GSX Coalition

Media Backgrounder

The Georgia Strait Crossing Pipeline Project

October 8, 2000

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What Is The GSX?

The Georgia Strait Crossing (GSX) pipeline project is a joint venture of BC Hydro and an American pipeline company, Williams, to build a 136 km natural gas pipeline through Washington State, across the Strait of Georgia, to Vancouver Island.

GSX Route

The GSX begins at the Canadian/US border at Huntington/Sumas in Washington State. It runs west, underground, along an existing pipeline corridor to the coast at Cherry Point, Washington. This section is approximately 54 km.

The marine portion of the pipeline begins there, and runs for 67 km under Georgia Strait to Botswain Bank, in Cobble Hill on Vancouver Island, crossing through a large proposed international marine protected area.

Back on land, the GSX will run underground about 15 km across Cobble Hill to a point just northwest of Shawnigan Lake, along a route referred to as Manley Creek South

At the Sumas end, the GSX will connect to a Westcoast Energy gas line. On Vancouver Island, the GSX will connect to the Centra Gas line that runs from Victoria to Campbell River. (Centra Gas is owned by Westcoast Energy.)

A larger version of this map is appended to the document, and is at http://www.sqwalk.com/images/GSX_Route.gif

How The Gas Will Be Used

The gas has two destinations: Washington State and Vancouver Island.

According to the proponents' (Hydro and Williams) Fall 2000 "Project Update"

> **The pipeline is designed to provide natural gas to western Washington for industrial and commercial growth and to provide natural gas for new electric generation plants on Vancouver Island.**

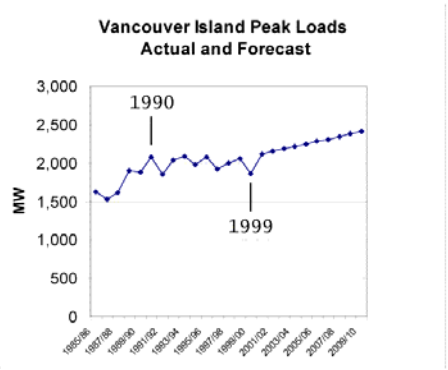
Three Generation Plants On Vancouver Island

1. **Island Cogeneration in Campbell River (ICP)**, 240 MW, owned until Sept 6, 2000 by Westcoast Energy, since then owned by TransCanada Pipelines, start up fall 2000

2. **Port Alberni Cogeneration (PAC)** , 240 MW, original deal has collapsed, possible deals with ABB or NESCO (proponent for Sumas Energy 2), startup by 2004

3. **Combined Cycle Plant**, probably Duncan, 660 MW, planned for 2004 or 2007, depending on Port Alberni deal, possible discussions with NESCO

Why The Gas Is Needed



BC Hydro claims that more electricity is needed to meet growing demand, and to replace aging cable systems to the island.

Hard figures are difficult to obtain for load statistics (though they were published in previous years). A quick review of Hydro's "Peak Loads" graph, shown here, shows that actual demand was effectively level for the ten years from 1990 to 1999. The only growth here is an apparently arbitrary line that was drawn from 2000 up to 2010 – the "growth" is not based on an observable historical trend at all.

A larger version of this graph is at http://www.sqwalk.com/images/HydroForecast.jpg

BC Hydro states that some of the existing cable and components that supply a major part of Vancouver Island's electricity must be phased out due to age. Replacing this infrastructure is the most obvious thing to do.

The cable systems that need replacement are referred to as HVDC Pole1 and Pole2 or DC1 and DC2.

Hydro does not intend to replace these systems, for a variety of reasons: economic, technical, and political. Do they need to be phased out? Probably. Is gas the best alternative? Not for a minute.

Hydro's primary stated reasons have to do with Vancouver Island generating its own power and with costs.

Self-Reliance: "The time has come for Vancouver Island to generate more of its own power" states one of their publicity releases. If what Hydro is attempting to achieve here is self-reliance for Vancouver Island, what is the difference between shipping electricity to the island vs. shipping natural gas?

Costs: Like statistics, these numbers can argue for any desired outcome. Capital costs of the cable, and three cogeneration plants, and operating costs for Hydro to supply gas to the plants, and purchase electricity from them, are a dog's breakfast of unknowns. Rising natural gas prices alone make any costing predictions tenuous.

Capital costs of cable replacements and alternative generating technologies are not so open ended and risky, but are still difficult to state with confidence.

If environmental and safety costs were factored into a costing algorithm, they would clearly kill the GSX and the natural gas strategy being implemented here.

Why Use Natural Gas?

Hydro wants to use natural gas because it is, in their view, the "lowest cost" option for future electricity generation and the "cleanest" option.

Natural gas is by no means "clean" – it is merely the cleanest of the major hydrocarbons (oil and coal) – like smoking a "low nicotine" cigarette, perhaps.

Is Gas "Lowest Cost"?

Absolutely not! Gas prices have already soared beyond $5 per mmBTU or mcf (million metric BTUs and million cubic feet – roughly equivalent measures though one is heat output and the other is volume) this year alone. The spot price as of September 15 was $4.63 mcf.

Expert opinion is that easily retrieved gas is in declining supply, and demand is skyrocketing – both factors which contribute to rising prices.

Hydro is basing their strategy on a price of $2 US per mmBTU as far out as the the year 2007!

At the same time, the costs for alternative technologies, particularly wind, are coming down considerably, makin wind power nearly competitive with natural gas. And of course, wind will always be free, and gas is non-renewable.

Community Support For The GSX

There is none. At every opportunity for the public to express themselves on the GSX, there has been mass opposition to the project. Not one person, apart from Hydro and Williams personnel, has spoken in favour of the project. This includes Cobble Hill, Sydney, and Salt Spring Island, Pender, Galiano and Saturna Islands. And in San Juan County and Whatcom County, the project is just as unpopular. Williams lost their public relations contractor after only a month on the job, when she quit after having eggs thrown at her. This is NOT a popular project.

Opposition and concern is diverse – there are many reasons that people are upset about the GSX. The picture above was taken at a farm on the proposed route in Cobble Hill.

Global Warming And Greenhouse Gas Emissions

Burning natural gas creates carbon dioxide, a major greenhouse gas (GHG). Canada is signatory to the 1997 Kyoto Protocol where we committed to reduce GHGs. Prior to that Canada signed the United Nations Framework Convention on Climate Change, joining most of the world in acknowledging the existence and severity of global warming.

BC produces almost no GHGs in the production of electricity, apart from the Burrard Thermal facility. The addition of the three cogens on Vancouver Island will add about 4 million tonnes per year of CO2.

Natural gas is mostly methane. Methane leaks everywhere – in storage, in transmission. It doesn't have to be burning to pollute, to contribute to global warming. It is estimated that somewhere between 1.5% and 3% leaks into the atmosphere in moving natural gas from source to destination.

Toxic Emissions From Gas-Fired Generators

Nitrous oxides (NOx), sulphur dioxide (SO2), other volatile organic compounds (VOCs) like formaldehyde and benzene, and particulate matter (PM) - these are the most prevalent polluting toxins produced when burning natural gas. Nothing clean about these toxins. Natural gas merely produces less of this stuff than oil or coal.

In parts of the world where even dirtier hydrocarbons are burned to produce electricity, there may be an argument for natural gas. In British Columbia, it makes no sense.

Safety Concerns

Pipelines are not safe. In the United States, there are on average 18 deaths and 83 injuries per year from natural gas pipeline incidents. An incident happens, on average, every two days, someone is injured every four days, and someone is killed every 17 days.

Natural gas at ambient temperatures and pressures is lighter than air - it rises and dissipates quickly. In pipelines it is under enormous pressure – in the GSX it will be compressed to 2160 psi. When there is a leak or rupture in a natural gas pipeline, an explosion is almost certain to occur.

Underwater incidents are usually attributable to shipping activity – dragging anchors, for example.

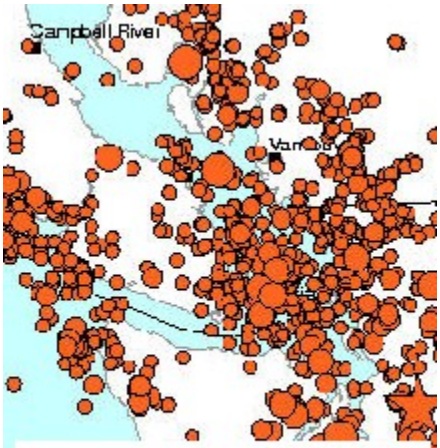
Land based incidents are the result of many things, some of which are human caused, like construction activity. For some, like the oil pipe rupture near Chetwynd this summer, the cause is more elusive, but may be due to flawed manufacturing, maintenance, or monitoring of pipelines, as was suggested by Environment Minister David Anderson.

Earthquake

Earthquakes are the most catastrophic risk the GSX faces. Engineering for a pipeline that has both underwater and in-ground sections, in a zone with a very high earthquake risk, is phenomenally challenging.

Will this pipeline be built to add no additional risk of damage during an earthquake, along its route? Of course not. It is unlikely that it is economically viable to do so, even if it can be engineered to that standard.

For this reason alone, the GSX should not be built.



Earthquakes in the GSX region
five years 1995/09 - 2000/09

Landowner Concerns

In Cobble Hill, the GSX route is mainly through farmland. Most of the private landowners along the route have signed documents stating their opposition to the GSX, have told GSX that their agents are not permitted on their land, and have even posted signs indicating their opposition to the project. They have specific concerns:

- Safety
- Alienation of land from productive use (a broad swath of land along a pipeline route has usage and construction restrictions)
- Compensation

Hydro and Williams staff and contractors have trespassed on lands a number of times, in disregard to the wishes of the landowners. The opposition has not deterred GSX at all.

Alternatives To The GSX

Many alternatives to the GSX and to gas-fired electrical generation exist.

- replace the electrical cable systems to Vancouver Island
- exploit wind, tide, solar opportunities and turn Vancouver Island into a global showcase for alternate technologies
- take seriously the efficient use/demand side management ideas that Power Smart was originally envisioned to implement.

Is The GSX Necessary?

Hydro argues that the GSX is necessary to fuel the three generation plants to be built on the island.

However, in the application to build Island Cogen in Campbell River, the applicant (Westcoast Energy at the time) said the natural gas supply for that plant would come from the existing Centra Gas pipe.

In the application to build Port Alberni Cogen (PAC), the second plant, it was also not stated that there was insufficient gas to the island to meet the demand from the PAC. However, the PAC deal is in jeopardy, and if one is renegotiated, a new environmental review process will likely be required.

BC Hydro now says that there is only the possibility that a third plant will be proposed for Vancouver Island. So there is no third plant, no second plant, and enough gas to fuel ICP, so the argument of necessity for the GSX is invalid.

It is not necessary because there is not a persuasive case that the need is there, and there are many alternatives in any event.

Can We Trust BC Hydro?

Hydro argues the GSX is necessary to fuel plants that are on record as not needing the gas.

Hydro argues that the GSX is necessary to meet growing demand on the island, when they have not presented evidence of that growth.

Williams was so unprepared as to have agreed to the arrangement, when they did not know the GSX was to be built in an earthquake zone.

Requests for information from BC Hydro are stonewalled. Even requests filed under the Freedom of Information Act have huge sections omitted, and large blocks of text whited-out.

Neither company has given us any reason to be confident in their arguments as to why the pipeline should be built, or their ability to build it safely

There has been little willingness to share information, no attempt to present the landowners' interest fairly, grudging concessions to the need for public consultation.

The NEB Comprehensive Study Report Process

Because the pipeline is an international project, it must undergo environmental assessments by the National Energy Board (NEB) and the US Federal Energy Review Commission (FERC).

This takes it out of the provincial environmental jurisdiction. The BC Environmental Assessment Office (EAO) and the federal department now called Fisheries and Oceans Canada (not surprisingly, they still use the abbreviation DFO) have assigned their authority to the NEB, by a Memorandum of Understanding.

Despite there being private contracts in place, there may be NAFTA implications to this deal, as well, that we don't understand at this time.

The proponents preferred that the NEB conduct a Comprehensive Study Report (CSR) of the GSX. A CSR process would have meant that the proponents themselves (Hydro and Williams) would have done the Environmental Assessment (EA). After the NEB and DFO (termed the "responsible authorities") reviewed the EA, it might have been revised and modified. Only then could the public have made presentations and submissions. Assuming that all the requirements of the Canadian Environmental Assessment Act (CEAA) would by then have been met, the NEB would then have referred the proposal to the Federal Environment Minister, who then almost always grants approval for the project. Virtually no project has been rejected in Canada, and virtually all have followed the CSR process.

In a CSR process, opportunities for public input are severely constrained, and the subjects on which the public can express opinions is also restricted.

On October 4, 2000, David Anderson, the Federal Minister of the Environment, ordered an independent panel review for the GSX.

3 Key Issues

There are three key issues of concern with the environmental assessment of the GSX.

- environmental effects of the generation plants that the GSX will fuel
- comparable environmental effects of alternatives to the generation plants
- greenhouse gas emissions from the pipeline and the downstream generators

In each case, the proponent does not want to include the issue in the EA.

Greenhouse gases are not currently included in environmental assessments. If they are ultimately included in the EA for the GSX, the decision would be a legal and environmental breakthrough, and an act of which Canada could be very proud.

Independent Panel Review

A more open process than the CSR is to have an Independent Panel Review of the project. On October 4, 2000, David Anderson, the Federal Minister of the Environment, ordered an independent panel review for the GSX.

In this process, the panel can include as much public input as it deems necessary, and may broaden the scope of the review considerably.

The main objectives, now that an Independent Panel Review has been authorized, are:

- public concern is intense and growing, and will now have a place to be expressed.
- environmental concerns are more likely to be addressed, or to be addressed satisfactorily
- BC Hydro has not provided convincing evidence that the pipeline is needed
- They have not provided any convincing arguments as to the non-viability of any alternative
- Hydro's demand growth projections for Vancouver Island are unconvincing.
- The GSX truly has no meaning, use, or context outside of the generation plants it is intended to fuel, and the natural gas they intend to burn. Therefore, the entire set of projects must be discussed together, in the context of the whole. Only a panel review is likely to broaden the scope to include these "downstream" effects.

Action Items

Write to provincial and federal Ministers of the Environment, David Anderson, and Joan Sawicki in BC, encouraging them to ensure a balanced panel is selected, and that items you consider important are included in the review.

Write or call your MP and MLA expressing your concerns about the GSX

Write letters to your local newspapers.

Where to get more information

The website, SqWALK!, at http://www.sqwalk.com/, is a useful repository of information, links and contacts about the GSX. Useful addresses are at http://www.sqwalk.com/GSX_contacts.htm

The official GSX project website is at http://www.georgiastrait.twc.com/.

Contact the NEB, Environment Canada, Fisheries and Oceans Canada, and BC's Environmental Assessment Office, with concerns about the GSX and issues you believe belong within the scope of the panel review. The NEB has published a scoping document for the project. It is available online at the NEB site, with other GSX related documents. Go to http://www.neb.gc.ca/regupd/georgia/georidx.htm

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Contact David Anderson and thank him for authorizing the Independent Panel Review of the GSX proposal.

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Media Contacts

The GSX Coalition has lively, informed individuals among our coalition who are available for interviews, panel discussions, radio and television shows. Newspapers and magazines will find us able to deliver good interviews, and well-written articles.

General requests may be made by sending an email to gsxccc@sqwalk.com.

These individuals may be contacted directly:

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GSX Coalition

The GSX Coalition is made up of individuals and organizations from Cobble Hill and the Gulf Islands on the pipeline route, as well as concerned individuals from Vancouver Island, the Lower Mainland and Fraser Valley, and Whatcom and San Juan Counties.

Organizations associated with the GSX Coalition include:

BC Public Interest Advocacy Centre (BCPIAC)
Canadian Parks and Wildlife Service (CPAWS)
Carbon Monoxide Information Network (COIN)
Citizens Action to Save the Environment Society (CASES)
Concerned Citizens for Clean Energy (CCCE)
Council of Canadians, Cowichan Valley Chapter
Council of Canadians, Victoria Chapter
David Suzuki Foundation
FREE Co-op
Galiano Conservancy
Georgia Strait Alliance (GSA)
SPEC
SAFE Bellingham
Salt Spring Island Conservancy
Saturna Community Club
Sierra Legal Defense Fund (SLDF)
Sierra Club of Canada
Sustainable Communities Consultancy
West Coast Environmental Law Association (WCEL)

Vancouver Island Pipelines Map