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# **Georgia Strait Crossing Pipeline Major Capital Project Plan**

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May, 2001**

# **1.0 OBJECTIVES OF THE PROJECT**

## **1.1 The Project Objective**

The project under consideration in this Major Project Capital Plan is the development and construction of the Georgia Strait Crossing (“GSX”) Pipeline, sponsored by BC Hydro and Williams Gas Pipeline Company (“Williams”). It consists of two pipelines that together will provide gas transportation service between Sumas, Washington and an interconnection with the Centra system on Vancouver Island. The Georgia Strait Crossing pipeline will transport the additional gas needed for two new natural gas-fired electricity generating facilities. This additional capacity is required to supply the Island Cogen Project and the Port Alberni Generating facility, currently under negotiation.

## **1.2 Background and status**

Demand for electricity on Vancouver Island is forecast to grow by about 1.8% per year over the next fifteen years. In addition, one of the submarine cable transmission systems now carrying electricity to Vancouver Island is nearing the end of its service life. An older low-capacity cable system to Vancouver Island has already been relegated to standby status, as it can no longer be relied upon to provide firm capacity. This reduced electrical transmission capacity, coupled with the growth in on-Island power requirements, results in a need for additional capacity so that BC Hydro can continue to provide reliable service to Vancouver Island customers.

Pursuant to the January 2000 Integrated Electricity Plan Update, high-efficiency, natural gas-fired, combined-cycle gas turbine facilities (CCGTs) were identified as the best technology available to ensure a reliable and economic supply of electricity and to address the immediate and medium-term needs of Vancouver Island. Accordingly, on October 22, 1996 and July 31, 1997, respectively, following the receipt of the Independent Power Producers (IPP) Review Panel’s report, the Premier and Minister responsible directed BC Hydro to conclude an Electricity Purchase Agreement with the Island Cogeneration Project (ICP) and the Port Alberni Generation Project (PGP). As part of the Electricity Purchase Agreement (EPA) with ICP and the agreement with the proponents of PGP, BC Hydro is responsible for delivering natural gas to ICP and PGP.

The GSX project team has met with local officials, landowners, First Nations and environmental organizations to identify the preferred pipeline route on both the US mainland and on Vancouver Island. Extensive public consultation was carried out in support of applications to the National Energy Board and the Federal Energy Regulatory Commission (FERC) in the US, both of which were filed April 24, 2001.

## **2.0 COSTS AND BENEFITS OF THE PROJECT**

### **2.1 Costs**

The total capital cost estimate of GSX has increased from the \$180 million (without contingency) quoted in the September 29, 1999 press release issued by BC Hydro and Williams to \$257.5 million (includes \$20 million contingency). The original cost of BC Hydro's portion of the project was \$90 million but has now been revised to \$128.8 million. This increase represents BC Hydro's portion of the \$20 million contingency (\$10 million) and a \$15 million inflation adjustment (2% per year from 1999 to 2003), as well as additional costs for higher environmental standards.

The GSX Project remains the preferred option, from both an economic and technical standpoint, despite its increased capital cost.

### **2.2 Benefits**

GSX delivers social and economic benefits in the form of facilitating electric service to meet the growing needs of industrial, commercial and residential customers on Vancouver Island at the lowest cost for the appropriate level of reliability. Other benefits include the creation of direct employment in British Columbia (170 person-years in direct construction employment), and a better natural gas infrastructure system on Vancouver Island.

## **3.0 RISKS ASSOCIATED WITH THE COSTS AND BENEFITS**

### **3.1 Risks Associated with Costs**

The retention of an independent engineering consultant who reviewed project costs, as well as the establishment of strong project management and capital cost control mechanisms between BC Hydro and Williams mitigate the potential for capital cost increases. Additionally, established BC Hydro Treasury hedging techniques will be deployed to manage exchange rate risks for the GSX project.

### **3.2 Risks Associated with Benefits**

#### **Regulatory/Schedule Risk**

BC Hydro's extensive public consultation preceding the regulatory application and continued public consultation will help mitigate the potential for additional costs and delays from potential regulatory/schedule changes arising because the proposed pipeline route, as filed with the regulators, is subject to future detailed route hearings.

#### **Public Relations Risk**

BC Hydro and Williams are engaged in ongoing, proactive consultation with stakeholders and have sought to minimize potential impacts to the public, First Nations and the environment in the design, building and operation of GSX. BC Hydro has also undertaken to mitigate environmental risks on the GSX project through comprehensive environmental impact studies.