

by Arthur Caldicott

Enbridge has been promoting its Northern Gateway

Pipeline project (NGP) since 2002. Designed to move tar sands bitumen to the west coast, the company has never been clear about where the oil will go after that. Apart from glib assurances that it won't wash up on BC's coast, that is. Originally, the company said "California and the Far East." Today, it's "new export markets" and less certainty about California.

NGP is a pair of pipelines between Bruderheim Alberta and Kitimat BC. The larger one is designed to transport 525,000 barrels (bbl) per day (bpd) of diluted bitumen to Kitimat, and the other would move imported condensate to Alberta – where it is used to thin the bitumen so it can flow in a pipeline.

Enbridge is certain about two things, however: opening Asia to oil exports from Canada will benefit all Canadian oil producers – the "Asian bump" – and California is a new market for Canadian oil, which could be fully supplied by the NGP.

# **The Asian Bump**

Right now, there's only one customer for Canada's oil and gas – the United States. When producers sit down with buyers to haggle over price, it's a short conversation. The buyer says, "Take it or leave it."

Tar sands producers would like to change this conversation. The NGP, with its Asian access, would achieve that. According to Enbridge, this "Asian bump" could be worth \$2.39 billion in additional revenues to all of Canada's oil producers in the first year of operation, and \$4.47 billion in the tenth year.

Whether they plan to ship on the NGP or not, all tar sands producers stand to benefit.

#### Where Will It Go?

In terms of oil and gas, California is not connected to the rest of the continental United States, not unlike Alaska or Hawaii. There are no major interstate pipelines going in any direction. The state has its own refining capacity – nearly 2000 bpd, about the same as all of Canada – much of it able to handle heavy tar sands crude.

Forty per cent of the oil refined in California is pro-

duced there, another 15% comes from Alaska, and 45% is imported from foreign nations. Supply is changing, with in-state production in gradual decline, and Alaskan supply dropping rapidly. The growing shortfall is filled with foreign imports.

Yet Canada supplies very little oil to California, because there is no way to get it there. No pipeline. No practical marine option.

Kinder Morgan (KM) already owns a pipeline to the Pacific. Its Trans Mountain system terminates in Burnaby at KM's Westridge Terminal. These are assets retained by KM after it acquired BC-based Terasen in 2005. Recent expansion of the pipeline (TMX Phase 1) has resulted in increasing shipments from Westridge – a record 65 tankers in 2009, 90% of which are destined for California and now contributing up to 5% of the state's supply.

TMX Phase 2, a 100,000 bpd expansion, is where the KM option may run aground.

First, large tankers provide huge economies of scale. NGP will use Very Large Crude Carriers (VLCCs) with a capacity of up to 3 million bbl, but the Port of Vancouver & Westridge can only handle Aframax tankers with one-quarter the capacity.

Second, if TMX-2 were to go ahead, it would add 50 or more tanker visits per year to the port, or 100 transits. Port restrictions limit tanker movement to daylight-only and slack tide, effectively jamming an increasing number of vessels into very small windows during which they can manoeuvre – and increasing the risk of an accident.

Third, the social licence to use Vancouver as an oil port is already tenuous. Ramped up with TMX-2, the public opposition will only intensify.

#### The Pipeline Option to California

California is a promising market for Alberta's oil, yet a direct pipeline (a "bullet") to California has not joined the many other pipelines proposed from Alberta to the US Midwest and the Gulf of Mexico (see "Fill Er Up!," *Watershed Sentinel*, Sept-Oct 2006). Cost is a factor: building a 2,500 km pipeline to California, crossing the Rocky Mountains and the Sierra Nevadas, is a lot more costly and environmentally challenging than building a pipeline across the flat land in the middle of the continent. The environmental impacts, actual and potential, would be similar to those of NGP. And the social licence would be even more difficult to obtain than with NGP, if that's possible, if only because the population density along the route is so much greater than along the route to Kitimat.

Tankers are cheaper to operate than pipelines. The average toll to Kitimat on the 1170 km NGP is estimated at \$3.21 per barrel. Tankering the barrel another 2130 km from Kitimat to San Francisco will cost \$1.37. The total distance is 3300 km and the total toll would be \$4.58/bbl. Compare this to the toll on a 2500 km bullet pipeline from Alberta to San Francisco – which might be \$6.85/bbl using the NGP estimated toll. In terms of cost, NGP is the effective bullet to California for tar sands oil. Even more striking – Alberta to Shanghai is cheaper at \$6.31/bbl than Alberta to California by pipeline.

## **Double Hulls, Doublespeak,**

Enbridge claims that the tankers it charters will be "operated as models of world-class safety standards." It's deceptive language – because the tankers themselves will not be world-class. That standard belongs to the Alaska-class tankers that operate between ports in Alaska, Washington, and California, and which are built with redundant propulsion and control systems. Enbridge is proposing only to use

tankers with double hulls – the minimum requirement in North America.

The much safer Alaska-class vessels do not sail inside the Tanker Exclusion Zone (TEZ), which only applies to tankers sailing to and from Alaska and which keeps them at least 124 km west of Haida Gwaii. With the support of the federal and provincial govern-

ments, Enbridge would use tankers built to a distinctly inferior standard, sailing to and from Kitimat and effectively flouting the purpose of the TEZ

In the absence of a legislated ban on tankers in these coastal waters, there is no regulatory impediment to the Enbridge proposal. On December 14, 2010, Liberal MP Joyce Murray introduced a private members bill in Parliament seeking to pass just such a ban.

#### California's Low Carbon Fuel Standard

If NGP is built – far from a sure thing given the near unanimity of opposition to it by First Nations along the route, and by the very real and potentially catastrophic ecological risks – one thing still stands between California's refineries and Alberta's tar sands: the state's Low Carbon Fuel Standard (LCFS). The state's *Global Warming Solutions Act of 2006 (AB 32)* and the LCFS, passed in 2009, require that fuels sold in California achieve a 10% reduction in carbon intensity by 2020.

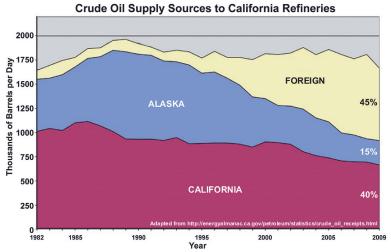
Tar sands oil flies off the intensity scale in the wrong direction, and California's refineries and other lobby groups are working to undermine the progressive legislation. Most recently, they funded Proposition 23, which would have suspended AB 32. Prop 23 was rejected by 62% of California's voters.

This battle is not isolated to California. Oil from the tar sands is getting bad press right across the US, thanks to major media initiatives by environmental groups, and the unavoidable ugly facts of its production. The Albertan and Canadian governments and the tar sands producers have joined the US refining lobby in pitching for the tar sands.

## **Northern Gateway: Cheaper At Any Price**

Powerful political, corporate, and economic forces are joined in supporting the construction of the Northern Gate-

way Project. Only two forces have significant legal opportunity to stop or impede the project, or undermine its economics: First Nations along the pipeline and tanker routes, and California's climate change legislation. A legislated tanker ban in Canada would put an end to the project.



Arthur Caldicott writes frequently for the Watershed Sentinel on energy matters.