Murder or Suicide: What Killed Low-Cost Natural Gas Service in New Brunswick?

Robert Jones

The Problem

Natural gas became available to the public in New Brunswick on 22 March 2001.

A celebration of sorts was held to mark the occasion at Mama's Pub on the north side of Fredericton. In attendance was the premier of the day, Bernard Lord, various ministers, and natural gas executives. Then-owner of Mama's Pub, Paul Elliot, expressed the hope, which was shared widely by others in the province, that the arrival of natural gas would transform energy pricing in New Brunswick. "We're thrilled to finally have access to natural gas," said Elliot. "This is going to make our business more competitive and more profitable because of the significant cost savings we will enjoy because of natural gas."

It's not how things turned out.

Fourteen years after becoming the first commercial natural gas customer in Atlantic Canada, Mama's Pub has become a symbol of widespread disappointment in the fuel. Mama's has already replaced its natural gas water heater to go back to electric. And new owner Brad Cain says if he could afford to shut down more of his natural gas appliances, he would. "As far as kitchen equipment goes, we'd love to but it's so expensive to switch over. We'll probably start switching one by one," says Cain. "It's ridiculous."

Natural gas in New Brunswick is actually cheaper than electricity—most of the time—but Cain's frustration is not unusual, and many people wonder why the fuel isn't half the price it currently sells for in the province—or less. And it's not an unreasonable question.

Natural gas is an incredibly cheap fuel throughout much of North America: one third the price of oil, even at $45 a barrel. But what really makes it cheap to use is the method of delivering it to customers, with pipes underground directly connecting users to the supply. It is an efficient and low-cost delivery system. At least outside of New Brunswick it is.

Anywhere in southern Ontario, for example, a business that consumed 100 gigajoules of natural gas in August of 2015 would have paid $119.77 plus tax in delivery charges to the gas company. That doesn't include the cost of the gas itself—just the cost to deliver it to the business.

One hundred gigajoules of gas holds the equivalent energy of about 2,800 litres of gasoline, so the delivery charge for natural gas in southern Ontario is, in gasoline terms, about 4 cents a litre.

But in New Brunswick, the delivery of 100 gigajoules of natural gas to a business in August 2015 would have been $1,287.62 plus taxes. That's ten times more in delivery costs, and in gasoline terms more like 40 cents a litre.

True, southern Ontario has millions of people packed into a confined area, and it offers an economy of scale to gas companies that New Brunswick will never enjoy. Still, try to think of any consumer product or service that is priced seven times more in Moncton than it is in Markham.

Electricity is actually cheaper in New Brunswick than it is in southern Ontario, with similar economy of scale issues. And although lots of things *are* more expensive in New Brunswick—flights to Paris, for example—they are never 900 percent more expensive. That kind of a price premium is unheard of, except to commercial customers of natural gas in New Brunswick.

But forget about southern Ontario. Getting 100 gigajoules of natural gas delivered to a business to more remote northern Ontario locations like Thunder Bay (population 110,000) or Fort Frances (population 8,000) is 80 percent cheaper than in New Brunswick.

Then again, forget about Ontario altogether. In Bangor, Maine, which got natural gas at the same time as New Brunswick from the same Nova Scotia gas fields and delivered by the same pipeline, a business can get 100 gigajoules of natural gas delivered for about 70 percent less than a business in New Brunswick, even after currency conversion.

So how did that happen?

The origin of New Brunswick's natural gas pricing problems—especially high prices to deliver gas to customers—is still the subject of some debate. But there are two main suspects. Some say the provincial government killed the chances for low prices with a decision it made before gas even arrived in New Brunswick. Others blame a series of lousy decisions and self-inflicted errors made by Enbridge after gas arrived—Enbridge the company that owns the underground pipes that distribute gas in New Brunswick. Likely it is a combination of the two.

A Critical Political Decision

Natural gas came to New Brunswick rapidly in the late 1990s after a consortium of oil companies, including ExxonMobil and Shell, announced in 1996 that they were finally prepared to develop an offshore gas industry in Nova Scotia.

In New Brunswick, that forced some immediate policy decisions on the provincial government. The primary market for the gas was to be in the U.S., and that triggered the need for the construction of a pipeline that would run through Nova Scotia and New Brunswick to the border with Maine. The National Energy Board (NEB) was in charge of approving the Canadian section of the pipeline, and it adopted an interesting position on its construction and financing that provided an opportunity and posed a problem for New Brunswick.

The NEB said the pipeline could be constructed either in a straight line to the U.S. border, or in a straight line with various branches, or laterals, coming off to bring gas to New Brunswick communities like Saint John at the same time it reached the U.S. Better yet, the company building the pipeline proposed, and the NEB agreed, that if the laterals were built around the same time as the main line, it would fold all of its costs into a single price that all users of the pipeline would pay for. The proposal meant that if 75 percent of the gas from Nova Scotia eventually went to the U.S., then 75 percent of the cost of the New Brunswick laterals would be paid for by tolls on U.S. customers.

It had the potential to be a great deal for New Brunswick, but it came with a catch. In order for a lateral to be built to a location, customers in that location would have to make a long-term commitment to buy enough gas from the lateral to make it viable.

Normally that commitment would be made by the local gas distribution company, but that was a problem because New Brunswick had not yet picked who would run the province's natural gas distribution system. Different groups were competing for the role, including a group backed by Enbridge, but none of the contenders could make commitments to a lateral until the province chose who the distributor would be.

Large New Brunswick industries like Irving Oil Ltd. and JD Irving Ltd. had a different idea. They signed contracts with the pipeline company, Maritimes & Northeast, to be the anchor customers on their own. That would make the lateral viable, but the Irving companies proposed to go ahead only if they could buy gas directly from the main pipeline.

In other words, the Irvings wanted to avoid dealing with—and paying into—the province's public distribution system when a company was finally chosen to build and run it. And the companies made it clear that if they could not have a guarantee from the province that they could operate outside of the distribution system, they would not commit to buying any gas at all, meaning that the lateral would have no backer.

In 1998, during the single year that New Brunswick was led by Premier Camille Thériault (after the resignation of Frank McKenna), the province set up a committee of MLAs to study how New Brunswick should proceed.

At a hearing in Saint John in September 1998, Arthur and Kenneth Irving from Irving Oil, and Jim Irving from JD Irving, all appeared personally to press their case that industry would buy gas *only* outside of a public distribution system. "All bets are off," said Kenneth Irving about buying any natural gas if industry had to purchase from a public distribution system. "If we're going to have extra costs we're better off not to go ahead," echoed his cousin Jim Irving.

Fredericton businessman Bud Bird, who headed the group of Enbridge-linked investors that was eventually awarded the public distribution system one year later in 1999, was also at the Saint John hearing. Bird had been campaigning hard against the Irving position all through 1998. He told CBC News in July 1998 that if the province agreed to the Irving plan to buy its natural gas outside of a public distribution system it would wreck the economics of getting gas to the public. "The transfer of that load directly away from the provincial distribution system will diminish the potential or the feasibility of the system if not perhaps mortally wound it," Bird said.

In September, Bird was in attendance as the Irvings made their case directly to the committee of MLAs, and he told reporters they were bluffing. "I doubt they're going to cut off their noses to spite their faces," said Bird, who insisted that all Irving companies would buy gas from a distributor if it were cheaper than alternatives.

But MLAs were not so sure. Committee member and Progressive Conservative MLA Peter Mesheau said it was hard to know if the Irving family was serious or not. "I'm sure there's a certain degree of bluff there," said Mesheau. "Will Mr. Irving if he doesn't get what he wants pack up his toys and move away? Well that's a possibility."

Despite Bird's efforts, the MLA committee worried deeply about the Irving threat to abandon natural gas if it didn't get its way, and, under this pressure, the committee eventually backed completely the position put forward by the family. "Without anchor customers, it is very unlikely there will be laterals, and without laterals, gas availability will be severely limited in the province," wrote the committee in its eventual report. "The imposition of distribution charges on anchor loads could threaten the economic viability of their conversions and, consequently, the viability of the laterals."

It was a complete victory for the Irving position, a victory coloured by Bud Bird's ominous and eerily prophetic warning that New Brunswick would be stuck with an unworkable system for the public. "This recommendation reflects a short-term view of industrial preference and if it is adopted we believe will come at great expense to natural gas service to small business and residential users," said Bird.

But the recommendation from the committee of MLAs was adopted. Instead of awarding one natural gas distribution franchise to serve all customers in New Brunswick, the province awarded seven. One franchise to Bud Bird's group of investors—including Enbridge—to set up a system to serve the public, and six independent franchises to individual industries, most of those to Irving companies.

The effect was significant. By 2013 the total consumption of natural gas in New Brunswick had risen to 19.2 million gigajoules, but less than one third of that—6.2 million gigajoules—travelled through and helped to pay for the public distribution system. The rest travelled directly to industry outside of the public system.

Enbridge general manager in New Brunswick Gilles Volpe says today that Bud Bird's warnings in 1998 about industry undermining the viability of the public distribution system by operating outside of it have been proven true. "Those single end use franchises don't contribute to the operational costs of the public distribution system," says Volpe. "So because the costs are borne by a fewer number of customers and a fewer amount of throughput, the per unit cost becomes higher for everybody and the rates [to the public] in New Brunswick are higher because of that."

However, others dispute that explanation and offer another reason for New Brunswick's natural gas pricing problems: miscalculations and missteps inside the public system by Enbridge itself.

Early Business Mistakes

Bud Bird lost the fight with the Irvings over how natural gas would be distributed in New Brunswick in 1998, and his investor group knew there would be no large industrial customers in the public distribution system for several months before the public franchise was to be awarded. That gave Bird's group plenty of time to abandon its bid, which is exactly what two other groups who were initially in the running did. But Bird's group, which included Enbridge, re-evaluated its contention that industrial customers were critical to a public system, and decided to forge ahead. They felt a public system might be viable anyway, and when the public franchise was finally granted to Enbridge almost by default in August 1999, the company began drawing up plans and budgets for how everything would work.

Because the public natural gas distribution system would be a monopoly, the province placed oversight in the hands of the Public Utilities Board (PUB). Under the name Enbridge Gas New

Brunswick, Enbridge and a group of local investors headed by Bird began appearing in front of the PUB almost immediately to seek approval for its plans to move forward.

Enbridge is probably the most experienced natural gas operator in Canada, and there was a general belief it knew what it was doing. But the company made critical errors from the start, which it foreshadowed at its first rate hearing in 2000. "No textbook exists to spell out exactly how a company such as ours should prepare and implement its plans," said Arunas Pleckaitis, the first president of Enbridge Gas New Brunswick. "While Enbridge has extensive experience in operating a natural gas utility, it is important to recognize the complexities and uncertainties associated with starting up a greenfield [new] operation."

Pleckaitis was right—there was no textbook to explain how to start a natural gas distribution system from scratch—especially one without large industrial customers to help pay its bills. But if a textbook ever does get written, New Brunswick may well get its own chapter, "What Not To Do."

Unlike the Maritimes & Northeast pipeline company, which had wanted guaranteed customers before building laterals, Enbridge was confident that large numbers of New Brunswick customers would present themselves once it built a distribution system. To make that happen, Enbridge proposed to set the overall price of natural gas in New Brunswick—distribution charges and gas charges combined—just below the price of its chief competitors, electricity and heating oil. The plan was to offer residential customers a 30 percent discount on the price of oil, with commercial, institutional, and smaller industrial customers saving between 5 and 15 percent.

The company submitted a planning document to the PUB showing it expected to attract 71,000 customers to the public distribution system by the time its twenty-year franchise expired in 2019, including 3,700 by the end of 2001 and a strong growing base of 16,800 customers by the end of 2005. Those projections formed the basis of how the system was to be built and financed in New Brunswick. They were also grossly inaccurate.

Based on the number of natural gas customers Enbridge felt it could attract, the company proposed to spend $300 million installing a network of pipes initially in Moncton, Riverview, Dieppe, Fredericton, Saint John, and St. George. Although that was a lot of money, Enbridge felt that customers would appear so quickly the project's debt load would be minimal.

Enbridge executive Lino Luison said the company's plans all hinged on one thing: getting its targeted number of customers signed up rapidly as the pipes went in the ground. "Ultimately [in our planning] we always tried to land on whatever it would take to attract customers," said Luison. "The success of this opportunity relies on us adding customers as quickly as possible."

But if adding customers quickly was to be the measure of success, there must have been concern in Enbridge offices early. Conversion to natural gas required customers to buy a new furnace, and with that upfront cost weighed against the long-term savings being offered, many customers didn't bite.

More Policy Trouble

A second problem was that in awarding the distribution franchise to Enbridge, the province originally forbade Enbridge, the monopoly distributor, from retailing natural gas to customers. Enbridge could charge natural gas users a distribution fee, but the actual gas would have to be purchased from another supplier. It was like NB Power, because it generates electricity, being barred from retailing electricity, or Irving Oil, because it manufactures gasoline at its own refinery, not being allowed to operate gas stations. The province wanted to introduce more competitors into the natural gas business, but the policy produced a different outcome.

In the early days of natural gas in New Brunswick there were no customers—zero—so the number of companies wanting to sell natural gas was low. And the ones that did come forward to sell ran businesses that competed with natural gas. Park Fuels and Irving Oil, for instance, both became natural gas retailers, but both had thousands of established customers who they already serviced with furnace oil. Why would either try and get its own bill-paying oil customers to switch to natural gas? In Enbridge's view, they wouldn't—and didn't. As Enbridge spent significant money to build its distribution network, customers were slow to show themselves. In fact, natural gas conversions and signups fell so far behind schedule that, by 2004, Enbridge had barely reached the number of customers it had projected for 2001, and things got worse from there.

Instead of 16,800 customers by the end of 2005, Enbridge executives Andrew Harrington and Shelley Black told the PUB in October 2004 that it would be lucky to reach 5,200 by that time, less than one third of its target. With that result, the company began acknowledging that its plan of winning over large numbers quickly had been misguided (however, after the province lifted its ban on Enbridge retailing natural gas directly to customers in 2003, that fell away as an excuse).

Getting customers signed up quickly had been job number one for the company, yet four years into the effort Enbridge was failing miserably and didn't seem to know why. "Neither Enbridge Gas New Brunswick nor the [Public Utilities] Board could have reasonably expected such wide variances from forecast," was all Harrington and Black could say in a letter to the PUB in 2004.

It was a significant problem. Every year in the critical early years of building the distribution system customer targets were being missed by a wide margin—bad enough—but those missed targets were creating chaos in the distribution system's financing.

A System Built on Credit, Not Customers

In 2000, to deal with its upfront costs, Enbridge had applied for and received permission to establish a deferral account. Enbridge executives told the PUB that the company was willing to spend more than it made for several years to get the distribution system up and running, and that the deferral account would be used to record expenses Enbridge incurred that exceeded revenues in the early years. Enbridge said that as its customer base expanded, the deferral account would eventually stop growing and then be paid off as the business matured.

Based on estimates of how much it would cost to install pipes, and company projections of how quickly customers would sign up to use and pay for that equipment, Enbridge felt it was reasonable to expect the deferral account to peak at $13 million sometime during 2008 before the company would be in a position to start paying it off. Enbridge said its plan was to keep the deferral account as small as possible, because if it grew too large it would put the entire business in New Brunswick at risk. "If the company mismanages this [deferral], our long-term costs per customer served will be higher than planned. In turn, if our long-term costs per customer are higher than planned, we will have fewer customers. This scenario represents one which the company is absolutely incented to avoid," Enbridge's Arunas Pleckaitis told the PUB.

At the same time, Pleckaitis made it clear that Enbridge wasn't running a charity, either. Although the company said it wanted to keep money that ended up in the deferral account to a minimum, it wanted to earn a fair return on whatever that amount happened to be for as long as it sat there. "It is generally accepted that a greenfield venture is considerably more risky than a mature utility," said Pleckaitis who wanted the financial rewards for Enbridge to match the risk it was taking in New Brunswick.

Others worried that allowing Enbridge a fat return on expenses that went into a deferral account would create an incentive for the company to overbuild and overspend. After all, the more money that went into the deferral account, the more interest it would generate that would have to be paid back to Enbridge over time by customers. Christopher Stewart, a lawyer for Irving Oil Ltd., warned that Enbridge could make a lot of money for itself if the interest it was allowed to earn on the deferral account was set too high and the amounts that went into the account were more than expected. "Enbridge Gas New Brunswick should be incented to keep the balances as low as possible," said Stewart. "There should not be an incentive to make them higher than they should be. It should not be a profit centre for them."

But the Public Utilities Board seemed unconcerned. "There must be a premium to compensate Enbridge for this risk," wrote the PUB in its 2000 decision on how the deferral account would work. The PUB decided that Enbridge would have to treat half of the money in the deferral account as debt, and collect interest on it at the cost of borrowing money, but that the other half could be treated as equity, and Enbridge could collect a robust 13 percent per year return on that amount. It seemed a minor issue at the time, but as Enbridge's building program and expenses grew, and customer recruitment flopped, the deferral account became exactly what Stewart warned about and what Pleckaitis insisted it could not be allowed to become: a runaway debt train.

Looking forward during those initial hearings in 2000, Enbridge had predicted the deferral account would grow maybe to $12 million by the end of 2005. But that assumed 16,800 customers by then, whereas Enbridge had signed up less than one third of that number. There was not enough customer income to match expenses, and the deferral account, to continue the metaphor, began to leave the station. Instead of reaching $12 million in 2005, the account raced past $75 million—six times more than predicted. And not only did the lack of customers cause it to keep growing after 2005 as Enbridge kept building, but the balance in the deferral account was now so high that the magic of compound interest began to multiply it like a virus. Three years later, in 2008, when it was supposed to peak at $13 million, the deferral account hit $140 million. Two years after that, in 2010, it passed $170 million.

Trying to cope with the rapidly escalating balance of the deferral account prevented Enbridge from lowering rates to attract more customers, just as Pleckaitis said would happen (back in 2000) if the deferral account was not kept under control.

By 2010, every original projection Enbridge made about how the distribution system would grow and prosper was in a shambles. And so was every *revised* projection. In 2004, Enbridge had reworked its original plan to have 35,000 customers by 2010 down to a more "realistic" estimate of 18,000. When 2010 actually arrived, fewer than 11,000 were on the system. By then the deferral account was thirteen times larger than originally planned and rates to the limited customers Enbridge did have had to be kept up, not just to run and build the distribution system, but to feed the deferral account's enormous interest costs and slow its relentless growth.

That is why rates, like those charged to Mama's Pub in Fredericton, had to be ten times higher than businesses in other jurisdictions like Mamma's Pizza in Toronto.

Who to Blame

Generally, users of natural gas in New Brunswick are still paying less than if they used alternative fuels like oil, but the promise of natural gas producing huge energy savings for consumers and businesses—like the fuel does outside of New Brunswick—has been a bitter disappointment.

There is plenty of evidence that Enbridge itself is at fault for much of that, for it made a clear-eyed decision to build a distribution system even though it knew a large industrial load would be missing. It grossly overestimated the number of customers it could attract based on the savings it was offering, first in 2000 and then again in 2004. It set out to spend hundreds of millions of dollars to build a system for 71,000 users that 11,000 now pay for.

Still, there is also an argument that none of that would have happened if it wasn't for the original decision by the province to exempt so much industrial load from having to use and help pay for one public system for everyone's use. In Enbridge's view, industrial use of the public distribution system would have generated critical early and reliable income that could have kept the system's debt load and interest expenses considerably lower. That would have allowed for better rates for everyone, which likely would have improved customer recruitment efforts. That in turn would have spread costs over a larger group, further lowering prices.

When asked about problems with the distribution network in 2011, Jim Irving blamed a lack of load on the system as its central weakness. "It's broken. It's a mess," said Irving. "This thing is not right. If we're ever going to build a strong distribution network, we need volume."

On that point, Irving and Enbridge agree. Enbridge's current general manager, Gilles Volpe, says New Brunswick would be having an entirely different experience with natural gas if not for that very first government decision to exempt so much industrial volume from the public system. "The public good I think has suffered," said Volpe. "The public distribution system is charging higher rates because these single end use franchises are not part of the system. Not to say after fifteen years of operations they [the public] would be paying the same rates as they do in Ontario or Arkansas, but I suspect that they would be lower than they are today."

Eventually the province itself seemed to come around to the idea that maybe Volpe, and Bud Bird before him, had a point. Perhaps the distribution system's problems were not entirely of Enbridge's making, and that those exemptions for big industry really did handicap the public system from the beginning.

In a change of thinking in 2014, the New Brunswick Legislature passed a new law requiring the six industrial holders of independent franchises to begin contributing money to support the public system. Not that the hammer fell too hard.

The required payments into the public system won't begin until the six industrials' current franchise agreements expire in 2019. And when those payments do start, the amount the companies have to pay—10 cents per gigajoule—will be significantly cheaper than industrial rates elsewhere, like in Ontario. The amount will also be less than 1 percent of the rates commercial businesses in New Brunswick, like Mama's Pub in Fredericton, continue to be saddled with.

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