Evidence submitted by Williams Gas Pipeline Company
in
Terasen Gas (Vancouver Island) Inc., 2004 Resource Plan
for
Vancouver Island and Sunshine Coast
and
Application for a Certificate of Public Convenience and Necessity
for a Liquid Natural Gas Storage Facility

I.
OVERVIEW AND INTRODUCTION

Williams Gas Pipeline Company ("Williams") owns and operates major interstate natural gas pipeline companies in the United States. Between the Transco, Northwest Pipeline, and Gulfstream systems, Williams operates over 15,000 miles of pipeline and delivers approximately 12 percent of the natural gas consumed in the United States. Major markets being served by Williams' pipelines include the cities of: Seattle, Washington; Portland, Oregon; New York City, New York; Atlanta, Georgia; and the markets generally described as the MidAtlantic region, Florida, and the Pacific Northwest. With a combined design capacity of more than 12 billion cubic feet per day, Williams' interstate pipelines transport enough natural gas to serve the needs of more than 30 million homes on a winter day. Williams' seasonal storage capacity is over 230 billion cubic feet, which ensures adequate fuel for customers even during times of peak demand.

Williams has participated in the construction and operation of many interstate natural gas pipelines as well as various other energy-related projects. Williams is a joint owner of the proposed Georgia Strait Crossing Pipeline ("GSX") providing the engineering, design, operation and management of the proposed GSX project—both in the design and permitting stages of the project as well as the possible construction and operational phases of the GSX project.

Williams possesses knowledge and information relevant to issues relating to the construction, operation, and reliability of natural gas pipelines generally. Williams also possesses specific information about the proposed GSX project that may be viewed as a natural gas pipeline alternative that should be considered in the evaluation of TGVI's 2004 Resource Plan ("Resource Plan") as well as an alternative to the Terasen Gas Vancouver Island Inc. ("TGVI" or "Terasen") proposed LNG storage facility to meet the demands of electric power generation and general gas demand growth on Vancouver Island.

Williams also believes that the outcome of the above-referenced proceedings could have a material impact on the proposed GSX project that has already been certificated by the Federal Energy Regulatory Commission ("FERC") and the National Energy Board of Canada ("NEB").

The evidence presented herein reflects Williams' views of how the proposed GSX project could resolve issues raised in these Terasen proceedings based upon Williams' understanding of the purposes and objectives of the GSX project consistent with the underlying project

agreements. Williams is prepared to provide relevant information to the British Columbia Utilities Commission ("BCUC" or "Commission") pertaining to GSX that may be required to facilitate a complete review of TGVI's Resource Plan and the TGVI-proposed LNG production and storage facility. Williams is assuming its own costs with respect to its participation in these proceedings.

II.
BACKGROUND CONCERNING GSX PIPELINE

Original RFP

On April 28, 1998, the British Columbia Hydro and Power Authority ("BC Hydro") issued a Request for Proposal ("RFP") to identify the most cost-effective alternative to provide gas feedstock to serve anticipated future gas generation load requirements on Vancouver Island. Among other identified power plants, BC Hydro asked for proposals to serve the existing Burrard Thermal Generating Station ("Burrard"), as well as proposed power plants near Campbell River (the "ICP Plant") and at Port Alberni on Vancouver Island. On June 1, 1998, Williams provided a response with proposals to build pipeline infrastructure to serve Burrard (240 TJ/d), Campbell River (45 TJ/d), and Port Alberni (45 TJ/d). Williams proposed an all-Canadian route to serve the existing and proposed power plants commencing at Huntingdon, British Columbia. Later in the RFP process, BC Hydro withdrew its request for transportation to Burrard. Thereafter, Williams revised its proposal to serve only the Campbell River and Port Alberni facilities and revised its pipeline alignment to provide for facilities that were to be located in the U.S. as well as Canada. BC Hydro later determined that the initially proposed Vancouver Island Generation Plant ("VIGP") for Port Alberni should be located at Duke Point.

Other participants in the closed-bid RFP process included Westcoast Energy Inc, and BC Gas Inc. After evaluating the economics, environmental and constructability factors and other business ramifications of the other pipeline proposals, in January 1999, BC Hydro elected to pursue the Williams proposal. Due to the confidential nature of the RFP process, Williams was not made aware of specific details related to the Westcoast Energy Inc. and BC Gas Inc. proposals.

Project Agreements / Ownership Structure

The GSX project is owned jointly by Williams and BC Hydro. The primary relationship of the owners is set forth in a GSX Project Agreement, although a number of related agreements have been executed to establish limited partnerships on both sides of the border and to reflect the various interests of the parties ("GSX Project Agreements"). The GSX Project Agreements call for the creation of a management committee to oversee the GSX project and to provide direction to an EPCM contractor. The EPCM contractor is GSX Operating Company, a Williams subsidiary, having responsibilities to provide engineering, design, construction, and management services to the GSX project.

The GSX Project Agreements also assign certain regulatory and permitting responsibilities to Canadian and U.S. general partners on either side of the border. The GSX Project Agreements provide for the owners to share equally in the ultimate equity investment and project financing responsibility for the GSX pipeline once it is completed. In the event of project failure, the GSX Project Agreements provide for a sharing of any development costs, except where the project failure could be attributed to a failure in securing certain required regulatory permits on either side of the border.

In a Memorandum of Agreement executed in the Spring of 2004, BC Hydro, in recognition of the uncertainties (primarily associated with regulatory clearances for VIGP to proceed) agreed to assume all responsibility for the development costs spent to date in the event of project failure. BC Hydro was also given control over any ongoing levels of spending for the GSX project, pending final outcome of the Call for Tenders ("CFT") process, and secured a unilateral right through March of 2005 to determine whether the GSX project should be terminated.

Williams has continued to perfect any applied-for permits and stands ready to proceed with the GSX project if the necessary Canadian regulatory clearances can be obtained that will allow the GSX project to proceed.

Commercial basis for project

The GSX project was initiated to address the growing demand for natural gas on Vancouver Island, in particular the need to supply gas for two new natural gas-fired electrical generation facilities. If constructed, it is anticipated that GSX will also provide gas supply to future industrial and commercial end-users in northwest Washington. The GSX system is designed to facilitate relatively inexpensive expansions, by compression upgrades, to accommodate future market growth on Vancouver Island and northwest Washington.

On January 24, 2000, Williams and BC Hydro announced an open season to solicit expressions of interest. The open season resulted in a binding Precedent Agreement (dated July 6, 2000) with Powerex Corp. ("Powerex"), an energy marketing affiliate of BC Hydro. The Powerex commitment is for 100 percent of the initial certificated design capacity for a thirty-year term at a negotiated rate. The open season resulted in non-binding expressions of interest from several additional parties for various levels of service to Vancouver Island and to the Cherry Point, Washington area.

Current status of project

1. Regulatory/Permitting status and history

GSX has successfully completed the majority of the necessary permitting and regulatory approvals for the GSX project.

a. U.S. Regulatory and Permitting

On September 20, 2002, FERC issued a Certificate of Public Convenience and Necessity and a Presidential Permit authorizing the siting, construction, operation and maintenance of the U.S. portion of GSX subject to several conditions. A thorough environmental review was completed as part of the FERC process to include the issuance of a final Environmental Impact Statement ("FEIS"), which concluded that approval of the proposed project, with appropriate mitigating measures as recommended, would have limited adverse environmental impact. The FEIS also evaluated alternatives to GSX, including system alternatives, route alternatives, and route variations. With the exception of three minor route variations proposed by FERC, which have since been incorporated, FERC found no preferable alternatives.

The Washington Department of Ecology ("WDOE") identified 39 issues that it believed were not adequately addressed in the FEIS; therefore, it commissioned a Supplemental Environmental Impact Statement (SEIS) and issued the final document on January 20, 2004. The SEIS addressed all 39 issues and found that if the proposed mitigations and conditions were implemented, no significant unavoidable adverse impacts would be expected from the proposed project.

Concurrences that GSX would result in no adverse environmental impacts were received from the National Marine Fisheries Service on May 29, 2002, and from the U.S. Fish and Wildlife Service on June 25, 2002. On January 22, 2004, the Washington Department of Fish and Wildlife issued the Hydraulic Project Approval ("HPA") for the onshore construction (stream crossings) of the U.S. portion of GSX and, subsequently, on March 22, 2004, issued the HPA for the marine construction of the U.S. portion of GSX, both subject to certain conditions. WDOE has also issued GSX the Storm Water Permit (January 23, 2004).

On April 20, 2004, FERC issued a Declaratory Order stating that the WDOE had failed to act within the statutory time frames regarding a consistency determination under the Coastal Zone Management Act and certification under Section 401 of the Clean Water Act ("401 Certification") and stated that both permits were thus granted. Notwithstanding FERC's issuance of its Declaratory Order, on September 28, 2004, WDOE issued the 401 Certification and declared that the U.S. portion of GSX would comply with the applicable provisions of the Clean Water Act, subject to certain conditions.

On May 28, 2004, the San Juan County Hearing Examiner determined that the proposed GSX project was consistent with the policies of the Shoreline Management Act and issued the Shoreline Substantial Development Permit. Subject to certain conditions, the Whatcom County Hearing Examiner recommended on October 11, 2004, that the Whatcom County Council grant the requested Shoreline Substantial Development and Shoreline Conditional Use Permit for GSX. The Whatcom County Council has deferred any action on the Shoreline Permits pending completion of a major project permitting process.

A few permits for the U.S. portion of GSX are still outstanding, including the U.S. Army Corps of Engineers Section 404 of the Clean Water Act permit, the Aquatic Land Lease and Forest Practices Act authorization from the Washington Department of Natural Resources, the final Washington State Office of Archaeology and Historic Preservation Section 106 concurrence with FERC, the Air Quality Permit from Northwest Air Pollution Authority and all

State road crossing permits. Many of these remaining permits have short shelf lives. Applications will be timely submitted once a final construction timeline has been established. Federal pre-emption rights ensure that the issuance of any remaining state or local permits will be completed timely and that any required permits will be in a form not inconsistent with the FERC certificate issued to GSX. Williams is confident the remaining permits can be obtained without delay.

b. Canadian Regulatory and Permitting

Following extensive discovery and a formal hearing, on December 15, 2003, the NEB issued a Certificate of Public Convenience and Necessity authorizing construction and operation of the Canadian portion of GSX, subject to several conditions. The NEB process included a full review of the commercial arrangements, project costs, and environmental implications of the project by a Joint Review Panel ("JRP") established by the Minister of Environment Canada and the NEB. On July 30, 2003, the JRP Report was issued and found that the proposed GSX project was in the public interest if all GSX's environmental commitments and the Panel's recommendations are implemented. The JRP determined that the Project is not likely to result in significant adverse environmental effects.

GSX has received verbal assurances from the Department of Fisheries and Oceans Canada ("DFO") that GSX's Freshwater and Marine Habitat Mitigation, Restoration and Compensation Plan required for the Fisheries Act authorization is acceptable. Several other minor Canadian permits will still be required, but none present any major concerns or schedule issues.

2. Completion of Benefits Agreements with First Nations

To address First Nation concerns in Canada, GSX has executed Benefits Agreements with the Cowichan and the Tseycum First Nations and with the Sencot'en Alliance. The Sencot'en Alliance Agreement jointly addresses concerns of the Pauquachin, Semiahmoo, Tsartlip and Tsawout First Nations. Further, the JRP confirmed in its report that it was satisfied that all First Nations in the Project area were provided with sufficient information about the Project, and that they were given the opportunity to enter into meaningful discussions with the applicant with respect to any concerns they had about the Project. The JRP went on to state that it was encouraged by the fact that GSX executed the mentioned Benefits Agreements and noted that all First Nations interventions in the JRP proceedings had been withdrawn. First Nations interveners had indicated to the Panel either that their concerns had been adequately addressed or that discussions were ongoing and they were confident that their concerns would be adequately addressed. The JRP concluded that it was not necessary to further address the issue of Crown consultations.

3. Rights of way and property acquired

To date, GSX has acquired 64 percent of the U.S. right-of-way (79 out of 123 landowners) and 28 percent of the Canadian right-of-way (6 out of 21 landowners). GSX has already purchased in fee the site on the U.S. side for the compressor station and the shore

crossing upland entry point. On the Canadian side, GSX has purchased in fee the site necessary for the interconnect with the TGVI system and has acquired the easement required for the shore crossing upland entry point. GSX also has current lease agreements for main construction staging areas in both the U.S. and Canada.

4. Construction timeline for GSX

The GSX project is at an advanced stage in the planning & permitting process. Since so much work has been completed, the project could easily proceed with an October 2007 in-service date. Postponing the previously proposed October 2005 in-service date project schedule by essentially two years to accommodate the CFT schedule results in the following timetable, which would require a decision to proceed sometime in early 2005 to allow work to resume and would not require any major commitments (pipe order & marine lay contractor award) until fourth quarter 2005.

PROPOSED GSX PROJECT CONSTRUCTION TIMETABLE

Activity	Begin	Finish	Location
Mobilize and Prepare Staging Areas	June 2006	July 2006	International
Install Shore Crossing (Vancouver Island)	July 2006	Sep 2006	Canada
Clear Timber (Vancouver Island)	Feb 2007	Mar 2007	Canada
Construct Terrestrial Pipeline (Vancouver Island)	May 2007	Aug 2007	Canada
Construct Interconnect Facilities (Shawnigan Lake)	May 2007	Aug 2007	Canada
Install Shore Crossing (U.S. Mainland)	Sep 2006	Nov 2006	U.S.
Construct Terrestrial Pipeline (U.S. Mainland)	Aug 2006	Aug 2007	U.S.
Construct Interconnect Facilities (Huntingdon/Sumas)	May 2007	Aug 2007	U.S.
Construct Compressor Station (U.S. Mainland)	Mar 2007	Sep 2007	U.S.
Prepare Marine Pipeline Cable Crossings	Oct 2006	Nov 2006	International
Mobilize Marine Pipeline Contractor	Nov 2006	Dec 2006	International
Construct Marine Pipeline	Dec 2006	Apr 2007	International
Final Tie-ins, Start-up and Commissioning	Sep 2007	Oct 2007	International
System In-service	Oct 2007	Oct 2007	International

5. Cost estimate details

The existing GSX cost estimate has been refined over several years of planning, permitting and design. The estimate has been developed using Williams' experience in

estimating and constructing pipelines along with considerable input and information from vendors, suppliers, contractors and regulators. Since the majority of the permitting and planning of the project is completed and the majority of regulatory and permitting conditions are known, the project scope is very well defined, thus resulting in a very refined and detailed estimate. Only pricing fluctuations of raw materials and construction costs remain as potential volatilities, and any impacts caused by either of those items would also be expected to similarly impact any other energy portfolio or project.

The latest capital cost estimate for GSX was completed based on a proposed 2005 in-service date and was completed in as-spent dollars. The estimate would still be applicable for a 2007 in-service date with the appropriate cost of inflation adjustments. The total estimate for the 2005 in-service date as-spent dollars was $209.5 (U.S.) million ($279.3 million CDN). The direct capital cost component is $192.7 million U.S. The estimate is a P50 estimate meaning it is considered to be the most likely outcome considering any probabilities for upward and downward volatilities.

The capital cost estimate of $340 million CDN that TGVI refers to in its responses to IRs and that BC Hydro has sometimes used for other purposes is an overly conservative number and contains costs that are not appropriate for comparative purposes to the TGVI costs. The $340 million CDN estimate does not reflect the true estimated capital costs of the project and is not appropriate for a direct comparison with the TGVI portfolio costs. The $340 million CDN referred to by TGVI should be adjusted as follows:

-6.8	Elimination of BC Hydro's third-party consulting costs (not applicable project costs)
-11.7	Elimination of overstatement of project costs because P90 assumptions were used
-43.0	Exchange rate differential from previously used rate of 6.5 to 7.5 (utilized by TGVI)
278.5 CDN	Total CDN Estimate (approximates $209.5 U.S. estimate)
-21.6	Elimination of indirect costs (comparable to TGVI basis)
259.9 CDN	Current "as-spent" direct costs ($192.7 U.S.)

6. Existing expenditures and commitments

The existing direct capital expenditures to date (through September 2004) are $31.2 million U.S. ($41.6 million CDN). These costs have primarily been spent on planning, regulatory/permitting and design activities. Beyond these expenditures GSX has no other outstanding direct capital dollar commitments.

7. Call for Tenders process

The GSX project has been affected by delays that have occurred in obtaining the necessary regulatory clearances for the proposed VIGP, which is the subject of a BCUC encouraged CFT process. While the results of the CFT process are supposed to be announced on

November 3, 2004, the BCUC is the entity that will ultimately approve the final outcome of the CFT process. Williams urges the Commission to take into account both the long-term electricity and gas needs of Vancouver Island while evaluating all alternatives in supplying Vancouver Island's energy demands rather than taking a narrow view of only one utility's resource plan or merely focusing on short-term fixes.

8. Key decisions needed to proceed

Listed below are the few remaining key decisions that need to be addressed that would allow GSX to proceed with its proposed pipeline project. Each of these key decisions are directly or indirectly dependent upon issues that this Commission must resolve in connection with the above-referenced regulatory proceeding or the VIGP proceeding where the CFT process is being pursued.

a. Finalization of commercial agreements

While substantially all necessary authorizations and permits have been issued by both U.S. and Canadian authorities granting GSX the authority to proceed with its proposed pipeline, there are a few final steps that need to be taken in order to proceed with the GSX Pipeline project. These remaining key decisions are dependent, in part, on decisions the Commission will be making in this and other pending proceedings.

First, the CFT process, which is currently underway, must be completed and approved by the Commission. Several different outcomes of the CFT process could merit proceeding with the GSX Pipeline project. The need for an economically efficient natural gas-fired electric generation plant to be located somewhere on Vancouver Island would need to be confirmed. With respect to the need for such a generation plant, Williams believes that current forecasts for electric energy demands fully support an electric generation plant of the size that was initially proposed in the VIGP proceeding,, i.e., a plant capable of producing 300 MW of power. Further, the economics associated with building a generation plant of that size provide economies of scale with respect to the electricity that is to be provided, whether such electricity were used solely on Vancouver Island or also used via displacement or transportation to help satisfy the needs of other markets.

The commitment for gas transportation entered into by Powerex that was secured with GSX is of a size that fully justifies the construction of the GSX pipeline and results in rates that prove the economic viability of the new pipeline. Hopefully, the results of the pending CFT process will provide answers that are acceptable to this Commission concerning the ownership and operation of the VIGP plant while also endorsing a sizable project which would validate the basic underlying economics for both an electric generation plant and the proposed GSX pipeline that would supply the necessary natural gas required by existing and new on-island natural gas-fired electric generation facilities.

In order to complete the last leg of transportation of gas supplies that could be made available through the GSX Pipeline to on-island electric generation facilities, some transportation arrangements would have to be put in place to move GSX gas through a portion of the Terasen

transmission system for delivery of gas supplies to the generating plants. Notwithstanding some attempts at negotiating such needed transportation arrangements, no agreements exist at this time. Williams believes that the individual corporate interests of Terasen and/or BC Hydro may have clouded the circumstances which might have otherwise resulted in an equitable and economically justifiable transportation agreement to provide for the last leg of transportation for GSX-supplied gas to be delivered on Vancouver Island.

The costs and expenses that might be incurred by Terasen and/or BC Hydro that should ultimately be recovered in rates to be collected from the citizens of British Columbia fall within the scrutiny of this Commission. If, as a result of the evidence presented in this proceeding, the Commission believes that GSX should be made a part of the energy solutions required for British Columbia, appropriate direction could be provided by the Commission that would lead to a fair and equitable transportation arrangement for delivering GSX gas supplies to Vancouver Island electric generation and industrial loads. Williams believes that minimal infrastructure changes would be required for the Terasen system to accommodate natural gas transported via GSX to Vancouver Island for delivery to customers of Terasen.

b. Confirming the existence of economics to justify GSX

The size of the GSX pipeline was designed to (i) meet the needs of the existing ICP generating plant and the proposed VIGP plant, and (ii) take advantage of certain economies of scale associated with building a pipeline to meet those needs. From Williams' perspective, the contract entered into by Powerex provides a contractual commitment of sufficient size to serve the proposed electric generation needs while justifying a pipeline that could economically provide initial deliveries of up to 101 TJ/d of gas. Prospectively, the pipeline capacity could easily be expanded by adding additional compression, resulting in a lower per unit cost of supplying natural gas in the future. While the size of the ultimate Vancouver Island gas market that could be served by GSX could easily vary from the initially proposed 101 TJ/d up to an expanded capacity to satisfy 228 TJ/d. Williams believes that the evidence provided in this proceeding fully supports the construction of additional on-island natural gas-fired electric generation facilities that could provide 300 MW of power. This new gas-fired generation, together with the existing needs of ICP and potential industrial customers that are currently subject to curtailment, fully support the initial capacity of GSX.

III.
TERASEN'S RESOURCE PLAN TO MEET THE LONG-TERM ENERGY NEEDS OF VANCOUVER ISLAND

Terasen gas system

1. Costs

a. Terasen cost estimate uncertainty and minimal details

All of the TGVI presented studies have been developed based on early information and assumptions associated with the planning/permitting/design stage of its proposal. The uncertainties, cost volatilities and likelihood of scope changes are significant. Even with the progress TGVI has made with the LNG project, because of the EPC approach to the project, it appears the construction estimate is still tentative and the looping and compression components are at a very preliminary stage in the process. In addition, the current status of TGVI's proposal presents timing and scheduling uncertainities.

b. Terasen history of cost overruns

It appears that the actual costs for the original TGVI system build ($356.2 million (CDN) forecast presented to BCUC July 1992) came in (or were forecast to come in) approximately 43 percent higher than the original estimate provided to the BCUC ($248.5 million (CDN) – November 1998).

This type of cost overrun is of concern and a cost overrun of this magnitude would have a huge impact on the final rate impact to customers. If a 43 percent overrun occurred on the execution of the TGVI preferred portfolio for the Base + 45 case, this would result in a total portfolio package cost of $326 million (2004 CDN).

2. Fuel use

The TGVI LNG Storage Base + 45 case would require the addition of approximately 33,000 hp of new compression facilities in addition to the existing horsepower. Such added compression would likely result in additional emissions and would require significant fuel use.

In contrast, for the GSX Base + 45 case only the one compressor unit at Cherry Point will be required for a total of 10,300 hp. This would suggest that the fuel requirements and emissions resulting from TGVI's proposal would be approximately triple that of GSX. The costs of the additional fuel use are significant and should be considered in any economic analysis.

3. Reliability

a. One-way feed

The TGVI gas supply system to Vancouver Island is a very long one-way feed to transport gas supplies approximately 615 kilometers to reach TGVI's core market near the end of its system. While additional compression and looping could provide additional throughput and may offer some localized reliability, additions do not provide the reliability that a separate supply to the island would provide. If seismic or landslide events were to cause a catastrophic failure to the TGVI system, it is quite possible that even in those areas where two lines exist, both lines would be impacted and gas service to the island would be disrupted for some period of time. Even less drastic events could cause similar results.

GSX would provide a separate and independent gas supply to the island that could continue flowing if other sectors of the TGVI system were to experience a major upset and would bolster TGVI's system reliability and flexibility from the south.

b. Environmental

In Appendix G of the Resource Report, TGVI mentions that it may have to construct three grass roots compressor stations, including an additional compressor unit at the existing Coquitlam Compressor Station site, representing an incremental 33,700 hp. TGVI states: "The most significant environmental impacts from compressor stations are generally perceived to be viewscape disruption, noise and air emissions. However, in reality compressor stations typically have limited impact on air, land or water, or on local residents." TGVI appears to minimize the emissions issues and fails to address issues relating to global greenhouse gas emissions.

In comparison, GSX would require far less compression of 10,300 hp at Cherry Point, Washington as opposed to an incremental 33,700 hp on Vancouver Island. The less significant air emissions issues as might be presented by GSX have been thoroughly considered and resolved in the certificates that have already been issued by the FERC and NEB.

The Resource Plan does not adequately address construction challenges and environmental reclamation issues associated with pipeline looping projects. There is no mention of potential slope instability on the Canadian mainland or seismic issues associated with the second marine crossing that could impact future service reliability. TGVI's strategy appears to have the BCUC approve the LNG facility in concert with the Resource Plan, so that third-party competition will be eliminated from an economic standpoint and future additions can be pursued without a challenge.

LNG Tank

1. Project Justification

In most circumstances projects are not brought before a regulatory body without a demonstrated market. There is no evidence in the Resource Plan or LNG CPCN application of binding commercial arrangements (transportation agreements or precedent agreements) to justify the LNG project. Project justification appears to be based on what ifs (such as presumed results from BC Hydro's CFT process), and the uncertainty of negotiating expiring contracts with certain industrial customers ("Joint Venture") and BC Hydro. By approving the LNG project at this time, the BCUC will effectively be making a determination against any alternative means of bringing natural gas to Vancouver Island to serve any gas-fired electric generator resulting from the CFT process.

Even in TGVI's Base + 45 case, it appears that installing a 1 BCF LNG facility at this time is oversized. TGVI states that the entire capacity of the LNG facility is not needed at this time to serve peaking needs on Vancouver Island.

IV.
POWER/GAS AVAILABILITY THROUGH CURTAILMENT AGREEMENTS

In its 2004 Resource Plan, Terasen states that a key strategic objective for Terasen is to ensure the Province remains attractive to new business from a supply reliability perspective, and further explains that TGVI has arrangements with BC Hydro and the Joint Venture where TGVI can recall or curtail a portion of their firm transport capacity to meet Core peak demands. Such an arrangement would result in having the markets being served by BC Hydro or the Joint Venture being required to switch to alternate fuels, with increased emissions, or merely reduce their production levels. Such an arrangement and ongoing strategy seems to be contradictory with Terasen's key strategic objective of attracting new business to its system, whereby industrial users may be required to install expensive alternate fuel equipment, grapple with associated permitting challenges, or curtail their production resulting in lost revenues. Seventy percent of TGVI's annual demand is comprised of generation and the Joint Venture loads. It does not appear in the 2004 Resource Plan that TGVI is proposing to install facilities that will provide firm year-round service to those customers that provide the majority of revenues to TGVI. Additionally, TGVI mentions that BC Hydro has expressed a willingness to enter into peaking arrangements at ICP. This appears to be contrary to an apparent need for incremental power generation on Vancouver Island. If there is a need to curtail gas supplies to ICP, the very core market furnaces that would consume the natural gas being made available as a result of curtailment may be in jeopardy of obtaining the needed electricity to operate them.

V.
BRITISH COLUMBIA PROVINCIAL ENERGY PLAN

On-Island Natural Gas-Fired Generation

In the Final Report of the Task Force recommending Strategic Considerations for a New British Columbia Energy Policy issued in March of 2002 ("Energy Report"), the energy needs of Vancouver Island received special focus and consideration. The Energy Report found that:

> Vancouver Island is a capacity-constrained system with a peak demand of about 2,139 MW, provided primarily by supply from aging submarine cables. . . . The natural gas pipeline that currently serves Vancouver Island is fully contracted during the five winter months. Consequently, there is insufficient capacity to serve new loads (i.e. increased domestic space-heating requirements, commercial and industrial end-use needs), as well as existing natural gas-fired electricity generation. There is a need for additional pipeline capacity.

The Energy Report also found that of the two options that had been considered for Vancouver Island, i.e. additional electricity generation and the need for a new natural gas pipeline or new electric transmission, that new electric transmission was "more expensive and requiring new generation capacity elsewhere in the province along with required transmission upgrades."

These recommendations underpin the findings in the Minister of Energy's final report, the 2002 Energy for Our Future: A Plan for BC ("BC Energy Plan"). The BC Energy Plan also acknowledges the need for a near immediate solution to the Vancouver Island energy problem and similarly notes that a sizable (265 MW) natural gas-fired plant located on Vancouver Island may be a better solution than "requiring transmission upgrades and new generating capacity elsewhere in the province."

VI.
BC HYDRO ASSESSMENT OF ELECTRIC DEMANDS

Projected power load for Vancouver Island

BC Hydro's 2004 Integrated Electricity Plan ("BC Hydro Plan") validates the growing need for additional electric demand on Vancouver Island. However, it is apparent that BC Hydro is considering a two-stage process in trying to meet the projected needs of the island. First, BC Hydro anticipates meeting some of the emerging immediate needs through the results of the pending CFT process. In addition, BC Hydro envisions the need to provide a replacement to the aging transmission cables that serve Vancouver Island from 2009 onward. The combination of these findings validates the long-term electricity needs for the island. The only question that needs to be answered is how best to satisfy the growing short-term and long-term needs.

Cost of replacing transmission lines to Vancouver Island

The BC Hydro Plan identifies the costs associated with its proposed replacement of the Arnott Station to Vancouver Island HVDC line as $212 million CDN in 2003 dollars. The incurrence of these costs is not consistent with the strategic solution that was identified and endorsed in the BC Energy Plan. In addition, the projected timeline for replacement of the cables is currently 2009, although Williams submits that with uncertainties associated with such a projected project, the realistic time for achieving the actual replacement of the transmission lines could extend some years into the future. The use of transmission lines to move electricity to serve distant markets (from mainland generation locations to Vancouver Island) is not as efficient as moving natural gas through pipelines to provide for the opportunity to generate electricity near the markets that will be served.

VII.
GSX PIPELINE -
THE ANSWER TO VANCOUVER ISLAND
LONG-TERM ENERGY NEEDS

Reliability

1. Dual Feed and Operational Flexibility

GSX provides a secondary source of gas supply to Vancouver Island. If the Terasen system experienced a prolonged failure in the upstream sections of its system, (which nearly occurred in October 2003), GSX could continue to supply natural gas service to the island, especially to feed the large residential and commercial markets on the south end of the island (namely Victoria). GSX would provide operational flexibility and efficiency to the TGVI system, such as allowing TGVI to minimize the utilization of costly compression to the north, and associated fuel usage.

2. Delivery to Market Area

GSX would provide natural gas service to TGVI's system, which could serve peak core loads (Victoria), and some industrial loads via displacement. In the long run, this would eliminate the need for LNG facilities or for TGVI to otherwise develop non-economic expansion scenarios, including (i) adding compression and the looping of a small diameter pipeline from north to south, and (ii) adding a second marine crossing, which would be necessitated by the addition of another material industrial or electric generation load.

Rate certainty

The GSX-proposed rate structure has been presented, reviewed, and approved by the FERC and the NEB, and has been found to be just and reasonable. With the possibility of additional loads being served by GSX, the rate for Powerex, as well as other new shippers, will only decrease.

Gas pricing advantage resulting from gas-on-gas competition

GSX would provide gas-on-gas competition in excess of what is currently experienced on the Terasen system. Through an interconnection with Northwest Pipeline Corporation ("Northwest"), in addition to Canadian gas supplies, GSX has access to Rocky Mountain and San Juan Basin gas supplies. Terasen shippers would also have access to additional flexibility provided by various storage facilities connected to Northwest.

Expandability

At an estimated cost of $20 million (2004 $U.S. direct costs) ($26.7 million CDN) for additional compression at Sumas, Washington, GSX can increase its deliveries from Sumas to Cherry Point, Washington from approximately 101 TJ/d to 663 TJ/d of which approximately 228 TJ/d could be transported to Vancouver Island. Attaching additional US and Canadian markets through such an economic expansion could significantly reduce the GSX transportation rate to Vancouver Island. Comparable expansions to the Terasen system in a Terasen-only solution would be much more expensive.

Most predictable construction timeline

Because of the mature state of the GSX project and the majority of the permitting and regulatory issues being resolved, the GSX pipeline could easily be placed in-service by November 2007.

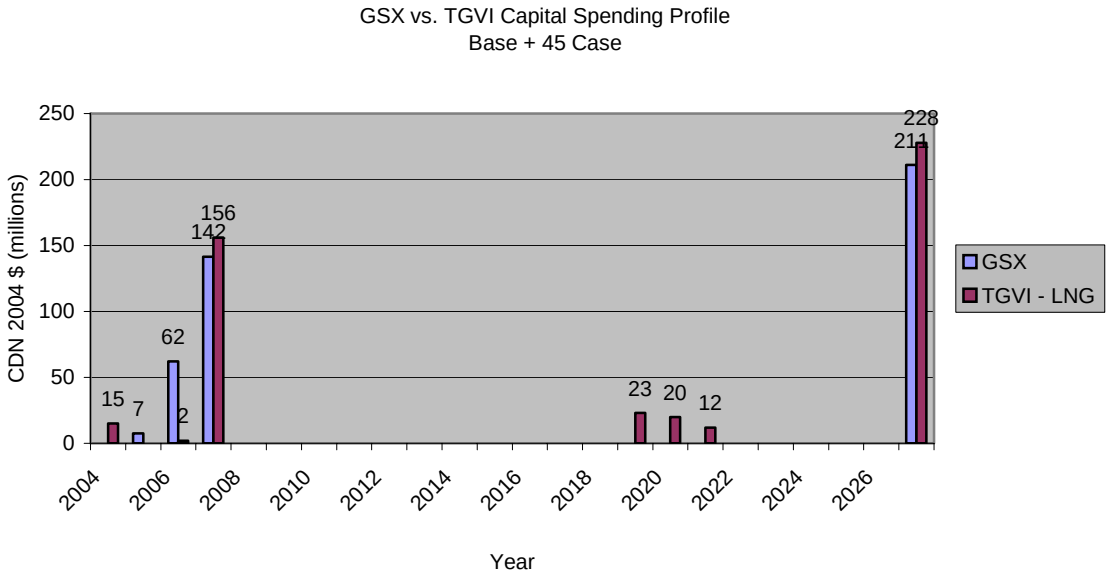
Cost comparisons: GSX with other options

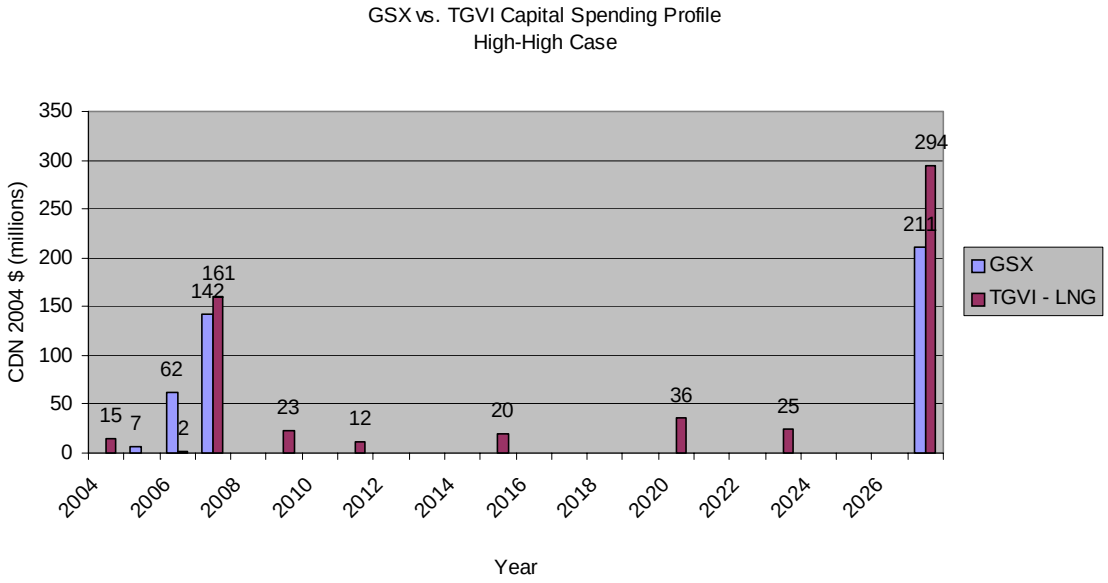
Williams has a proven track record in designing, managing, constructing, and operating natural gas pipeline projects. Since 1998, Williams has designed, managed, and constructed 17 natural gas pipeline projects with a minimum budget of $5 million U.S. each. Of the 17 projects, the total budget is approximately $4.3 billion U.S. and the actual/forecasted costs for completion are $4.1 billion U.S. with an average variance of 0.4 percent. These results are based on the use of equivalent P50 estimates, not P90 estimates. Williams takes great pride in completing projects on time and on budget and in its estimating detail and accuracy.

Since the TGVI Resource Plan states all estimated costs in 2004 CDN dollars, the comparisons below include GSX-estimated costs which have been time adjusted and converted to Canadian dollars to allow direct comparison. To be consistent with Terasen's stated approach, estimate costs should be limited to direct costs only, should be adjusted to 2004 dollars, and should utilize an exchange rate of .75 for converting U.S. dollars to Canadian dollars.

Since actual dollars spent on GSX would not be avoided by selecting one of the TGVI portfolios (the dollars are spent and must be borne by someone), those costs have been subtracted from the GSX capital estimate for purposes of comparison to the TGVI incremental costs. Even with the spent dollars included, the GSX costs compare favorably to the TGVI costs in terms of long-term planning.

For the proposed GSX initial build, the current as-spent direct capital cost estimate is $192.7 million U.S. Adjusting to 2004 dollars results in $189.6 million U.S. The conversion to Canadian dollars (using a 0.75 exchange rate) equates to $252.8 million CDN. Finally, subtracting the actual spent to date amount of $31.2 million U.S. direct ($41.6 million CDN), results in $211.2 million CND (2004 direct), which Williams believes is the appropriate incremental estimated costs for direct comparison to the TGVI estimates.

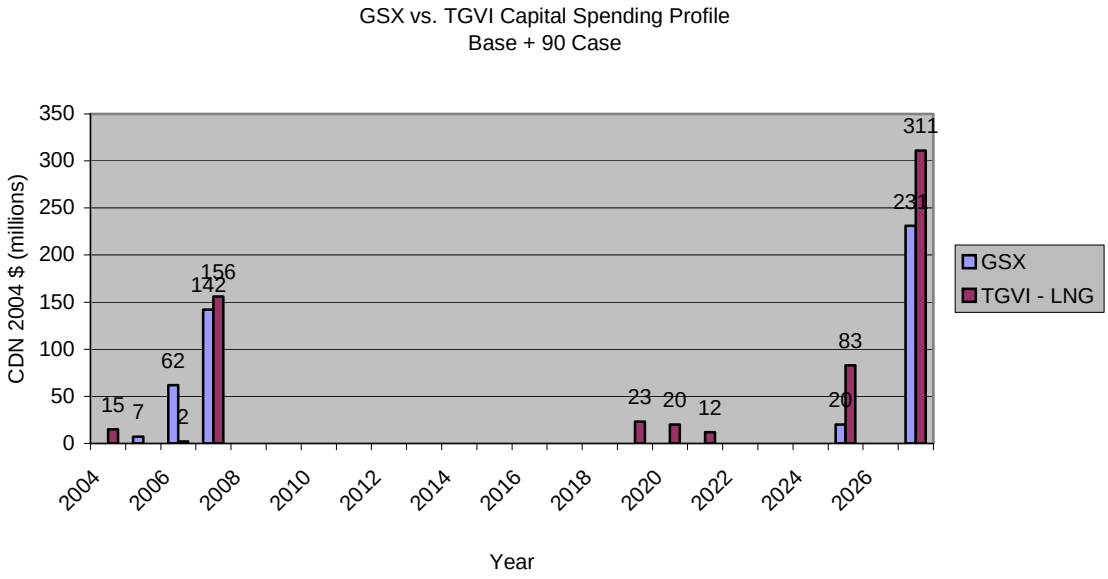




* The High-High case assumes with GSX built, TGVI could have as much as 49 TJ/d of additional capacity to handle core load growth - 38 TJ/d from ICP and 11 TJ/d excess capacity on GSX. This would cover the expected core load growth stated by TGVI in response to BCUC IR #8.6 and, therefore should require no additional TGVI facilities.

Long-term assessment

In terms of long-term planning considerations, it is appropriate to review the large step-change in demand that TGVI notes would require a re-consideration of a new marine crossing. Assuming that a large step-change is to be a third on-island gas-fired generation facility (in addition to the second as a possible outcome of the CFT) of approximately the same size as ICP (45 TJ/d demand), then GSX would clearly be the low-cost solution, as seen in the following table:



** The Base + 90 case presented here contemplates the large step-change in demand that TGVI suggested would cause reconsideration of the new marine crossing on its system. This scenario is shown simply for comparison purposes, specifically in regard to long-term planning. The assumption was randomly made that the third power plant would be added in 2025. If added sooner, it is not entirely clear what expansion components on TGVI would ultimately be required without GSX.

*** The 2025 GSX expenditure includes a small incremental power upgrade of the Cherry Point compressor station and a new compressor station at Sumas (preliminary estimated costs in 2004 dollars). This expansion would increase the capacity of GSX to Vancouver Island to a total of approximately 228 TJ/d.

Reductions in overall capital required to meet Vancouver Island energy needs

A careful review of Terasen's 2004 Resource Plan and BC Hydro's most recently completed Resource Plan show that these two utilities both plan to expend significant capital to address the energy needs of Vancouver Island. Terasen, on the one hand, plans to solve the shortage of gas supplies needed to satisfy the island's needs (although arguably only on a peak day) by building an LNG storage facility and adding additional pipeline looping and compression at significant cost so that the electric needs of the island can be met with on-island generation. The initial costs for the Terasen proposal in 2004 Canadian dollars amount to approximately $173 million by 2007 (TVGI Base + 45 case through 2007). On the other hand, BC Hydro plans to replace the electric transmission cables that serve the Island so that future

electricity needs can be met by transporting mainland power to the Island to meet the future demand. The costs for BC Hydro to replace its transmission lines to the Island are shown to be $212 million in 2003 Canadian dollars in BC Hydro's Resource Plan. Placed on an equivalent 2004 basis, this amounts to approximately $225 million CDN.

Rather than spending a combined $398 million CDN to solve the problem of bringing energy from the mainland to Vancouver Island, GSX offers a more economical solution. The additional direct costs associated with completing the GSX project in 2004 Canadian dollars is $211 million. Allowing GSX to proceed would result in a better solution to the problem that both Terasen and BC Hydro are trying to address in the separate, but overlapping Resource Plans. The estimated savings to the British Columbia province and citizens by pursuing the GSX pipeline as a single solution is $187 million CDN.

Rate equity for BC citizens

Assuming the Commission allows the duplicitous completion of both the Terasen and BC Hydro solutions to the Vancouver Island energy problem, a careful look at who will bear the costs of each solution shows certain rate inequities.

Terasen plans to recover the costs associated with its proposed LNG storage project and any upgrades to its distribution system via the rates that would apply to the customers being served by TGVI, the same as if the expenditures were for new transmission facilities. This limits the number of customers who are being asked to bear the burden for the energy needs (and, in particular, the electric needs) of Vancouver Island to the gas customers being served by TGVI.

BC Hydro's proposal to replace the transmission lines to Vancouver Island would presumably be covered in the rates being paid by all citizens of British Columbia as part of the infrastructure distributing power throughout the province.

If GSX were built, the costs of GSX's transportation service would initially be assumed by Powerex, then passed along as part of the cost of electricity to citizens throughout British Columbia or other markets that might be supplied by electricity generated within British Columbia. With the projected cost for completing the GSX project being less than what BC Hydro anticipates it would take to replace the electric transmission lines that serve Vancouver Island, the ultimate rate effect of building GSX would be no different than BC Hydro's solution to the island's energy needs. However, the costs that Terasen seeks to have approved for its proposed infrastructure improvements would be completely eliminated if the GSX solution were allowed to move forward. This would not only save the approximate $173 million CDN that Terasen plans to spend by 2007 (as well as the years to follow), it would save the citizens who would be paying TGVI rates from any increases associated with the needless expansion of facilities.

When considering the relatively smaller number of ratepayers that would have to absorb the Terasen costs and the relatively larger number of ratepayers that exist throughout the province that could share in any required increases in the costs of acquiring additional electric generation capabilities for the province, the impact to individual ratepayers would be

significantly minimized if a single solution providing for additional on-island electric generation via natural gas supplied by GSX were the preferred BCUC outcome of these proceedings.

Absent a clear showing by Terasen why the existing certificated GSX project should not proceed as being in the public convenience and necessity, the proposed LNG storage project cannot satisfy the public necessity test for its own certificate.

VIII.
CONCLUSION

The GSX pipeline has already been certificated by the FERC and NEB as providing a solution to the energy needs of Vancouver Island that satisfies the public convenience and necessity. GSX represents a single solution to the current island energy needs that would obviate the need for what is now two duplicitous solutions being pursued by the electric and gas utilities that are regulated by this Commission. GSX's anticipated costs are more refined and accurate than other competing proposals. GSX's proposed construction timeline is not only more accurate than other alternatives, but represents the best bet in solving the energy needs of the island before serious shortfalls occur because of aging infrastructure. The Commission should seriously consider rejecting the proposed expenditures by Terasen to solve a problem that would be better solved by the GSX project. The interests of the rate-paying citizens of Vancouver Island and the entire province of British Columbia would be better served by a GSX solution.