

PETROLEUM INTELLIGENCE WEEKLY®

Vol. LIII, No. 21



May 26, 2014

Special Reprint of *Petroleum Intelligence Weekly* for Enbridge. Copyright © 2014 Energy Intelligence.
Unauthorized access or electronic forwarding, even for internal use, is prohibited.

Enbridge's Monaco Maps Out New Midstream Realities

The demand for new midstream infrastructure to handle North America's surging oil and gas production has presented huge new opportunities for the region's pipeline operators, but also a number of new pressures. Al Monaco, chief executive of Canadian pipeline giant Enbridge, spoke to PIW during last week's Oil & Gas Strategies Summit in New York, co-hosted by Energy Intelligence and the Financial Times, and discussed the competitive, logistical and regulatory challenges his company is facing.

Q. With North America's oil and gas revival, this should be a "Golden Age" for pipeline companies. But with competition from rail, the safety issues, the opposition, does it feel that way?

A. In our business, I've learned that not everything goes the right way all the time. But if you step back from it, at 50,000 feet, we are in a tremendous age of opportunity. We've got a renaissance in supply, with the application of new technology and scale, and unbelievable growth in oil, gas and NGL supply. With that comes a whole bunch of opportunities in our midstream sector to connect this growing supply, which is from different areas than it used to be, to the markets that need it. I think we will look back, years from now, and say "Wow, that was a great time in our business." At the same time, nothing goes perfectly right all the time — there's this challenge we're facing in North America around the whole development of energy infrastructure. This complexity has come about because of a cocktail of things, a confluence of factors. Number one is the focus on legitimate concerns around climate change. Number two, there have been several high-profile incidents in the upstream and midstream sector. You've got the advent of social media that has created a different way of people talking about energy at a much faster pace. Finally, you've got this focus on the midstream sector — the transportation conduit — that has really focused all the energy of opposition onto pipeline companies. Those four components are creating much stronger public expectations from our industry. And the point of attack happens to be the pipeline companies.

Q. You've said it is no longer enough to stress economic benefits, and there must be equal emphasis on sustainability. What does that mean in practice?

A. What it means is when you're speaking with communities — whether an aboriginal community, a local community, a provincial government or a federal government — what people want to know first is whether your project can be done

safely, and with the environment as the first priority. Nobody is going to care too much about the benefits — which everybody wants — unless they first know that the project can be done safely. That's a change that we've seen: We used to go in and talk about how this project was great for the community from an economic point of view — and these are great projects from that perspective — but [now] the first thing they need to know, to have trust in what you're doing, is safety and the environment.

Q. With hindsight, what would you have done differently with the Northern Gateway project from Alberta to the Pacific?

A. First of all, we need to put this in context. We've been working on Gateway for 10 years now, and in that time, we have seen the changes that I described. The game changed. But every project in North America is going through this kind of complexity and increased expectations. I don't think Gateway's any different. As to what we would have done differently, we would have spent more time on the ground building trust. So, put the maps away, with the lines drawn on them as to where the project's going to go, don't talk about the benefits, let's first talk about safety and the environment, and build that trust with people over a longer period of time. The second thing is the need to engage these communities with your own staff — the people that are familiar with your approach, with the values and culture of your company. It's always a better connection to have your own people on the ground. If you look at it though, if you read through the Joint Review Panel recommendations summary, it shows the lengths that we went to, and how we learned through this entire process. They recognize the lengths we went to beyond regulatory requirements — from design to consultation, marine safety, and a number of other factors. That's what you need to do today — you've got to be driven not by the letter of the regulation, but by the concerns of the community.

We listened to what people were saying, we put the engineering hats aside, and said, "Look, people want some addi-

(continued on page 2)

Enbridge *(continued from page 1)*

tional comfort.” Even though from an engineering or regulatory perspective it wasn’t necessarily required, what would give people that comfort? So, we have thicker wall pipe, more valves along the right of way, we’re designing in a redundant leak detection system, various enhancements to the marine part, we will have three times more emergency response equipment than is required. We’d always been tagged as being behind the curve, but we learned, and if you look at the projects since then — Line 9 reversal, for example — it shows how these learnings have been applied. You listen carefully to what the community is saying, you take advice and you respond to their concerns to give them comfort.

Q. In the case of existing infrastructure — whether Enbridge’s Mainline or other projects — some of the regulatory opposition seems to have been unexpected. How much of that is political?

A. I don’t like to pin it on politics, because I think the political outcrop is an outcome of the things I mentioned — so when people are concerned about climate change, about incidents, when they have the avenue to move information more quickly, and they have a point of attack like pipelines, it becomes political. I would say those are the main drivers, as opposed to the other way around. In many ways it exceeds our capabilities to understand all the variables that go into this. What we need to focus on are those fundamental things I talked about. It’s this question of “social license” — it’s such a nebulous concept, but social license to me means safety and environmental protection, investing in your system and technology, being transparent, leading regulatory requirements, and using existing infrastructure. If we do all of those, we are doing the best we can do.

If you look at the history of Canada or the US, transportation conduits have always been an issue, whether it was rail to connect populations, the original gas pipeline across Canada or the Saint Lawrence Seaway — there’s always been concern over these types of projects. If we focus on those things that we can control, we will do the part that we can.

Q. How do you avoid getting bogged down in consultation and dialogue? You will never make everybody happy.

A. I think that’s right, but it’s one of those things where you can’t be looking at your watch or your calendar, you can’t hurry the consultation process. You’ve got to start earlier, consult often, be totally transparent in what you’re doing. And build coalitions — it’s not just the pipeline company that should be talking about the project, it’s the refiners, the producers, the community leaders, the union leaders, the people who are part of the community itself, everyone is effectively in a coalition of information, so that people really start to understand the project.

Q. How do you see the future for crude-by-rail? Is it a permanent solution?

A. Our customers want options — so in an environment where things take longer, it makes sense for customers, whether producers or refiners, to want access to rail. I think it’s going to be a permanent part of the transportation infrastructure, but not as large as it is today. When differentials start to narrow up, all of a sudden volumes start to flow back onto the pipe. We’re seeing this in spades on our North Dakota system. Because of wider differentials before, people were moving onto rail. Now those volumes are moving back onto pipe as those differentials tighten up.

Q. So rail will be a smaller part of the system than today?

A. That’s my view. I think it will always be there, because a producer or refiner wants that optionality. But at the end of the day, it’s about the economics, and the most effective way of moving crude.

Q. Are the safety steps being taken now for crude-by-rail sufficient?

A. They’re going to continue to evolve. It’s always hard to tell where it’s going to end up. This is very similar to the pipeline business — and that’s part of why I said we’ve got to keep ahead of the regulatory rules. Industry needs to lead and try to set those standards, as opposed to following them.

Q. Some market players will no longer accept older tank cars at their facilities. Will Enbridge follow suit?

A. We are going to move as quickly as we possibly can to move to the new standards. That’s our corporate position.

Q. Logistically, how well is North America coping with all the oil and gas it now has to move around?

A. To be honest, you’d have to say not very well yet. Because when you have the kind of disparity in prices that you do between regions, when they’re so wide, it begs for new infrastructure. I’d say we are behind. We haven’t been keeping pace with the increase in supply — and importantly, the location of the markets. This is a critical point. If you look at the transportation grid in North America, let’s take oil, we used to have this grid moving crude from coastal markets inland. What we’ve seen in the last five years is a total transformation of that grid. It’s now moving crude from inland to coastal markets. And that’s where the real drive is coming in the transportation sector. Crude is not all alike. Getting heavy to heavy markets and light to light markets is essentially the strategy we’ve employed over the last three or four years. So getting that perfect marriage between Canadian heavy and Gulf Coast heavy refining capability, and linking those up, is the key to what needs to happen in our business. The heavy increase from the oil sands was generally pretty well known. What people didn’t

(continued on page 3)

Enbridge *(continued from page 2)*

anticipate was the striking increase in light. As soon as that started to happen, we designed our strategy to get those light barrels, whether from Western Canada or the Bakken, into the light oil markets — eastern Padd 2, the eastern US, and other areas. So you've got this light moving to eastern markets, and you've got heavy generally moving into the Gulf Coast.

Q. Do you see infrastructure constraining the development of North American oil and gas in the coming years?

A. It's a challenge, and if we don't continue to move quickly on pipeline infrastructure, I fear that the additional costs and these differentials are going to hamper development. That's because you're not getting the right price signal for development to occur in its most effective way. If you look at finding and development costs, and you add the midstream onto that, you see that in North America we're a relatively high cost barrel. I'm concerned that without enough infrastructure and with delays, it will start to hamper the competitiveness of North American crude. That's what we are worried about.

Q. You have a license to re-export Canadian crude from US ports. How do the economics of that work? Aren't you just layering in additional shipping costs?

A. That kind of export doesn't always work from an economical point of view. The arbitrage opportunity is not always the same. You've got changes in world prices, you've got changes in prices in North America, you've got the ability of crude to be absorbed within the US refining market — if it can be absorbed, that's where it's going to go. There are cases though where the arbitrage is there for export of Canadian crude. Let's put it in perspective — the vast majority of any crude that's moved is going to be consumed in the US market, it

needs it. I look at this as a small, small safety valve, so that if there are constraints in US refining intake, there is a little bit of room to move some of that outside the US. But it's so small, it's almost insignificant.

Q. What do you see as the natural markets for Canadian crude outside the US?

A. For Canada, it's certainly Asian markets. If you look at global demand, most of the demand growth is going to come from non-OECD countries, and the vast majority of that is China, India and other Asian markets. You've also got this good marriage there between heavy supply and heavy refining markets. That's not to say it can't move elsewhere, but the most effective would be the Asian markets.

Q. Canada also has a budding LNG export business. Will Enbridge be participating?

A. We would like to be involved. We haven't really brought our development forward to the point where we are comfortable saying we're going to be involved, but certainly we are very supportive, we are big believers in the natural gas market in North America — not just from a shale perspective, but from a consumption perspective. We like natural gas because it can be power generation, it can be sited more easily, it's lower in emissions relative to other fuels, and it can avoid in many cases transmission costs because it's located closer to the load center. And it's responsive to demand — I'm talking not just about being able to turn on a combined-cycle plant and ramp it up quickly, but from a drilling perspective, supply can be ramped up quite quickly in North America. We're big believers in natural gas — and the fact that North America's not connected to the world market yet, this is something that needs to happen.