

COAA Workface Planning Conference "Panel Discussion - Owner's Expectations"

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Project Execution Leader – Strathcona Refinery

Imperial Oil – Owner Expectations

For Project Delivery

- 1) Safety, Health and Environment
 - All individuals and organizations must share safety and protection of the environment as core values.
 - Facilities must be safe to construct, operate and maintain.
- 2) Quality and Reliability
 - Quality of the engineering and construction directly relates to safety and business results.
- 3) Capital Efficiency
 - To create value for the business, optimize life-cycle cost for assets.
 - Corporate emphasis globally on increasing field labour productivity.

For Workface Planning

- 1) Improved safety performance
- 2) Fewer quality issues
- 3) Increased field labour productivity
- 4) Improved predictability for cost and schedule

Workface Planning at Imperial Oil

- No experience in the downstream. Some experience in other parts of the company.
- Strathcona Refinery is implementing workface planning on work that includes construction of new facilities in operating units as well as during turnarounds.
 - Lessons learned will be shared globally
- Construction Focus areas for workface planning:
 - Aligning project team with workface planning model
 - Contractors to create Field Work Installation Packages and provide additional planning versus historical practice
 - A constraint based system to be used for releasing work to the field
- Turnaround focus areas for workface planning:
 - Historical level of planning already sufficient
 - Increased focus on efficiencies in a geographic area (ie. workface) vs. individual jobs
 - Additional emphasis on "plan B or plan C"; having contingency work available
 - Productivity improvement will help ensure labour availability
- Benefit to contractors:
 - Improved safety performance and productivity
 - Enhanced competitive position

Why Workface Planning?

- What do Owner's Want From Their Projects?
 - Projects delivered:
 - On-time
 - On-price
 - ▶ On-quality
 - Executed Safely!

- Why Do Owner's NEED to Be Involved in WFP?
 - Recent Projects' Execution failed to produce On-time, Onprice, On-quality performance
 - Design Cycles & Deliverables did not support the Construction Execution Plan
 - The Construction Execution Plan was not "In Sync" with the Owner's Turnover & Commissioning Plan
 - Inadequate FEL left too many gaps for EPC contractors to bridge

- When do Owner's need to be involved in Workface Planning?
 - From DBM onward, Owner's must ensure that Workface Planning encompasses <u>all</u> phases of the project life cycle:
 - ▶ Concept (DBM): Deciding what to build effectively
 - ▶ Preliminary Design (FEED): Engineering the project efficiently
 - ► Construction (Detail/Execution): Building it productively
 - ▶ **Commissioning**: Ensuring the project comes on-stream in the sequence and way intended

- How Does Workface Planning Improve Project Execution?
 - Aligning Execution Plans to be in Sync with the Owner's Turnover & Commissioning Plan
 - Tuning Design Cycles & Other Project Deliverables To Construction Execution Plans
 - Early Planning For Seamless Integration Between Project Silos

- In Summary, Owner's Expectations from WFP are Planning Processes that Produce Efficient:
- Designs that Support Construction Execution
- Construction Execution Plans Tuned to Turnover & Commissioning
- Seamless Interface Management plans between Silos and "Brownfield" Interfaces.

Speaker Notes: Carl Souchereau Owners Expectations Regarding Workface Planning Wed Dec 1 1:30-2:30pm Coast Plaza Hotel & Conference Centre 1316 – 33 Street N.E., Calgary Plaza 5 room

Introduction:

- Who I am
- Time in TransAlta
- Background
- What I'm currently doing in the PMO

Role of TransAlta PMO

- Governance TRACT
- Project Management Standards (Project Management Process and Templates)
- Project Management Services

Briefly outline Current Construction Model

- 8 Stage Gate process
 - o Screening
 - o Early Development
 - Mature Development Evaluation
 - o Mature Development Definition
 - Construction
 - o Integration
 - Commissioning
 - Wrap Up and Lessons Learned

Describe that TransAlta has not implemented WFP into our construction projects

- That said, I see our model embedded in the four basic WFP steps. For example:
 - o Design Basis Memorandum = TransAlta Screening/Early Development
 - o Engineering Design Specifications = TransAlta Mature Development Evaluation
 - Detailed engineering = TransAlta Mature Development Definition and Construction
 - Construction = Construction/Commissioning/Integration/Wrap-up and Lessons Learned
- However, the value in WFP resides in the detail.
- Where TransAlta also sees value in WFP is in how it drives collaboration within the key stakeholders and decision points are very well defined.
- We find the collaboration piece in TransAlta a challenge at times and accountabilities at times get confused. The WFP model is very clear when it comes to accountabilities and I see it can be modified to meet our purposes depending on who has been hired to do each piece of work.own

• Finally, we see that aligning our model more closely with the WFP model will likely benefit us in that the same terminology, timings, and expectations that are used outside the confines of TransAlta are used internally. Speaking the same language!!

Challenges

- Based on what I've seen in the limited time in my current role I make the following comments:
 - o Good Processes do not always lead to good work.
 - TransAlta has a lot of very good processes that are clearly defined and mature in nature. Where we tend to have an issue is not with the process, it's getting folks to understand the value of the process and following it because it creates.
 - A solid and mature process is a double edge sword in my opinion. On one hand the process is embedded into our culture so any adjustments will come with some significant change management challenges.
 - To be successful, I'm of the opinion that we need to make the process the path of least resistance because it's easy, and repeatable. As a result, users will naturally migrate to it.
 - I see implementing WFP methodologies into our process will come with those same challenges. I think TransAlta will not be alone in this challenge.

Bottom Line

- TransAlta will be conducting a detailed review of the WFP model in conjunction with our process in January to incorporate as many of the WFP best practices as possible. When we're done, the final outcome may not have the same look and feel as the WFP model but judging from what I've gleaned so far, the majority of the WFP model will be embedded in our process.
- Once this piece of work is complete, the heavy lifting will begin. We will begin the change management necessary to communicate our expectations internally and externally. Similar to what we do now, it will be our intention that contractors and engineering firms will need to conform to our model and planning expectations.

Opening Question

• How can we best implement any changes into our planning model and immediately get the buy-in by the end users?

Owners Expectations

"More Business Value for Our Money"

Jim Porter DuPont VP Engineering & Operations (Retired) WorkFace Planning Conference December 1, 2010



Core Values

Safety and Health

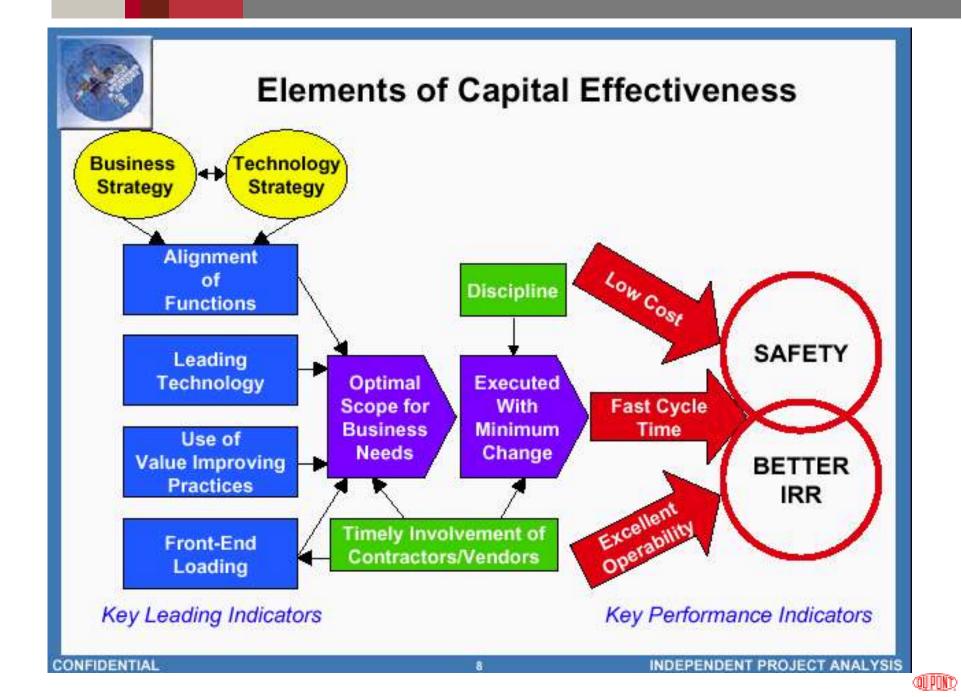
• Environmental Stewardship



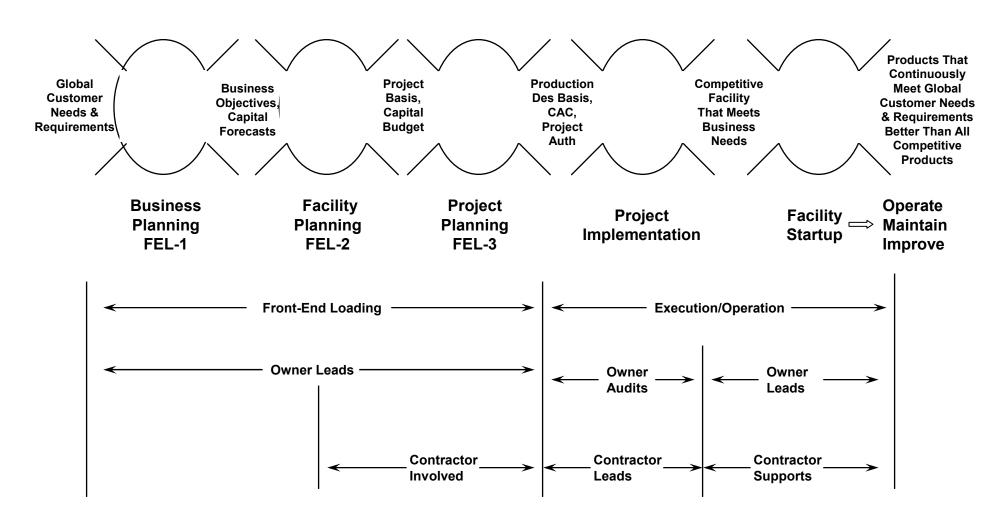
Highes Thical Standards

Respect for People





Facilities Engineering Process





"More Business Value for Our Money"

Different Levels of Value From WFP

- Owners
- Contractors
- Industry

Owners: - Improved safety performance

- Improved planning

*Execution strategy

*Contracting Strategy

*Optimize cost & schedule

More accurate estimates(cost/schedule)

- Improved control
- Increased productivity



"More Business Value for Our Money"

Contractors: - Improved safety performance

- Improved planning
- Improved productivity
- Increased profitability

Industry: - Improved safety performance

- Improved work force development
- Increased work force availability
- Increased overall productivity
- Increased attractiveness of construction jobs





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