

Agreements For Unconventional Projects

Jim MacLean

2011 CAPL Conference

September 26, 2011

Presentation Disclaimer

- My comments reflect experiences obtained primarily through extensive involvement in Canadian frontier projects and the negotiation of several large unconventional agreements in my former consulting practice.
- My comments should not be construed as necessarily reflective of the perspective of my employer, Talisman Energy, on any of these issues.

Today's Topics

- Issues relating to earning agreements.
- Issues requiring special attention under an Operating Procedure.
 - Selective modifications to the CAPL Operating Procedure.
 - Heavily modified CAPL Operating Procedure that integrates frontier/international principles.
 - Potential use of international, project based AIPN Operating Agreement as a starting point.

Desired Outcomes

- An enhanced understanding of:
 - Some major issues associated with the negotiation of an unconventional earning agreement;
 - The limitations in trying to use an unmodified CAPL Operating Procedure for unconventional rights; and
 - Some of the major issues that need to be considered when preparing your JOA.

Objectives Of The Parties

- Optimize project NPV by:
 - Having agreements that are clear, that offer reasonable solutions to a wide range of foreseeable issues, that reflect the needs of the particular project, that allow activities to proceed in a timely manner, that facilitate dialogue and decision making and that create a balanced risk-reward structure;
 - Managing the property on a project basis, rather than as a collection of individual wells; and
 - Integrating project infrastructure considerations into the project vision, approval processes and ongoing project management.

Earning Agreement Issues

- Nature of the earning obligation
 - Drilling obligation must be described carefully (target horizon, minimum horizontal target penetration, potential Farmor input on drilling program if Farmor has specialized expertise to offer re well orientation, drilling program, etc.).
 - Clear expectations re completion program (minimum fracing program re # and distance between fracs, Farmor input, extent of testing obligation-one bona fide continuous test in target zone?, micro-seismic program?).
 - Information req'ts-clarity re any Farmee offsite core analysis (duty to share with Farmor?, at whose expense?).
 - Cost allocation for early stage in-line testing programs?
 - Handling of earning costs for NPI type Crown royalties.
 - Regard Farmor as having spent its post earning WI share?

Earning Agreement Issues

- Traditional approach to earning
 - Farmee earns in a prescribed area for each earning well, with a continuing option to drill additional wells on unearned lands.
 - Should not link the election to drilling rig release date, as completion information is the key.
 - Little incentive to do more (#fracs, micro-seismic).
 - Typically a restriction on further drilling on earned lands until the earning phase is complete.
 - Farmee retains its earned interest, even if it surrenders its option to earn further interests early in the earning phase.

Earning Agreement Issues

- Traditional approach to earning
 - Typical drilling string election approach can see a Farmee make suboptimal investment decisions to drill distant wells to keep the option alive.
 - A more appropriate evaluation of the commercial potential of the rights might see a Farmee being permitted to drill additional “pilot” earning wells on lands that have already been earned as part of a concentrated pilot program.
 - Earn selected nearby unearned rights for any such well.
 - Special considerations required for expiring rights.

Earning Agreement Issues

- Alternative potential approaches to earning
 - Potential “walk away” feature if Farmee is not prepared to move to a Phase 2 evaluation after the initial commitment?
 - Farmee would walk away with no interest for its initial program (but keep certain liabilities).
 - Farmor option with a payback mechanism of XY%?
 - Allows Farmor to try to find another Farmee with an intact project area in order to facilitate development.
 - Farmee had the option benefit of testing its idea, but found that it didn't meet its investment criteria.

Earning Agreement Issues

- Alternative potential approaches to earning
 - Phased approach to the project-earn applicable WI for work to date through Phases 1 and 2, with right to drop option to earn in remainder of the project area.
 - Election to move to Phase 3 could see Farmee earn its interest in remainder of the project area in for a carry to Farmor of next \$ZZ MM of future expenditures (drilling, completion, micro-seismic, pilots, tie-in, AMI, etc.) before Farmor exposed to any project capital.
 - Farmee would retain flexibility to allocate capital to those portions of the project area that are of greatest interest to it (i.e., concentration of capital on a pilot).

Earning Agreement Issues

- Alternative potential approaches to earning
 - Attributes of a carry/credit mechanism:
 - Clear definition of “Eligible Expenditures” addressing included and excluded items and permitted internal charges;
 - Handling of outstanding credit amount at the end of XX months (Farmor initiated cash buyout option?);
 - Farmor deemed to participate in Farmee’s proposed operations during the credit period;
 - Clarity re impact on tax returns, indemnification and liability, any royalty credits based on investments;
 - Probable temporary restriction on Farmor’s right to initiate independent operations prior to a prescribed date; and
 - May Farmee acquire an additional WI by electing to increase the credit amount by \$YY, as is done in mining agreements?

Earning Agreement Issues

- Area of Mutual Interest
 - Will there be an AMI?
 - What does it look like (areal, stratigraphic, term, %)?
 - How does Farmor retain suitable flexibility to deal with third parties if Farmee surrenders its option to earn further interests?
 - Should a financially vulnerable Farmor reserve the right to participate for a minimum percentage less than its full entitlement if Farmee has deep pockets?
 - Would a credit mechanism apply to Farmor's costs?

Earning Agreement Issues

- Expectations respecting regional facilities
 - What is the vision for the handling of production in the event of success in the near, mid and long terms?
 - Ability to optimize project value can be largely compromised if the parties are not aligned on the handling of production.
 - Need to be cognizant of risks when one party already owns existing infrastructure or the parties have very different access to project capital.
 - But existing Farmee infrastructure can offer major benefits-preferential access for commingled WI owner volumes, enhanced opportunity to negotiate suitable fee structure in front end negotiations.
 - Requires discussion during initial negotiations, not later on.

Earning Agreement Issues

- The negotiation of an earning agreement for an unconventional project will be much more challenging than for a conventional area.
- The “size of the prize” and potential strategic visibility of an unconventional project are such that the consequences of suboptimal negotiations for either a Farmor or Farmee are magnified inside your company.

Operating Procedure Issues

- Using an unmodified CAPL Operating Procedure for a material unconventional project is analogous to trying to use a Honda Civic to tow a fair sized boat to the Okanagan.
 - It's a great car, but it's being used well beyond its inherent design limitations.
 - Unconventional resource project needs are significantly greater in many key areas than the design capacity of the CAPL Operating Procedure, as noted in the annotations at the end of the 2007 document.

Operating Procedure Issues

- The content in this portion of the presentation is based on the September and November, 2009 articles written for the CAPL Negotiator.
 - Those articles offer additional insights beyond the scope of today's presentation.
- Desired business outcomes can be achieved by using the traditional CAPL content for those areas for which the business needs warrant that handling and supplementing or modifying the CAPL content as required for particular needs.

Selective Modifications Approach

- Make selective modifications using the CAPL Operating Procedure as a largely intact platform.
 - More appropriate for a modest land holding and a modest initial expenditure profile.
 - May be particularly attractive if ownership is more complex than two like-minded parties.
 - Additional modifications potentially subsequently required in a success scenario.

Selective Modifications Approach

- Desire to limit the number of changes in order to facilitate finalization of agreements.
 - Trading off depth and breadth of coverage for expediency.
- The 2007 CAPL document was designed to address complex projects more fully.
 - Many more changes would be required if the 1990 document were being used as the foundation.
 - Specific provisions identified in the September, 2009 CAPL Negotiator article.

Selective Modifications Approach

- Forfeiture mechanism for non-participation in certain early stage exploratory wells?
 - Recognition that a traditional cost recovery could encourage non-participation in risk wells.
 - Addressed in detail in September, 2009 CAPL Negotiator article, with an illustration.
 - Important that any such mechanism be “dynamic”, to reduce the consequence as the drilling density in the target zone increases in the immediate area.
 - Not much interest in this concept at current gas prices.

Selective Modifications Approach

- Provisions to enable the parties to proceed with multi-well drilling and completion programs.
 - Impact of the traditional 3.2km election deferral mechanism on continuous drilling programs.
 - Mechanism allows for traditional 30 day election on the initial program well, with reduced election period on all subsequent program wells and no election deferral to a non-participating party for those wells.
 - Potential to include restrictions on use.
 - Again, not much interest in this at current gas prices.

Selective Modifications Approach

- Modifications to limit the potential legal responsibility of an Operator for loss in a high activity, high volume, complex operating environment.
 - Modification to “Extraordinary Damages” re operational events beyond loss of well control.
 - Possible “Senior Supervisory Personnel” test to offer Operators greater protection in a gross negligence or wilful misconduct scenario.

Selective Modifications Approach

- Authority to modify a proposed operation.
 - Impact of well information on the go forward drilling program for an unconventional well.
 - Provide some incremental flexibility for Operator relative to participants-comparable to the authority in Subclause 8.02B of the 2007 CAPL, but using a greater radius.
 - Provide greater incremental flexibility for Operator and other participants relative to non-participants to mitigate potential “change in scope” argument.

Selective Modifications Approach

- Potential minimum WI restriction for dispositions.
 - Disposing party must retain a minimum specified WI and may not dispose of less than a X% WI.
 - To mitigate the sharing of sensitive information to competitors overpaying to acquire a minor interest to obtain a strategic window into a project.
- Definitions for target formation and any recognized subsets, with qualification that defined “members” are each treated as “formations” in the Agreement.
 - “Upper Montney Member” and “Lower Montney Member” within the “Montney Formation”.

Highly Customized Approach

- A highly customized document that integrates frontier/international principles and, post development, unit type processes.
 - Reflects large scale potential capital requirements (i.e., a nine section development could be \$500MM).
 - Could be integrated into CAPL Operating Procedure.
 - Special content to supplement or modify familiar CAPL concepts simplifies ongoing use relative to a document that is completely unfamiliar to users.
 - Requires careful editing and thorough understanding of desired outcomes and domino impacts on CAPL.

Highly Customized Approach

- Major differences relative to CAPL
 - Additional segmentation of phases between exploration, appraisal/pilot, pre-development, development and production.
 - Inclusion of definitions, particularly in context of pilot, pilot area, pilot plan, pilot assessment report, micro-seismic and pre-development.
 - A major emphasis on project engineering and linkage to purpose built infrastructure.
 - Use of project based approaches, particularly for facilities issues, development project approval and production phase.

Highly Customized Approach

- Major differences relative to CAPL
 - Use of cash premium frontier/international style penalty regime up to development, versus traditional production penalty/cost recovery.
 - Requires a cash payment (cost plus multiple) to reinstate into a development that includes the applicable area.
 - Cash premium component varies by operation type, and is customized to each agreement.
 - Forfeiture for applicable development area if no reinstatement at the development approval stage.

Highly Customized Approach

- Major differences relative to CAPL
 - Provisions relating to multiple well drilling and completion programs to facilitate continuous work programs and pad development.
 - No 3.2 km election deferral mechanism at some prescribed point in the project evolution.
 - Short cycle responses after initial “program well”.
 - Non-participants required to make blind election.
 - But no independent operations after development.
 - Special provisions for activities on the same pad.

Highly Customized Approach

- Major differences relative to CAPL
 - Operating Committee processes to facilitate dialogue, planning and approvals.
 - Shift to more of a decision making role after a development, as in a unit agreement.
 - A particular emphasis on approval processes during the production phase.
 - Voting thresholds customized to each transaction.

Highly Customized Approach

- Major differences relative to CAPL
 - Processes respecting annual work plans and financial reporting.
 - Major emphasis on reporting processes for capital extensive development projects and forecasting/budgeting during the production phase.

Highly Customized Approach

- Major differences relative to CAPL
 - “In or out” election when presented with a “Project AFE” for a project based development, including associated purpose built facilities.
 - Typical international/frontier approach to project based development.
 - Users not familiar with that approach are likely to object to it, particularly if commodity price is low!
 - Safeguards required for “change in scope”.

Highly Customized Approach

- Major differences relative to CAPL
 - Application of unit concepts to production phase.
 - Annual work plan cycle.
 - Activities only proceed if applicable voting threshold obtained (i.e., no single party can force activity).
 - Activity for joint account if relevant voting threshold obtained (i.e., objecting party dragged along).
 - Designed to mitigate risks of overcapitalization and predatory work programs by a deep pockets player during periods of financial vulnerability and to avoid carrying passive parties with a production penalty.

Highly Customized Approach

- This is all very interesting, but...
 - Very difficult to finalize this type of document.
 - Requires high level of expertise with international/frontier type documents and CAPL to create a coherent document without major unintended consequences.
 - Application of unfamiliar international/frontier type approaches quite likely to be resisted.
 - Particular problem during a period of low prices and capital constraints.

Highly Customized Approach

- Parties are likely to use a staged approach
 - Major challenges in preparing a highly customized Operating Procedure for an unconventional project.
 - Parties might choose a modified CAPL during early stage activities.
 - Potential shift to more of a development style document after certain project milestones are attained.

Potential Use Of AIPN JOA

- AIPN JOA used for large international projects
 - AIPN JOA is widely accepted internationally.
 - International players investing in large Cdn projects likely to gravitate to AIPN JOA because of familiarity and its project based approach.
 - International players likely to struggle with CAPL document because of the process emphasis in CAPL and the differences relative to familiar standards.
 - Canadians potentially struggle because the AIPN is so different relative to Canadian documents.
 - Content, presentation and different process emphasis.

Potential Use Of AIPN JOA

- Significant cautions for use in Canada
 - AIPN is focused on conventional development projects, typically in an offshore environment.
 - Unconventional is very different and also onshore.
 - Concession agreement/production sharing agreement tenure regimes are very different than Cdn tenure.
 - No content on horizontal wells issues, micro-seismic, pad drilling, pilots or multi-well programs, particularly before development.
 - No specific content on pre-development type engineering work required in planning for a large scale development.

Potential Use Of AIPN JOA

- Significant cautions for use in Canada
 - No specific content to address facilities issues for an onshore project.
 - Large potential vulnerability relative to deep pockets owners with a broader regional land position.
 - Owner access to excess capacity, use by third parties.
 - Additional drilling after implementation of the project development plan requires unanimous approval as an amendment of the approved development.
 - Not suitable for ongoing high density drilling programs for which a unit type voting procedure should apply.
 - Less of an issue for a two party agreement.

Potential Use Of AIPN JOA

- Significant cautions for use in Canada
 - Very few sole risk/independent operations in an international operating environment because of the nature of the tenure.
 - Those AIPN processes have actually been seldom tested in practice.
 - CAPL content has been heavily influenced by actual experiences because of the large number of proposed independent operations.

Closing Comments

- Unconventional projects are very different
 - Earning phase obligations must be considered very carefully to optimize project outcomes.
 - CAPL Operating Procedure provides a very good platform for project based customization.
 - 2007 CAPL is a much better starting point than the 1990.
 - Don't try to use a Honda Civic when you need a high performance SUV for the job!
 - Onus on you to choose the right vehicle for the trip.

Questions?

Today's Sponsor

Thank you to our sponsor of today's presentation, Talisman Energy.