COLLABORATIVE CONTRACTING -
Strategy, Process, and Tools
Introduction

Wendy Ell - JuneWarren-Nickle's Energy Group (JWN Energy)
Christine Todd - Suncor Energy
Lisa Moore - Cenovus Energy
We are in a Crisis

Unpredictable project management and delivery performance have reduced investor confidence to levels that threaten the marketplace.

How do we correct this course?

- Reshape Regulation and Raise Transparency
- Rewire the Contractual Framework
- Rethink Design and Engineering Processes
- Improve Procurement and Supply-Chain Management
- Improve On-Site Execution
- Infuse Digital Technology, New Materials and Advanced Automation
- Reskill The Workforce

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Goals for the Workshop

To identify notable levers that contribute to greater collaboration that result in productivity gains.

To look in the mirror and identify areas of improvement at the individual, working group, company levels **AND** across the supply chain.

To allow participants to rank their collaboration efforts, relative to their peers.
What does today’s program look like?

- **Project Portfolio Strategy:** Matthew Faith (Enbridge)  
  Aaron Marlatt (Graham Construction)

- **Rewiring the Contractual Framework for Collaboration:** Richard Venerus (RVA)

- **Technology and its Ability to be an Enabler to Collaboration:** John Lusty (Siemens)
COAA BEST PRACTICE WORKSHOP

COLLABORATIVE CONTRACTING

Presenters: Matt Faith, Director, Canadian Projects, Enbridge
Aaron Marlatt, Vice President, Graham Industrial
Matt Faith is the Director of Canadian Projects at Enbridge Pipelines. His team is responsible to deliver approximately $400MM of core maintenance projects across Canada safely, on time and on budget each and every year. Previously to Matt’s role in projects he has worked in roles in Business Development, Finance, Shipper Services, Operations and Engineering in both Canada and the US. Matt is a member of the COAA board and believes that collaborative contracting represents an unique opportunity to both increase safety and productivity and to build a base from which both owners and contractors can innovate and unlock value for both companies through developing and executing projects faster avoiding the inherent waste associated with three bids and a buy.
Aaron Marlatt is the Vice President of Construction Industrial Alberta for Graham. He possesses over 20 years of progressive management experience in the design, construction and startup of Power Generation, Oil Sands, Refining, Petro Chemical and Pipeline Facilities and his group is responsible for servicing Industrial Clients project development and delivery needs in Western Canada. He firmly believes that both Owners and Contractors can greatly benefit from learning to work together developing our teams and projects collaboratively.
AGENDA

Â Why Collaborative Contracting?
Â Key Principles for Collaborative Contracting
Â Twice as Productive ï Twice as Safe ï Case Study
Â Collaboration results in Innovation
COAA Collaborative Contracting

WHY: CLIENT
1. Secure qualified contractor to perform projects.
2. Reduction in time/cost from three bids and a buy.
3. Provide continuity in contractor personnel.
4. Predictability of project outcomes:
   - Safety
   - Quality
   - Schedule
   - Cost
COLLABORATIVE CONTRACTING

WHY: CONTRACTOR
1. Increase predictability of annual work loads.
2. Opportunity to provide greater value to Client:
   - incorporating project learnings
   - continuity of staff.
3. Relationship status elevated.
5. Long Term Agreements Lower Risk Profile.
KEY PRINCIPLES FOR COLLABORATIVE CONTRACTING

1. Commitment to work together through group development
   a) Forming, Storming, Norming, Performing

2. Senior Leadership Commitment
   a) Joint Team Onboarding
   b) Joint Project Kick-Off
   c) Joint Project Tours
   d) Partners Steering Committee
   e) Clear KPIs to define value
TWICE AS PRODUCTIVE – TWICE AS SAFE

Total Construction Cost per Construction Hour by Year In Service

- 2013
- 2014
- 2015
- 2016
- 2017
TWICE AS PRODUCTIVE – TWICE AS SAFE

Canada Projects 3 Year TRIF Rolling Average and Actual TRIF
Collaboration results in Innovation

1. Continue to raise the bar in production and safety by working on joint initiatives.
2. Increased integration of teams.
3. Minimize duplication of effort.
4. Earlier engagement of contractor in project onset.
5. Joint long term planning.
Rewiring Contracts for Collaboration

Rewire Your Brain

Presented by: Practical Procurement™
Richard C. Venerus is the principal of RV & Associates (RVA) – a consultancy specialized in supporting and improving the performance of projects where they interface with procurement and contracting functions. RVA’s practice relies on Richard’s 15 years of combined experience as project leader, supply chain expert and contracts lawyer. Richard is supported in projects by a team of similarly skilled project, procurement and contracts experts. Richard is a qualified lawyer and holds a MBA, as well as a B.Comm (Economics). Richard is also certified as a Project Manager, Change Manager and has received training in Construction Contract Administration as well as in Adult Education. Richard is an instructor for the Supply Chain Management Association, the de facto standard for supply chain training in Canada.
Spectrum of Procurement and Contracts

- Traditional Tenders: "3 Bids and a Buy"
  - Price Dominant Selection for Procurement

- Value-Based Procurement
  - Multi-factor Selection
  - Price Not Dominant Procurement

- Category Management and Strategic Procurement

- Supplier Relationship Management - & Sole-Source

Low: Spectrum for Collaboration and Shared VaR

- Traditional
- Lump-Sum
- Design Build
- Build
  - CM (Agency)
  - CM (At Risk w/ GMP)
  - FEED open book

High: Project Alliance
- NEC3
- IPD
Project Alliance Agreement (PPA)

• Originated by BP for North Sea exploration in ‘90s

• PPA adopted in Australia and elaborated - now used there extensively including in public sector applications

• “..model resulted in zero litigation, 100% on time and on-budget and high customer satisfaction in over 400 projects”

• Limited application in Canada

• More info @: http://www.ejcm.or.jp/eng/pdf/victoria.pdf
New Engineering Contract (NEC)

- Originated in UK in 1993. Created by engineers to simplify building contracting activities. Recently updated to v. 4 or NEC4 (2017)

- “Family” of 39 plain language document “options” designed to maximize user choice for tailoring contract to project conditions

- Emphatically supported by UK government. Receive widespread in major “marquee” UK public sector projects (Heathrow/Olympics)

- Some adoption in HK, AUS-NZ, S. Africa. Limited in Canada/US

- For more information: https://www.neccocontract.com
Integrated Project Delivery (IPD)

- Originated in the United States, mid-late 2000’s

- Unique form of contract (multi-party) supported by project delivery principles/methods, including:

  - “IPD projects displayed a superior performance on 14 different metrics belonging to six out of the nine performance areas...” (e.g. quality, schedule, change, communication). ACE Study (2013)

- 60 IPD: 50 in US/10 in Canada (6 in AB). (U of Minn. 2015).

- For more details see: http://ipda.ca
Common Characteristics

Â Success is Outcomes based
Commercial Altruism: Everyone does what is "Best for Project"

Â Shared risk and reward
Collective vs. Individual liability; No Blame/No Claim

Â Parties are peers with equal say
Equal power/balance in key decision making; risk allocation

Â Joint Delivery
Organizational structures generate collaboration
Collective roles/responsibility and management
Key Differences among contract models

- IPD is more of a project delivery method than a contracting tool
- IPD expressly encourages use of collaboration process/technologies
  - Lean Construction Methods
  - Building Info. Modeling (BIM) Technology
- NEC3
  - Family of contract options vs. one-off PPA or IPD template
  - New multi-party Alliance Contract option brings it closer to PPA
  - New ECI (early contractor involvement) simulates IPD aspect
- Project Alliance
  - Only version of collaboration contract used for Industrial
  - Custom designed by project participants as a one-off
The Need for Collaboration

Leveraging a Project Lifecycle Management Approach

John Lusty
Global Director of Energy & Utility Solutions
Siemens
John Lusty is the Global Director of Energy & Utility Solutions for Siemens and is based in Calgary. With over 25 years in the industry, John has spent half of his career working in facilities and the other half working with software solutions that support the design, construction, and operations of facilities. John's primary area of interest is to look globally across other mature industries to understand how technology already applied elsewhere can be adapted and applied to quickly solve problems in the Energy and Utilities industries.
The Documentation Challenge

- Shorter project development cycles
- Frequent project changes
- Increasing number of project variants
- Wide range of formats
- Different languages
- New media

The coordination and synchronization of projects and the corresponding documentation has become a extremely complex process.
A Project Lifecycle Mgt (PLM) Approach
Acts a central nervous system across the project

1. Ideation
   - Project Start

2. Realization
   - Design & Engineering

3. Utilization
   - Construction
   - Operations
A Common Digital Thread Compresses the innovation lifecycle

Ideation
1. Project Start
2. Project Planning

Realization
3. Design & Engineering
4. Construction

Utilization
5. Operations
<table>
<thead>
<tr>
<th>Access control</th>
<th>Version control</th>
<th>Automatic updates</th>
<th>Configurable review process</th>
<th>Tracking</th>
</tr>
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<tbody>
<tr>
<td>Â Supplier users are subject to system security access control</td>
<td>Â Modification rights can be given to authorized suppliers</td>
<td>Â Suppliers can search for reference data and schedule updates</td>
<td>Â Supplier information must be approved before it is imported into the Owner database</td>
<td>Â Submission packages contain auditable status and history</td>
</tr>
<tr>
<td>Â Each user receives data that has been filtered by their access privileges</td>
<td>Â Suppliers can modify contents as determined by the Project Owner</td>
<td>Â Project changes automatically distributed to affected parties</td>
<td>Â Successive submissions can be previewed and compared to understand changes</td>
<td>Â System reports show supplier activity and record file uploads and downloads</td>
</tr>
</tbody>
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Key Takeaways of a Lifecycle Approach for Contracts and Collaboration

- Contract and supplier interactions are composed of “requirements” and those can be digitalized and managed using:
  - Properties
  - Traceability
  - Relationships
  - Change Mgt
  - Workflow
  - Reporting

- Information residing in siloed containers and spreadsheets slows collaboration and should be integrated where possible.

- Uncontrolled spreadsheets represent a risk to the secure flow of information.
Summary

Extend the Lifecycle across the supply chain

- **Reduce risk** by integrating offline suppliers and their data early in the project development process.

- **Increase productivity** by enabling suppliers to efficiently share information and collaborate throughout the project lifecycle.

- **Reduce rework costs** by shortening change cycles with more accurate supplier information (requirements, cost, design, process, etc.).

- **Increase Project ROI** with visibility into supplier cost drivers early in the project and before changes are approved.
Panel Moderation:
Christine Todd - Suncor Energy
Lisa Moore - Cenovus Energy
Wendy Ell - JuneWarren-Nickle's Energy Group (JWN Energy)

Moderated Q&A
Questions

Given what you’ve heard today, where do you sit in terms of acting differently tomorrow?

a) Ready – will for sure act differently tomorrow
b) Ready – may try to weave in change where I can, when I can
c) Not Ready – support the ideas but will have to ask others about this
d) Not Ready – not sure I agree

Collaboration’s burning issues fall into two categories, Attitudes and Processes; which category, if the issues could be resolved, would have the greatest impact on your business?

a) Attitudes (Trust, Communication, Collaboration Culture)
b) Processes (Contracts, Front End Planning, Shared Metrics/KPIs, Technology)

Of the following Process issues, if it could be resolved, which one would have the greatest impact on your business?

a) Contracts
b) Front End Planning
c) Shared/Standardized Metrics/KPIs
d) Technology

What would be the biggest benefit of resolving collaboration challenges?

a) Increased general dialogue and understanding among project team
b) Increased alignment of goals and objectives
c) Increased understanding of project strategy, reduced silo thinking
d) Common definitions and measures of “success”
e) Increased innovation (based on project payback vs. silo subcontractor payback)

What are the biggest barriers to effective implementation of collaborative contracting?

a) Management attitudes
b) Project team attitudes
c) Project team “collaborative competencies”
d) Absence of best practices / success stories / role models
e) Contractual or SCM rigidity

Do the barriers identified exist mainly:

a) Upstream from your business (e.g. disinterest by General Contractor or Owner)
b) Downstream from your business (e.g. your supply chain does not get it)
c) Both, equally
Change Management: Behavior and Process

- The Project Portfolio Strategy
- The Contractual Framework
- Technology as an Enabler to Collaboration
Collaborative Contracting Subcommittee

Chair: Allan To (Suncor)
Co-Chair: Chris Mummery (TransCanada)

Subcommittee Team:
Â Lisa Moore (Cenovus)
Â Christine Todd (Suncor)
Â Mike Smith (Imperial Oil)
Â Abraham Adesoye (Husky)
Â Skylar Anderson (TransCanada)
Â Manuel Dominguez (TransCanada)