

Pipeline Scheduling and Crude Oil Logistics

The New Systems Imperative: Addressing Hidden Logistics Risks and Operational Inefficiencies

Dr. Wolfgang Ferse, Executive Vice President-Commodities & Energy Solutions, OpenLink

Last year's turmoil and changing market conditions reinforced the need for stringent risk management and highlighted business inefficiencies in the distribution network that crude oil producers and other physical market participants cannot afford to ignore. As the industry seeks to cut costs and operate more effectively, pipeline scheduling, crude oil logistics and improved wellhead management are now taking center stage, explains OpenLink's Dr. Wolfgang Ferse...

Of course, some companies with sophisticated trading operations that already deploy integrated commodity trading, risk, and logistics systems, that can straddle physical and financial markets, have managed to generate handsome trading profits in this challenging environment.

Despite such instances of savvy risk management and profit generation, the oil industry's P&L rollercoaster ride during the last 18 months has highlighted that reluctance to aggressively hedge downside risk during the bull market was far from uncommon.

In addition, beyond this culture of upside participation, there is a more subtle risk management issue that many oil and gas producers have realized now needs to be addressed- the large hidden risk exposures, business inefficiencies, and systems redundancies associated with production, pipeline scheduling and crude oil logistics.

"One example, from an efficiency perspective, is the demanding task of managing ownership shares and changes in producing properties, changing marketing arrangements, and calculating estimated and actual wellhead volumes to the custody transport point of sales as well equity and royalty splits," comments Dr. Wolfgang Ferse, OpenLink's Executive Vice President of Commodities and Energy Solutions. "We've noticed a significant increase in interest among producer clients in modeling their deal life cycles in their entirety—that is, including splits—and also in improving wellhead accounting, with improved coupling to downstream marketing for energy trading, risk, and logistic systems," he added.

"OpenLink's ENDUR® system has included integrated cross-commodity trading, risk management and logistics functionality for some time," explains Ferse. "But, client awareness of the operational risk and inefficiency associated with the transfer of data between disparate trading and risk systems and off-system 'work arounds' has grown, resulting in the current interest to provide a

single, fully integrated solution for straight through commodity life cycle management. To address this, OpenLink has invested significantly over the last years to extend the life cycle coverage of its integrated system suite to cover the producer side as well."

Multi-Modal Transport: Fixing Logistics Risk Management's Achilles Heel

"We're already seeing a dramatic change in the way organizations want to manage crude oil logistics in concert with trading and risk decisions," comments Ferse. Traditionally, the task of automatically capturing the data necessary to track the movement of crude oil through a pipeline, into storage and then onto a barge and/or other modes of transport, along a perhaps yet-to-be-determined route, has been either outside the scope of risk management systems or been based on simplified information passed between the trading and the logistics world.

For example, if the oil company decides to redirect a planned shipment and purchase fulfillment in the local market, the physical and financial risks change. OpenLink has regarded the ability to manage multi-modal transport in an integrated fashion as critical. "Not having system support for multi-modal transport often results in incomplete risk analysis and reporting, let alone managing the optionality associated with location and storage," says Ferse. "From a trader's perspective, another problem is that they cannot assess the P&L impact on their strategies based on 'real world' operational events, such as shipping delays from pipeline disruption. This can be compounded with operational risks associated with the manual transfer of data and disconnects between different system outputs."

With the days of cheap oil behind us, oil producers and other market participants are realizing an attractive return on investment from replacing multiple and complex legacy systems with an integrated solution that supports all segments of the value chain, and which have previously been inaccessible from both an IT and economic perspective.

Contact Information:
Marketing and Communications
OpenLink
Email: info@olf.com
Tel: +1(516) 833-4509

