competition Agreements and Trade Secrets**
- Representation of a technology company on claims of misappropriation of trade secrets and breach of contract
- Representation of four individuals sued by an international valve company for alleged unfair competition
- Representation of a fractional jet airline in defense of wrongful discharge claims
John F. Sullivan III

- Representation of an employer against a former employee for misappropriating trade secrets in the high-tech industry
- Representation of an employer on claims by a competitor of allegedly raiding key employees

**Products Liability and Catastrophic Accidents**
- Representation of an industrial burner manufacturer on death and injury claims from a plant explosion
- Representation of an industrial crane manufacturer in defense of a product liability claim in a wrongful death case
- Representation of a major oil company in defense of product liability claims brought by survivors of over 150 individuals killed on a ski train in Austria
- Representation of a personal safety equipment manufacturer in defense of wrongful death claim
- Representation of a hotel in suit over death of a passenger on a shuttle bus
- Representation of a helicopter company in death and injury cases
- Representation of an industrial valve company in defense of products claims for catastrophic burn injuries
- Representation of a manufacturer of steel rollers used in plastic plant in defense of products claims for disabling injury
- Representation of a pharmaceutical company against hundreds of suits relating to withdrawn medicines
- Representation of a seat belt manufacturer in defense of product liability claims in several wrongful death and injury cases
- Representation of a major oil company over death of contractor on production platform
- Representation of a major oil and gas production company in defense of claims by trucking companies over defective lube oil
- Representation of a major oil and gas production company in defense of claims by joint implant patients over lubricants used in the manufacturing process

**Fraud and Collusion**
- Representation of a company in arbitration to avoid a multi-million dollar judgment resulting from collusion between the plaintiff and its insured
- Representation of a company in a declaratory judgment action to avoid a large collusive judgment
- Representation of a company in a fraud claim against an operator
- Representation of the officer of company on fraud claims
John F. Sullivan III

**Legal Malpractice**
- Representation of a tax attorney in a legal malpractice action for alleged improper advice and handling of tax affairs and returns
- Representation of a transactional attorney for an alleged breach of fiduciary duties to other parties to a partnership agreement
- Representation of a major oil and gas producer on claims of groundwater and soil contamination and issues of remediation as well as indemnification rights
- Representation of a commercial real estate owner sued for soil contamination and cost of remediation
- Representation of a major oil and gas pipeline company in a dispute over diminution in the value of real property because of alleged leak

**Human Rights and Pro Bono**
- Representation of a boy from China who faced deportation by the U.S., even though “Snake Heads” in China (human traffickers) threatened to kill him when he returned
- Representation of a trafficked boy from India to obtain Special Immigrant Juvenile Status (SIJS)
- Representation of a teenage girl from Honduras who sought asylum in the U.S. because of abuse and torture
- Representation of a boy from Iraq who boxed in 2004 Olympics in Greece, and who sought asylum because of persecution by radicals during the Iraqi War
- Representation of El Salvadorian parents whose son died in a private prison in South Texas while in the custody of the U.S. Marshall’s Service
- Representation of a Mexican mother of a young boy who was assaulted and molested at the U.S. border crossing while using the public restroom
- Representation of a young boy removed from the Fundamentalist Church of Latter–day Saints in West Texas at the request of Texas State Bar president
- Representation of family from El Salvador on asylum claims for religious persecution
- Representation of family from China on asylum claims for religious persecution
- Representation of 11 year old boy from Mexico for SIJS
- Representation of 17 year old boy from Honduras for SIJS
- Representation of Syrian family for temporary protected status (TPS)
- Initiation of a program at Fulbright and Jaworski LLP to instruct detained children of their rights prior to appearing before an immigration judge unrepresented
- Initiation of a program at Fulbright and Jaworski LLP for the pro bono representation of immigrant and refugee children seeking asylum or legal status
Randel R. Young
Administrative Partner (Houston)

Houston
T 713.815.7348
F 713.815.7301
randel.young@klgates.com

OVERVIEW
Randel Young is the Administrative Partner of the Houston office and serves on the firm’s Management Committee. Mr. Young’s primary areas of practice include:

- U.S. and international energy and natural resources matters
- U.S. and international project development and project finance
- U.S. and cross-border mergers, acquisitions and dispositions
- U.S. and cross-border joint ventures, joint participation arrangements and joint operating agreements
- Advising corporate and institutional clients on emerging market privatizations and international bid tenders, cross-border investment strategies and overseas business operations, and identifying and mitigating emerging markets risks, including on Foreign Corrupt Practices Act and other international compliance issues, transnational arbitration and ADR matters, including international energy and natural resource disputes and enforcement of foreign arbitral awards and judgments

Energy & Natural Resources
Mr. Young has over 30 years’ experience in advising companies in the energy, natural resource and electric power and related service, manufacturing and supply sectors. His U.S. and international oil and gas project development, M&A and other transactional experience spans virtually every major segment of the oil and gas business, including acquisitions and dispositions of onshore and offshore acreage and production; acquisitions and financings of drilling rigs, platforms and floating production storage facilities; joint appraisal and development operations and activities; acquisition, development and joint operation of natural gas pipelines, gathering lines, processing facilities, gas storage facilities and gas treatment facilities; and acquisition and development of refineries and product storage and discharge facilities.

Mr. Young has structured and negotiated EPC and other engineering, design and construction contracts and has advised on liquidated damage and other construction delay issues, force majeure claims and major construction disputes. He is experienced in advising U.S. and multinational companies involved in the gathering, transportation, marketing trading and processing of oil, gas and petroleum products and has drafted and negotiated long-term and spot market gathering, sale, transportation and processing contracts for a variety of commodities, both in the United States and internationally.
Mr. Young has advised on complex natural gas and other hydrocarbon product pricing and price redetermination issues, take-or-pay and makeup claims, and force majeure and other contract defenses, has structured damage recovery theories for gas contract claims and has acted as an expert on various issues in disputes relating to long-term sales and transportation arrangements for natural gas.

**Emerging Markets Advice & International Corporate Matters**

Mr. Young has over 25 years’ experience in guiding U.S. and multinational clients through the challenges of investing and operating in emerging markets and how to operate within and around developing legal systems. As an in-house legal counsel and in outside law practice, Mr. Young has worked throughout Latin America and the Caribbean Basin, lived and worked in South America and the Middle East, and has extensive experience in advising on investments, transactions and operations in North Africa, Sub-Saharan Africa, South Asia, Southeast Asia and China.

Mr. Young has represented national oil companies, international oil companies and other multinational businesses in structuring and implementing cross-border transactions in the United States, other parts of the Americas and around the world. Having handled transactions, disputes and other legal matters involving over 60 countries, he has developed and maintains an extensive network of foreign law firms with whom he has worked closely and that provide time-tested legal support in a wide variety of jurisdictions, particularly in the emerging markets.

As part of his international corporate planning practice, Mr. Young advises on the establishment, implementation and supervision of international corporate compliance programs, including matters relating to the U.S. Foreign Corrupt Practices Act and other anti-bribery statutes and conventions, U.S. economic sanctions and trade and investment restrictions, and U.S. anti-boycott compliance. He has coordinated and conducted numerous due diligence reviews and has advised on both internal and independent outside audits of alleged violations of international restrictions and company policies.

**Transnational Arbitration & ADR**

Mr. Young structures and negotiates international dispute resolution clauses and arbitration agreements, advises on choice of law and choice of forum questions, drafts and negotiates waivers of sovereign immunity and other matters critical to ensuring the enforceability of contractual rights in international transactions. He has managed and advised clients in international litigation, arbitrations and other ADR procedures, and has experience in the recognition and enforcement of foreign judgments in the United States and of foreign arbitral awards around the world under the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

Mr. Young holds a Certificate in Advanced Arbitration Skills (Domestic and International) from the A. A. White Dispute Resolution Center of the University of Houston Law Center. He is a member of the North American Users Council of the London Court of International Arbitration and the Houston International Arbitration Club, and he serves on the Advisory Board of the Institute for Transnational Arbitration. Mr. Young is a member of the Oil & Gas Law and Arbitration Committees of the IBA’s Section on Energy, Environment and Infrastructure Law.
PRESENTATIONS

- Panelist: “New Perspectives for Infrastructure Projects in Latin America,” American Bar Association Section of International Law, Sao Paulo, Brazil, August 2013
- Co-Chair, Fourth Annual West & Central Africa Oil & Gas Conference, Houston, June 2006
- Presenter, “Recent Transactions and Economic/Political/Legal Developments in Brazil,” Fifth Biennial Conference on Project Finance, International Bar Association, Washington DC, 2005
Randel R. Young (continued)

- Presenter, “Drafting Arbitration Clauses for Inter-American Transactions,” American Corporate Counsel Association Meeting, Houston/Dallas, April 2004
- Moderator, “Implementing the Corporate Antitrust Program,” Annual Meeting, Global Corporate Counsel Association, Versailles, July 2002

PUBLICATIONS
- “Planning the South American Divestiture Project,” Conference Paper, 15th Annual International Law Institute, International Law Section, State Bar of Texas, Houston, 2005

PROFESSIONAL/CIVIC ACTIVITIES
Mr. Young serves on the Advisory Boards of the Institute for Transnational Arbitration and the Institute for Energy Law, The Center for American and International Law in Dallas, Texas. Mr. Young is a member of the London Court of International Arbitration's North American Users Council. He is a member of the American Bar Association – Section of International Law, where
Randel R. Young (continued)

he served as co-chair of the International Energy & Natural Resources Committee (2004-2005) and on the Steering Committee (2005-2008); the International Bar Association, Section on Energy, Environmental & Infrastructure Law (Oil & Gas Law & Arbitration Committees), where he served on the Chairman's Ad Hoc Committee on Infrastructure Financing and Development (2005); and the State Bar of Texas, International Law Section, where he served on the State Council (2002-2005). Mr. Young is also a member of the Houston International Arbitration Club, the Association of International Petroleum Negotiators, and the Rocky Mountain Mineral Law Institute (Special Institutes Committee, Vice Chair 2002-2004). Mr. Young recently served as a trustee of the Houston Grand Opera Association.

ADMISSIONS
- Texas
- United States District Court for the Southern District of Texas
- United States Court of Appeals for the Fifth, Ninth and Tenth Circuits

EDUCATION
J.D., University of Houston (cum laude)
B.A., University of Houston (summa cum laude)
Certificate in Advanced Arbitration Skills (Domestic & International), A.A. White Dispute Resolution Center, University of Houston Law Center

ACHIEVEMENTS
Mr. Young is recognized in The Best Lawyers in America for his work in Project Finance Law, 2014-2016. Mr. Young has been named among the “Who’s Who in Energy” list consecutively since 2012. In 2007, Mr. Young was named one of five “Go-To Lawyers” in International Law by Texas Lawyer magazine.


LANGUAGES
- Spanish - Conversational
- Portuguese - Basic Proficiency
REPRESENTATIVE WORK

Exploration, Production & Other Upstream Projects

- Represented a leading global marine and subsea construction and oil and gas services contractor in (a) the acquisition of a European multinational service contractor’s deep-water diving assets, including two dynamically positioned multi-service support vessels (one by outright assignment and the other via assumption of a long-term Charter) transferred within international waters, onboard saturation diving systems, surface compression chambers, launch and recovery systems, diving control systems and other ancillary diving equipment; (b) the structuring and negotiation of a multi-year preferred subcontractor agreement for the purchaser to furnish diving services to the seller; and (c) the negotiation and closing of asset-based financing for the transaction involving senior secured vessel mortgages on the two ocean-going multi-service support vessels, flagged in the United States and the Republic of Vanuatu.

- Represented a U.S. independent oil and gas exploration and production company in a $450 million transaction with a consortium of European and Asian private equity investors involving (a) the sale of 90% of its interest in exploration, development and production rights in two unitized development areas and additional exploration rights in the North Slope of Alaska, including roads and other related infrastructure and facilities, but reserving certain undivided working interests and overriding royalty interests, (b) the sale of all of the membership interests in the contract operator of the two unitized areas and other exploration areas, (c) a subsequent oil and gas development program, including the obligation to drill three exploratory wells and to conduct subsequent drilling obligations, (d) the development, financing and operation of a 15,000 barrel per day crude oil processing handling facility with related tie-in arrangements with crude oil pipelines, and (e) a long-term drilling services and field maintenance agreement with a third party drilling contractor.

- Represented four U.S. institutional investment funds in the sale of over 13,000 net mineral acres in East Texas and associated production from the Woodbine formation to an energy financial services subsidiary of a Fortune 10 company and its U.S. operating affiliate.

- Represented a U.S. E&P company and its gas gathering and transportation affiliates in the sale of all of its upstream natural gas assets and related midstream assets in the Fayetteville Shale, including oil and gas properties and midstream facilities in seven counties in north-central Arkansas, to a US subsidiary of a major oil company.

- Represented a Japanese energy trading company in the acquisition of producing and nonproducing state and federal oil and gas leasehold interests and related infrastructure in the Gulf of Mexico, including twelve blocks in the state and federal waters of Louisiana and three additional blocks in the state waters of Texas.

- Represented an Asian national oil company in the acquisition of leasehold working interests covering over 20,000 mineral acres under Texas state leases in the Gulf of Mexico.

- Represented an Asian national oil company in the negotiation of a joint study and exploration agreement, an offshore operating agreement and other agreements for the joint
Randel R. Young (continued)

exploration and delineation of U.S. offshore oil and gas prospect with an Australian independent oil and gas producer.

- Represented an Asian national oil company in evaluating the acquisition of a U.S. company’s offshore E&P assets in the Gulf of Mexico and in the review of the purchase and sale agreement.

- Represented a U.S.-based investment company in negotiating the restructuring of net profit overriding royalty interests into equivalent working interests in over 800 producing coal bed methane wells and both developed and undeveloped coal bed methane acreage in the Black Warrior Basin Area of Alabama and in the San Juan Basin Area of Colorado and New Mexico.

- Represented a natural gas major in the sale of its E&P subsidiary in Oman and in the acquisition of certain new oil and gas E&P rights in Oman.

- Represented a natural gas major in the proposed sale of its deepwater E&P assets and related infrastructure and facilities in the offshore territorial waters of Brazil.

- Represented a Ghana subsidiary of a Saudi Arabian construction company in a development project for the construction and financing of an oilfield base support facility in Angola.

- Represented an Asian national oil company on a claim by a U.S. energy major relating to activities in connection with an upstream acquisition and financing program in Sub-Saharan Africa.

- Represented a U.S. independent oil producer in structuring a lease acquisition and participation agreement with an Asian national oil company for joint acquisition activities in the United States.

- Advised a Middle Eastern oil and gas company in structuring a hydrocarbon reserve acquisition and participation agreement with an Asian national oil company for joint acquisition activities in the Middle East and North Africa.

- Represented a Middle Eastern oil and gas company in negotiating a joint participation agreement and an operating agreement relating to an offshore exploration block in Cote d’Ivoire.

- Represented a Middle Eastern oil and gas company in negotiating a joint bidding and study agreement in connection with a joint bid to acquire an offshore exploration block in Cote d’Ivoire.

- Advised a Middle Eastern exploration and production company in the evaluation of a prospective hydrocarbon development opportunity in Guinea Bissau.

- Represented a consortium of Indian companies in evaluating the acquisition of an international oil company’s upstream assets in Egypt and in the review of the purchase and sale agreement.

- Represented an owner of overriding royalty interests in a producing oilfield in Equatorial Guinea in connection with the settlement of a claim against the operator and other owners.
Randel R. Young (continued)

of the license area and in the ultimate sale and assignment of the overriding royalty interests.

- Represented oil major in the purchase of an Arctic-Class Floating Drilling Platform, registered in Liberia and located in the Beaufort Sea, Northwest Territories, Canada, and in the re-flagging of the ocean-going vessel from Liberia to the Marshall Islands.

- Represented a gas major in the proposed acquisition of equity interests in deepwater offshore oil and gas prospects in India from a state-owned E&P company.

- Represented a gas major in its bid for offshore exploration blocks in the Sixth Round of India’s New Exploration Licensing Policy (NELP-VI) bid tender, involving six shallow water and 24 deepwater blocks.

- Represented a gas major in its participation in the acquisition of exploration blocks in the Third Round of India’s Coal Bed Methane Policy (CBM-III) bid tender, involving ten coal bed methane blocks in India.

- Represented a gas major in connection with the negotiation of a joint bidding arrangement with a state-owned oil and gas company in connection with their joint bid to acquire production sharing contracts relating to offshore blocks in India.

- Represented a major oil company in the formation of an investment partnership for an oil and gas drilling/development program in shale prospects in close proximity to heavily populated urban areas in Texas.

- Advised a Japanese energy trading company in connection with a claim for breach of warranty and indemnification against a U.S. oil and gas producer in the Gulf of Mexico relating to a claim for failure to disclose damages to an undersea gas pipeline.

- Represented a U.S. E&P company in a U.S. $50 million acquisition of all the shares of a Bermuda company that owned and operated multiple onshore exploration blocks and related infrastructure in Colombia, including the handling of due diligence and the structuring and negotiation of the share purchase agreement and ancillary agreements and other transfer documentation.

- Advised a U.S. drilling service provider on an arctic land-based drilling rig fabrication project for a major E&P company (valued at over U.S. $300 million dollars), including the project financing of the project through a long-term committed day-rate service contract.

**Natural Gas, Pipelines & Other Midstream Projects**

- Represented one of the largest U.S. producers of natural gas and natural gas liquids (NGLs) in structuring and negotiating a joint development project to fund, construct, operate, and maintain the largest integrated midstream service complex for the gathering and processing of natural gas and the fractionation of NGLs in the Utica Shale play in Eastern Ohio.

- Represented a U.S. natural gas midstream company in the acquisition of a natural gas processing plant, 600 miles of natural gas gathering and transmission pipelines and related compression, dehydration and treating facilities in West Texas.
Randel R. Young (continued)

- Represented a U.S. E&P company and its natural gas gathering and transportation affiliates in the sale of upstream and midstream assets in a shale gas field in the United States.

- Represented a U.S. midstream natural gas service provider and publicly-traded master limited partnership in the acquisition of the midstream gas and condensate assets of a publicly-traded U.S. gas producer in the Eagle Ford Shale involving pipelines and related assets in three South Texas counties.

- Represented a U.S. gas pipeline company in the sale of its gas gathering systems in the State of Louisiana.

- Advised a European gas company in the negotiations of a natural gas supply/transportation agreements for gas to be processed in Train 4 of the Atlantic LNG Facility in Trinidad/Tobago.

- Represented India’s largest private sector power utility in negotiating the gas supply/transportation arrangement for multiple gas-fired generation projects and gas utilization projects in India and advised on the deal structure to ensure project financeability.

- Represented an independent gas producer in negotiating the FEED contract for a gas processing and treatment facility in Algeria.

- Represented a Mexican offshore pipeline construction company in negotiating the formation of a new pipeline construction joint venture with a U.S.-based construction company for pursuit of new projects in the Mexican territorial waters of the Gulf of Mexico, including the funding and financing of the transaction.

- Represented a U.S. natural gas gathering company in the sale of its natural gas gathering systems and related compression, dehydration and treating facilities in Texas and Louisiana.

- Represented a U.S. natural gas gathering company in negotiating a limited recourse credit facility for the construction of gas gathering systems in Central Texas.

- Represented a multinational energy company in a privately negotiated M&A transaction to acquire a co-controlling interest in seven local natural gas distribution companies in the Brazilian states of Bahia, Pernambuco, Santa Catarina, Paraná, Alagoas, Paraíba and Sergipe.

- Represented a multinational energy company in the successful joint privatization bid with a European natural gas distribution company to acquire two gas distribution utilities with the exclusive gas distribution franchises for the state and city of Rio de Janeiro, Brazil, a service area with over 13 million customers.

- Represented a multinational energy company in the proposed sale to its interest in two gas distribution utilities in Rio de Janeiro, Brazil, to one of its partners.

- Represented a NYSE energy company in a U.S. $100.5 million acquisition from Ecopetrol, the Colombian national oil company, of a 38.67 percent interest in Promigas, an operator of 900 km of gas pipelines in Colombia, in a Colombian international bid transaction that offered US $80 million in non-recourse debt financing by Ecopetrol.
Randel R. Young (continued)

- Advised a NYSE energy company in connection with ongoing legal issues arising out of its ownership of a 38.67 percent interest in Promigas, an operator of 900 km of gas pipelines in Colombia, including issues relating to the technical operation of the pipeline by a third party contractor and ownership and governance concerns.

- Advised a multinational energy company on the development, financing and construction of the Bolivian and Brazilian sections of the Bolivia-to-Brazil Natural Gas Pipeline Project, including on matters relating to the Turnkey Engineering, Procurement and Construction Contract and related transportation and operations agreements.

- Advised a multinational energy company on the development, financing and construction of natural gas pipeline and power generation project in the State of Matta Grosso, Brazil, involving cross-border pipeline facilities for the supply and transmission of natural gas from Bolivia and Argentina and natural gas sales lines into the power generation facility in Brazil, including on matters relating to the Engineering, Procurement and Construction Contract and related natural gas supply, transportation, construction, management and operations agreements, and on disputes arising relating to construction delays, alleged defects in facilities, and claims for liquidated damages.

- Represented a pipeline company concerning litigation over the local highway district’s plans to widen a major roadway over two high pressure natural gas lines, successfully convincing a jury to enforce our client’s easement rights and to order the highway district to compensate our client for costs incurred to modify their natural gas lines.

**Refining, Processing & Other Downstream Projects**

- Advised a U.S. company in negotiating a greenfield development project for the production and sale of clean coal in Indonesia.

- Advised a UK/UAE-based company in negotiating a greenfield jatropha-based biofuels production project in Mozambique.

- Represented a UK/UAE-based company in negotiating the restructuring of the ownership of its chemical production affiliate’s facility in Dubai and in relocating the facility to Sharjah.

- Represented a multinational energy company in the acquisition of a 100,000 barrel/day oil refinery in Germany, including an interest in a 70-Km oil pipeline and related facilities, feedstock and product inventories, rail and land-based loading racks and handling facilities, and docking facilities in Hamburg.

- Represented a multinational energy company on an environmental assessment/remediation program on an onsite oil spill at a major refinery in Germany.

- Represented a multinational energy company in negotiating the joint operation and sharing arrangement for a previously unified crude refining facility and a bitumen processing plant in Germany.

- Represented a multinational energy company in the procurement of a major harbor expansion in Hamburg to accommodate deliveries from larger vessels, including negotiating with the German environmental authorities.
• Advised a multinational petrochemical company on its joint venture with a Saudi Arabian company to develop a greenfield petrochemical facility in Saudi Arabia.

• Represented a multinational chemical company in a cross-border acquisition of two divisions of a Mexican industrial group involving three major chemical manufacturing facilities in Mexico and over 900 employees in the largest asset acquisition closed in Mexico that year.

Public Bid Tenders and Privatization experience

• Led the legal function for the project team and coordinated the legal risk identification and mitigation process on a successful privatization bid transaction by a multinational energy company, under a joint bidding and ownership agreement with a major Spanish natural gas utility, to acquire a controlling interest in CEG and CEG-Rio, the state-owned owners and operators of the gas distribution franchises for Rio de Janeiro and the state of Rio de Janeiro, for a purchase price of US $576 Million, pursuant to an international bid tender involving transfer of control over a 2,200 km-long gas pipeline network for the distribution of natural gas, manufactured gas, together with an LPG piped gas system, a manufactured gas production and storage unit and three manufactured gas modulating systems, and involving the upgrade and turnaround of service to over 18 million customers.

• Led the legal function for the project team that marketed, divested and sold the interest of the same multinational energy company in CEG and CEG-Rio to Petrobras in a privately negotiated sale transaction, that took into account the rights of first refusal of the company’s Spanish partner in CEG and CEG-Rio.

• Led the legal function for the project team and coordinated the legal risk identification and mitigation process on a successful privatization bid transaction by a multinational energy company to acquire a controlling stake in Brazil’s sixth-largest electricity distributor serving 1.5 million customers in Sao Paulo state, for a purchase price of US $1.27 Billion, pursuant to an international bid tender involving the privatization, transfer and eventual restructuring of one of Brazil’s fastest-growing electricity distributors.

• Advised a multinational energy company a successful privatization bid transaction to purchase 38.67% of the paid-in shares of Promigas, a pipeline affiliate of Ecopetrol the national oil company of Colombia, in a transaction that resulted in the joint ownership, management and control of a major midstream and downstream pipeline business in Colombia involving natural gas transportation, operation of natural gas pipelines for third parties, promoting the utilization of compressed natural gas, supplying services complementary to the transportation of natural gas, and natural gas distribution operations within and across Colombia.

• Advised a multinational energy company and oversaw the risk identification and mitigation process for a Joint Venture contract with Bolivian State-Owned Enterprise, Yacimientos Petrolíferos Fiscales Bolivianos (“YPFB”) to acquire YPFB’s oil transportation unit, which later became Transredes, the first privately held oil transporter in Bolivia.
• Advised a multinational energy company and oversaw the risk identification and mitigation process on the development, financing and construction of the Bolivian and Brazilian sections of the Bolivia-to-Brazil Natural Gas Pipeline Project, including on matters relating to the Turnkey Engineering, Procurement and Construction Contract and related transportation and operations agreements.

• Advised a multinational energy company and oversaw the risk identification and mitigation process on the development, financing and construction of natural gas pipeline and power generation project in the State of Matta Grosso, Brazil, supported by a public bid for electric power by the State of Matto Grosso, involving cross-border pipeline facilities for the supply and transmission of natural gas from Bolivia and Argentina and natural gas sales lines into the power generation facility in Brazil, including advising on project risks and other matters relating to the Engineering, Procurement and Construction Contract and related natural gas supply, transportation, construction, management and operations agreements, and on disputes arising relating to construction delays, alleged defects in facilities, and claims for liquidated damages.

• Advised on numerous other public bid tenders and privatization efforts, including the preparation of project risk matrices that identified and recommended risk mitigation strategies for the project investments, including with respect to the following bids where the multinational energy company client was not the winning bidder:
  • Light, federal electric power company sold in Brazil under the auspices of the PND (1996, Ultimate Sale Price: $2.509 Billion)
  • Gerasul, federal electric power company sold in Brazil under the auspices of the PND (1998, Ultimate Sale Price: $880 Million)
  • Coelba, federal electric distribution company sold in Brazilian privatization bid process (1997, Ultimate Sale Price: $1.498 Billion)
  • CPFL, federal electric distribution company sold in Brazilian privatization bid process (1997, Ultimate Sale Price: $2.731 Billion)
  • Enersul, federal electric distribution company sold in Brazilian privatization bid process (1997, Ultimate Sale Price: $565 Million)
  • Energipe, federal electric distribution company sold in Brazilian privatization bid process (1997, Ultimate Sale Price: $520 Million)
  • Cosern, federal electric distribution company sold in Brazilian privatization bid process (1997, Ultimate Sale Price: $606 Million)
  • Coelce, federal electric distribution company sold in Brazilian privatization bid process (1998, Ultimate Sale Price: $868 Million)
  • Electropaulo Metropaulitana, federal electric distribution company sold in Brazilian privatization bid process (1998, Ultimate Sale Price: $1.777 Billion)
Electric Power Sector

- Represented a U.S. entity owned by Pakistan-based investors in the buy-out of a U.S. energy company’s controlling interest in a power generation facility and related operating affiliate in Lahore, Pakistan.

- Represented an Indian power plant developer in the negotiation of a long-term natural gas supply arrangement with an Indian oil and gas E&P company for multiple power plants in development in India.

- Advised a multinational energy company in devising and implementing a project risk mitigation program relating to the development, construction and project financing of a cross-border gas-to-power project, involving the construction of gas transmission/sales facilities from Bolivia and Argentina into a 480 MW power generation facility in Brazil.

- Represented a multinational energy company in the successful privatization of Brazil’s fifth largest electricity distribution company.

- Advised a multinational energy company in multiple privatization bids for electricity generation and distribution companies in Brazil, Argentina and Bolivia.

- Advised a multinational energy company in connection with the post-privatization restructuring of a privatized company’s debt and equity facilities and in the repurchase of publicly-held minority share positions.

- Represented a multinational energy company in a multi-jurisdictional divestiture transaction relating to integrated gas and power projects and business platforms in South and Central America and the Caribbean Basin.

Emerging Markets & Cross-Border M&A Transactions – Non-E&NR

- Represented one of the world’s leading producers of tubular products for the oil and gas industry, based in Russia, in the acquisition of the pipe threading services and precision manufacturing assets of a UK-based holding company and a group of affiliated investors, including the acquisition of an 84-acre manufacturing and service facility in Texas with total production capacity of more than 700,000 threaded pipes and 250,000 couplings.

- Represented a Dutch heavy equipment manufacturer in the acquisition of all the assets of a heavy equipment supplier in Saudi Arabia and in restructuring the acquisition to minimize local regulatory impacts.

- Represented a German consumer products and adhesive manufacturer in the acquisition of all of the adhesives and construction materials business in the largest asset acquisition in Mexico that year.
International Corporate Planning and Advice

- Advised a U.S. architectural design firm on the structure and implementation of a foreign subsidiary in Trinidad & Tobago using a two-tiered holding company structure in Cayman Islands and St. Lucia to take advantage of the Trinidad & Tobago-St. Lucia tax treaty to eliminate double taxation.

- Advising a U.S. public university on market entry issues relating to doing business in Saudi Arabia and proposed dispute resolution mechanism under a Saudi joint venture proposal.

- Represented a U.S. oilfield supply company in establishing a new business presence in Libya.

- Represented a U.S. management consulting firm in establishing a new business presence in Libya.

- Represented a UK/UAE-based company in negotiating the restructuring of the ownership of its chemical production affiliate’s facility in Dubai and in relocating the facility to Sharjah, UAE.

- Advised a UK/UAE-based company in negotiating a greenfield jatropha-based biofuels production project in Mozambique.

- Represented a French engineering and construction company in establishing a new wholly owned subsidiary in Saudi Arabia.

- Represented a UK investor in structuring and forming a UAE joint venture with a local partner for a construction business in Ras Al Khaima and in obtaining trade licenses for the joint venture with the local government.

- Representing a U.S. architectural design firm in structuring and forming a joint venture company with a local partner in Abu Dhabi and in obtaining trade licenses for the new company with the local government.

- Representing a U.S. structural engineering and consulting firm in dissolving its Saskatchewan branch office and in establishing a wholly-owned subsidiary in British Columbia with a branch office in Saskatchewan.

- Representing a U.S. structural engineering and consulting firm in establishing a wholly owned subsidiary in Panama to function as a regional headquarters for Latin America.

International Corporate Compliance Advice

- Representing a U.S. structural engineering and consulting firm in establishing an international compliance program, including FCPA and U.S. sanctions programs, for its worldwide operations.

- Advised a U.S. independent oil and gas company in connection with the implications of the Exxon-Florio amendment and CFIUS filing requirements for a U.S. joint development program with an Asian national oil company.

- Advising a U.S. oil and gas company in amending its international compliance program, including FCPA and U.S. sanctions monitoring programs, based on expanded operations in the North Sea and several emerging markets.
Randel R. Young (continued)

- Represented a UAE-owned oil and gas company in its response to extensive due diligence concerns of a U.S. gas major in connection with FPCA compliance procedures in an oil and gas farm-in and participation agreement on an offshore oil and gas field in West Africa.

- Represented a UAE-based public company dually listed on the London and Dublin stock exchanges in an internal investigation of allegations of insider fraud and self-dealing by corporate officials and insiders.

- Advised a non-U.S. oilfield service company with significant operations in the USA on its response to suspicions of potential violations of the FCPA and the UK anti-bribery statutes.

- Performed independent FCPA due diligence reviews for a U.S. based multinational oil and gas service company on its foreign contractors in Saudi Arabia, UAE and India to comply with the requirements of the client’s international compliance policy.

- Performed FCPA due diligence reviews for a U.S. based multinational oil and gas service company on an acquisition of a UAE-based competitor with foreign consultants in Saudi Arabia and India.

- Advised a Norwegian-based geological and geophysical survey company on questions relating to the use of U.S.-licensed technology in offshore territorial waters of Iran under U.S. trade and investment sanctions on Iran.

- Advised an oil and gas major on the vicarious liability implications of acquiring a company currently under investigation by the U.S. Justice Department for alleged FCPA violations in West Africa.
Jacquelyn S. Celender
Associate

Pittsburgh
T  412.355.8678
F  412.355.6501
jackie.celender@klgates.com

OVERVIEW

Jacquelyn (“Jackie”) Celender is an associate in the firm’s Pittsburgh office. She concentrates her law practice in the area of commercial litigation, with a particular focus in the insurance coverage and construction practice areas. Ms. Celender is experienced in all stages of litigation and in domestic and international (AAA and ICDR) arbitrations. Her experience includes fact investigation, managing e-Discovery matters and complex document collections and productions, preparing witnesses for and conducting fact and expert witness depositions and examinations at trial, motions practice, trial, and drafting pre and post-trial briefs.

Ms. Celender’s commercial litigation experience includes construction, commercial contract, warranty, and product liability cases. In the insurance coverage area, Ms. Celender has represented policyholder interests in a variety of insurance coverage disputes, including those involving long-tail liabilities related to asbestos-containing products and claims under professional liability, property and general liability insurance policies. In the construction field, Ms. Celender has worked on a wide-array of projects, including: wind farm and power and desalination plant projects, transportation, material handling systems, procurement of public contracts, civil construction, nuisance/trespass, and adverse possession land disputes, and bonding, prompt payment act, and lien disputes.

PROFESSIONAL/CIVIC ACTIVITIES

- Pittsburgh Associates Committee (K&L Gates)
- Member, Pittsburgh Diversity Committee (K&L Gates)
- Pittsburgh City Lead (Co-Chair), Leadership Council on Legal Diversity (LCLD) Success in Law School Mentoring Program (2013-2015)
- Coach, Mars Girls Lacrosse (2011-2013)
- Allegheny County Bar Association

SPEAKING ENGAGEMENTS

Jacquelyn S. Celender (continued)


**ADMISSIONS**
- Pennsylvania
- United States District Court for the Western District of Pennsylvania
- United States District Court for the Eastern District of Michigan

**EDUCATION**
J.D., University of Pittsburgh School of Law, 2011 (*magna cum laude*; *University of Pittsburgh Law Review*, Research Editor; Order of the Coif)
B.A., University of Delaware, 2008 (*cum laude*)

**REPRESENTATIVE WORK**

**Insurance Coverage**
- Counsel to policyholder in tortious interference case against the Berkshire Hathaway entities, National Indemnity Company and Resolute Management, Inc., as well as in related arbitrations against Underwriters at Lloyd’s and AIG Insurers.
- Represent chemical company in connection with asbestos liabilities.
- Counsel to policyholder involved in multi-insurer insurance litigation regarding coverage for asbestos product liabilities.

**Commercial Litigation**
- Represent aluminum manufacturer for commercial disputes (including construction and commercial contract matters) and product liability cases.
- Represent forging company in a multi-jurisdiction breach of contract and warranty dispute with customer.

**Construction**
- Represent developer of Phoenix Sky Train project at the Phoenix International Airport in dispute against engineers and contractors.
- Represent international designer/builder of coal preparation plant and material-handling systems in two different Pennsylvania state lawsuits and appeal regarding the collapse of a coal handling system.
- Counsel to owner of a wind farm project engaged in dispute with equipment manufacturer and supplier.
- Represent contractor involved in mechanics’ lien and defective residential construction lawsuit.
• Counsel to telecommunications corporation engaged in litigation regarding procurement of large public contracts in several jurisdictions, including Illinois, Louisiana, Maryland, Missouri, Pennsylvania, and Texas.
JOHN R. CUNNINGHAM, PMP, CFCC
Senior Vice President

CURRENT RESPONSIBILITIES
John Cunningham is a senior vice president for Marsh Risk Consulting’s Construction Consulting Services Practice. He consults in all phases of engineering and construction management regarding claims avoidance, management, and dispute resolution to both contractors and owners. He manages and performs claims preparation services for various types of insured losses. John consults in project risk analysis at the executive level, assessment of project controls, and corporate governance.

EXPERIENCE
John’s expertise is in engineering and construction management, focusing in the energy sector, including refineries, petrochemical complexes, power generation, electric transmission and distribution, pipelines, LNG facilities, and chemical manufacturing plants. He also consults on reconstruction of damaged plants and structures and specialty issues such as asbestos.

As a disputes expert, John performs, leads, and manages client services in such matters as scope disputes, damages valuation, forensic analysis, standard of care, prudence/negligence issues, errors and omissions, roles and responsibilities of the parties and causation, delay and disruption, and loss of productivity. John has testified as an expert in various claims proceedings and is experienced with ICC and AAA forms of arbitration.

As a management consultant, he advises clients seeking technical expertise to defend against or avoid claims, as well as initiate them. He leads or performs monthly heavy construction project reviews for executives to achieve early identification of loss or potential claims. He also leads and performs engagements in contract administration support, conducts project performance reviews, and analyzes engineering/construction practices in comparison with industry accepted standards of care.

As a manager in preparation of insurance claims, John coordinates client resources to produce credible and pertinent claim documentation aligned with the needs of the insurance policy and structured to facilitate approval by adjusters. John’s depth of technical knowledge facilitates work with the client’s technical executives and staff to obtain the information necessary to properly document a claim. John also produces Actual Cash Value (ACV) analyses.

As an executive consultant in corporate governance and risk management, John leads both executive level project risk evaluations and risk management training sessions. Having extensive experience drafting and negotiating numerous types of contracts and financial instruments, he also performs technical assessments of contract controls.
John offers 40 years of practical industry experience as an independent expert, project developer, contract negotiator, engineering officer, board member, project construction manager, and asset manager of large-sized energy projects. John has extensively negotiated contracts to own and operate international energy projects involving issues such as multiple owners, majority-minority control issues, political risk, changes in ownership, and valuation.

Prior to joining Marsh, John was an engagement manager for The Nielsen-Wurster Group, Inc., a dispute resolution, management consulting, and risk management services company whose assets were acquired by Marsh USA, Inc. John was previously employed for 30 years at El Paso Corporation as an engineering officer where his responsibilities included development of large, independent power projects and pipelines and support of FERC regulatory and certificate matters to approve new energy investments. John began his career as a plant engineer at a petrochemical complex in a program structured to developed skills in LNG liquefaction processes.

EDUCATION
- BS in chemical engineering, University of Michigan, Ann Arbor, summa cum laude
- MS in chemical engineering, University of Michigan

AFFILIATIONS
- Certified Project Management Professional (PMP)
- Certified Forensic Claims Consultant (CFCC)
- Project Management Institute (PMI), Member
- Association for the Advancement of Cost Engineering (AACE) International, Member
- American Institute of Chemical Engineers (AIChE), Member
- Tau Beta Pi (National Engineering Honor Society), Member
BIOGRAPHY

PAUL NICHOLSON
Managing Director

CURRENT RESPONSIBILITIES
Paul Nicholson is based in London and a consultant in Project Risk Management, a senior client executive on major gas transformation energy accounts and Marsh’s Global Gas and LNG Practice leader.

EXPERIENCE
Paul spent five years in the petroleum industry with a major oil company and London-based contractor before joining Marsh in London in 1982. He now has 32 years of experience in energy risk management, specializing in both downstream risks and projects.

As a chemical engineer, he initially conducted risk assessments, underwriting surveys, new project reviews, business interruption studies and emergency planning simulations at diversified petroleum, LNG, fertilizer and petrochemical plants worldwide.

In the 1990’s, Paul was Marsh’s Development Coordinator for oil and gas insurance working activity and risk assessment in Russia, China, India, and Eastern Europe frontiers.

Through 2001-2008, Paul was the Marsh Account Director on one of the World’s leading international oil companies.

Paul also worked in our Marsh Houston Energy hub from 2004-2008, where he was the downstream development director of Marsh’s practice in the USA.

EDUCATION
- B.S.C. degree in chemical engineering, Exeter University
BIOGRAPHY

ALI RIZVI
Senior Vice President

CURRENT RESPONSIBILITIES
Ali Rizvi is a marine client advisor in Marsh’s Houston, Texas office. In this role, he is responsible for serving various accounts within the marine and energy industry mainly working on the marine liabilities and marine cargo/DSU coverage.

EXPERIENCE
Ali joined our firm in June of 2003. Previously, he worked as a marine engineer for seven years. He has been associated with a number of shipping companies around the world in various capacities. In addition, he interned with a major petrochemical company in the Strategic Research Group where he analyzed major chemical companies in North America using statistical and financial tools.

EDUCATION
- BE in marine engineering and design, Marine Engineering & Research Institute, India
- MBA, Rice University
KEVIN SPARKS
Managing Director

CURRENT RESPONSIBILITIES
Kevin Sparks leads business development for Marsh's Energy Practice. Domiciled in Marsh’s Houston office, he serves as a client executive, as well as being involved in the design, marketing, negotiation, and ongoing service of major property programs for energy-related companies. He has over 30 years of industry experience.

EXPERIENCE
Kevin entered the insurance industry in 1977 and has worked in a number of different capacities including claims adjustment, risk management consulting, production and brokerage. He has extensive experience in the energy insurance field having produced, marketed and serviced property, construction, and casualty insurance for companies in the refining/petrochemical, chemicals and utility industries as well as the oil field service industry.

He has successfully directed the formation and implementation of offshore captive programs, financial insurance programs, and the development, implementation and servicing of construction insurance programs. Kevin has also been very active in the settlement of numerous large property claims for his clients.

EDUCATION
- BA in Humanities, The University of Texas, Austin, Texas

DESIGNATIONS
- Associate in Risk Management (ARM)
ROBERT PETERSON
Partner

Robert is a Senior Partner in Oliver Wyman’s Oil and Gas Practice, focused on delivering strategy and strategy execution projects for clients in Canada, Houston, and Mexico. Robert has over 30 years of industry and consulting experience, and has previously held senior management positions at Exxon Mobil and Schlumberger. He assists E&P companies in improving strategy execution thru an integrated approach to economic analysis, planning, technology monetization, organizational design, and performance measurement systems.

Recent project experience includes:

• For a global integrated oil and gas company, assessed its operational and technology effectiveness in major shale plays in North America. Benchmarked performance against peers in each of these basins, and identified operational and technology improvements to achieve top-tier performance.

• For a major U.S. investment bank, analyzed economics and maturity of major shale basins in North America, and advised on an investment strategy to grow position in most desirable shale plays.

• For a leading Oilfield Services firm, developed a 5-year growth model for North American production, identifying technology and chemical needs in conventional, oilsands, and shale reservoirs. Assisted client in developing a high-margin growth strategy, and developed a go-to-market strategy to execute goals.

• For a major global industrial firm, analyzed oilfield service market structure and demand for highly engineered products. Identified best-fit entry points and developed go-to-market strategy.

• For a global independent, audited a 2000- well annual drilling program. Advised on improvements to planning, execution, procurement, and organizational design that reduced capital investment by 10% for next year’s program.

• For a super major, refocused its technology investment portfolio to better support the firm’s growth ambitions in deep-water, oil-sands, and shale. Audited business needs, organizational structure and portfolio, and developed an execution plan to implement changes.

• For a major U.S. independent, developed organizational growth plan to support ambition to increase production in unconventionals by 3x. Analyzed strategy, technology needs, execution philosophies and culture, and worked with executive team to launch and implement organizational transformation.

EDUCATION

Robert holds an MBA from Southern Methodist University, a BSEE from Michigan Technological University, and a BA in Physics from Carleton College. He is an active member of the Society of Petroleum Engineers and the Society of Exploration Geophysicists and holds six patents for new exploration methods.
Industry Roundtable Review Panelists

RICHARD M. PETTIGREW
Senior Contracts Engineering Consultant
ExxonMobil Development Company

Richard Pettigrew obtained a Bachelor of Science degree in Civil Engineering from New Mexico State University. He joined Exxon Chemical in August 1980 at the Baytown Chemical Plant, where he began his career in project management. Richard has worked on a variety of plant expansions, major projects, and turnarounds over the years, in and around the Baytown area, as well as abroad. He has worked in all phases of project development and execution and has held managerial positions in engineering, construction, contracting/procurement, and projects. In June 2013, he left his contracting leadership position in Chemicals to join ExxonMobil Development Company in Project Management and Execution. Today, he serves as the Senior Contracts Engineering Consultant for EMDC and is a member of the Senior Technical Council. He is also chair of the ExxonMobil Project Advisory Council – Contracts Work Group and is sponsor/lead instructor for ExxonMobil’s contracting courses. Richard has been married to his wife Amy since 1981. They live in Spring, Texas, and have three sons.

STEPHEN B. SANFORD
B. Comm, JD, MBA
Managing General Counsel, Energy and Chemicals Business Unit and Power Business Unit
Fluor Corporation

Stephen Sanford has been the Managing General Counsel of the Energy and Chemicals Business Unit and the Power Business Unit for Fluor Corporation since 2006. Fluor is the largest USA based publicly traded engineering and construction company, with in excess of $20 billion in projects under contract. Stephen is responsible for the management of the legal environment for these business units worldwide, including supervision and development of a staff of 13 lawyers located in the United States, Canada, Mexico, Great Britain, South Africa, Australia, and the United Arab Emirates. He has significant experience in the negotiation of all types of professional services agreements, joint ventures (both strategic and project focused), and related matters. Stephen is also a Subject Matter Expert for Fluor Corporation on anti-corruption and leads the corporate task force on international issues (agents, bribes, facilitation payments, and boycotts). Stephen participates with the management team of the business units on determining the strategic direction for the businesses.
BARBARA L. THOMPSON, P.E.
Senior Vice President of the Front End Spectrum
Aker Solutions Inc.

Barbara L. Thompson, P.E. is a 33-year veteran of the offshore oil and gas industry and began with a Bachelor of Science in Ocean Engineering from Texas A&M University in 1981. Barbara is the Senior Vice President of the Front End Spectrum for Aker Solutions Inc., a business area dedicated to providing best-in-class early engagement with clients in order to improve project outcomes by using experienced project management and enabling technology. Her career has included assignments as a subsea engineer, naval architect, marine surveyor, project manager, business development professional, and a business manager. During her business development career, Barbara has led negotiations for EPCI projects in the deep-water offshore industry for both E&C companies and offshore installers. Her publications include several papers at the Offshore Technology Conference with respect to floating production mooring systems and offshore installation techniques. She currently serves as the chair of the ASME OTC Program Committee. Originally from Midland, Texas, Barbara has always had a passion for anything related to the water, which includes scuba diving and underwater photography. In addition to her work in the offshore industry, Barbara is the co-founder of the Dive Pirates Foundation, a nonprofit that brings scuba diving to persons with disabilities, including combat veterans.

MANUEL WALTERS
Global Contracts Manager
Phillips 66

Manuel (Manny) Walters is currently the Global Contracts Manager at Phillips 66, where he leads the Contracts organization for the global refining, midstream, and marketing company. In that role, he manages contract negotiations and stewardship of all company procurement contracts, including EPC agreements, as well as drives implementation of a Contracting Excellence function. He has 23 years of engineering, operations, project management, and commercial experience in the refining, chemicals, and pipeline industries — including previous work experience at Shell and Exxon. Manny graduated from Georgia Tech with a Bachelors in Mechanical Engineering. He serves on the Georgia Tech Woodruff School of Mechanical Engineering Advisory Board.
SHANE P. WILLOUGHBY
Associate General Counsel and Managing Attorney – Oil & Gas
CB&I

Shane Willoughby leads CB&I’s Oil & Gas Legal group. He was appointed to this role in October 2013. The Oil & Gas Legal group provides EPC transactional and project execution legal support for CB&I’s global activities in LNG, petrochemicals, refining, gas processing, oil sands, offshore, pipelines, and sulfur processing. Before his current role, Shane managed CB&I’s legal activities in the Asia Pacific and Australia region. He joined CB&I in January 2010 and has worked on most of CB&I’s largest projects over the past five years. Shane has more than 15 years of legal experience in the international oil and gas industry. Before joining CB&I, he spent five years in Qatar working with an ExxonMobil project team building the Qatargas 2 LNG project and two years in Kuwait with an upstream oil and gas company. Prior to that, he spent five years with Norton Rose Fulbright (formerly Macleod Dixon) in Calgary, Alberta, Canada. Shane holds a law degree from the University of Victoria, in British Columbia, Canada, and a business degree from Simon Fraser University in British Columbia, Canada. He also completed the Advanced Leadership Program at Rice University in Texas.
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