

In the matter of the Coastal Ferry Act, SBC 2003, Chapter 14 (The "Act")

And in the matter of an application by British Columbia Ferry Services Inc. pursuant to Section 42 of the Act

November 28, 2005

# In the Matter of the *Coastal Ferry Act* S.B.C. 2003, Chapter 14

And in the Matter of an Application by British Columbia Ferry Services Inc. pursuant to Section 42 of the *Coastal Ferry Act* 

# To: British Columbia Ferry Commissioner P.O. Box 1497 Comox, British Columbia V9M 8A2

#### APPLICATION

British Columbia Ferry Services Inc. ("BC Ferries") hereby applies pursuant to the provisions of the *Coastal Ferry Act*, S.B.C. 2003, c.14 (the "Act"), and in particular section 42, for extraordinary price cap increases in relation to six route groups (collectively, the "Six Route Groups") on the basis that an extraordinary situation exists, namely an extraordinary increase in the price of fuel. An extraordinary increase in the price of an uncontrollable input such as fuel is expressly identified in section 42(2)(b) of the Act to be a basis for an extraordinary price cap increase.

In respect of this Application BC Ferries submits:

- BC Ferries is a ferry operator under the provisions of the Act with its head office at Fleet House, 1112 Fort Street, Victoria, B.C., V8V 4V2.
- Pursuant to the Coastal Ferry Services Contract (the "Coastal Ferry Services Contract") dated April 1, 2003 with the Province of British Columbia BC Ferries operates the BC Ferry System as defined in the Services Contract.
- 3. Section 39 of the Act provides that for the first performance term of the Coastal Ferry Services Contract (which commenced April 1, 2003 and expires March 31, 2008) the price cap relating to a Route Group is the average of the tariffs payable as at April 1, 2003 on the designated ferry routes that are included in that Route Group, and

that price cap is increased on each November 1 in the performance term by 2.8% if the Route Group consists of Major Routes and 4.4% for all other Route Groups.

- 4. Pursuant to the Coastal Ferry Services Contract BC Ferries operates, or contracts for the operation of, ferries on seven Route Groups. By this Application BC Ferries seeks to increase the price cap applicable to six of those Route Groups: Route Group 1 (Major Routes); Route Group 2 (Horseshoe Bay/Langdale); Route Group 3 (Northern Routes); Route Group 4 (Discovery Coast); Route Group 5 (Brentwood Bay/Mill Bay); and Route Group 6 (Minor Routes). This Application does not seek to change the price cap applicable to Route Group 7 (Langdale/Gambier/Keats).
- 5. By Order 04-02 dated September 28, 2004 the Commissioner ordered that ferry operators were authorized to establish Deferral Accounts, to be operated as described in Schedule A to that Order. Schedule A provided that for the year commencing April 1, 2004 ferry operators shall charge to operating expenses, by Route Group, fuel oil costs calculated as the delivered price per litre budgeted for 2004/05 (the "set price") multiplied by the actual litres consumed to operate, redeploy, refit and maintain vessels, with the variance between the set price for fuel oil established for each Route Group and the actual delivered price per litre to be held, by Route Group, in the Deferral Accounts. Order 04-02 also stipulated that "If an application is made by a ferry operator under Section 42 for an extraordinary price cap increase because of an increase in the price of fuel oil, and if such application is approved by the Commissioner to take effect before March 31, 2008, then the balance in the Deferral Accounts will be adjusted to reflect the extraordinary price cap increase."
- 6. Subsection (1) and (2) of Section 42 of the Act provide:
  - (1) A ferry operator may apply to the commissioner for an extraordinary price cap increase, in relation to a route group, that exceeds any increase available under section 39 (b) or 41 (b), and the commissioner may authorize the extraordinary price cap increase.
  - (2) An extraordinary price cap increase must not be authorized under subsection (1) unless an extraordinary situation exists such as
    - (a) the deployment of a new capital asset such as a vessel on one or more designated ferry routes in that route group during the

- 2 -

currency of the applicable performance term of the Coastal Ferry Services Contract,

- (b) an extraordinary increase in the price of any uncontrollable input such as fuel,
- (c) an unanticipated and extraordinary change in traffic levels on one or more designated ferry routes in that route group, or
- (d) the introduction of new safety or other regulations that impose a new, unexpected and significant cost burden on ferry operator.
- 7. By Order 05-02 dated July 24, 2005 the Commissioner granted extraordinary increases in the price caps: 4% for Route Group 1 and 6% for Route Groups 2 through 6. He acknowledged in his Reasons for Decision (p.10) that a further application by BC Ferries for additional extraordinary price cap increases might prove to be necessary.
- 8. On July 25, 2005, BC Ferries implemented fuel surcharges consistent with the extraordinary price cap increases.
- 9. The extraordinary situation that existed when BC Ferries made its June 2005 Application and at the time of Order 05-02 in July 2005, continues to exist. The aggregate negative variance between the set prices and the actual delivered price of fuel grew by 20% between July 31 and October 31, 2005, considerably more than anticipated with the July 25, 2005 fuel surcharges in place. Current forecasts suggest that, without increased fuel surcharges, the aggregate deferral balance will continue to increase, not decrease, throughout the remainder of the performance term, reaching \$33.2 million by March 31, 2008.
- 10. The material included with this Application provides information on the variances held in the Deferral Accounts, the actual delivered price of fuel that has been experienced by BC Ferries since July 25, 2005, the forecast price of fuel oil over the period to March 31, 2008, the forecast balance in the Deferral Accounts as of March 31, 2008, the measures BC Ferries is taking to mitigate fuel consumption, the calculations to determine the price cap increases and BC Ferries' proposal for implementation of increased fuel surcharges if the price cap increases are authorized by the Commissioner.

- 11. BC Ferries submits that the material filed with this Application establishes that an extraordinary situation exists and that the Commissioner should authorize extraordinary price cap increases for the Six Route Groups.
- 12. Subsection 42(5) of the Act provides that the Commissioner must promptly, and in any event within one month after receiving the full information required by the Commissioner in relation to an application for an extraordinary price cap increase, issue to the ferry operator and the government the Commissioner's preliminary decision on the application.

BC Ferries applies for a preliminary decision of the Commissioner pursuant to subsection 42(5) of the Act, which becomes a final decision pursuant to subsection 42(6) of the Act, authorizing the following:

- A. An extraordinary increase of 2.5% in the price cap for the Route Group 1 (Major Routes), which consists of the three major routes between Vancouver Island and the Mainland.
- B. An extraordinary increase of 6% in the price cap for each of Route Groups 2 through 6.

# ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated at Victoria, British Columbia, this 28 day of November, 2005.

**British Columbia Ferry Services Inc.** 

**Original signed by David L. Hahn** 

David L. Hahn, President and CEO

All communications in connection with this Application should be directed to: Carol Prest Director, Economic Regulatory Affairs 1112 Fort Street, Victoria BC V8V 4V2 Phone: (250) 978-1300 FAX (250) 978-1544

#### FILED BY BRITISH COLUMBIA FERRY SERVICES INC. IN SUPPORT OF APPLICATION FOR EXTRAORDINARY PRICE CAP INCREASES

1. This material is filed in support of the application by British Columbia Ferry Services Inc. ("BC Ferries" or "the Company") pursuant to section 42 of the *Coastal Ferry Act*, S.B.C. 2003, c.14 (the "Act") for extraordinary price cap increases in relation to its ferry operations in Route Group 1 through Route Group 6 (collectively, the "Six Route Groups"). Since the Commissioner's Order 05-02 was issued on July 24, 2005 granting extraordinary price cap increases for the Six Route Groups, BC Ferries has continued to experience higher than expected fuel oil costs. The aggregate balance in BC Ferries' Commission-approved Deferral Accounts for the Six Route Groups increased by approximately 20% between July 31, 2005 and October 31, 2005. Based on revised forecasts of oil prices, the higher than expected fuel oil costs will continue and the aggregate debit balance in the Deferral Accounts is forecast to grow to \$33.2 million by March 31, 2008 unless further extraordinary price cap increases are implemented. This is far higher than the balance forecast when the fuel surcharges were implemented in accordance with the Commissioner's Order 05-02.

2. By way of overview, in Order 04-02, issued September 28, 2004, the Commissioner authorized the establishment of Deferral Accounts, in which to record the variance between the actual price of fuel (net of hedging gains and losses) and a "set price" for fuel for the Six Route Groups. The "set price" was established by the Commissioner, based on the 2004/05 budget and was to increase with inflation each fiscal year.

3. By March 31, 2005 increased fuel costs experienced by BC Ferries in its 2004/05 fiscal year had resulted in the aggregate balance in the Deferral Accounts of \$8 million, which exceeded the amount previously forecasted in September 2004 by approximately \$2.7 million. The revised forecast that BC Ferries relied on as at April 2005 was that world oil prices (West Texas Intermediate (WTI) crude) would average \$55 US barrel to March 31, 2006, \$50 US barrel to March 31, 2007, and \$45 US barrel to March 31, 2008. Based on the April 2005 forecast, unless the price caps were increased and fuel surcharges implemented, the aggregate balance in the Deferral Accounts would reach almost \$54 million by March 31, 2008, the expiry of the first performance term under the Coastal Ferry Services Contract. As a result, BC Ferries

applied to the Commissioner on June 13, 2005 (the "June 2005 Application") for extraordinary price cap increases for the Six Route Groups.

4. By Order 05-02, issued July 24, 2005, the Commissioner determined that an extraordinary situation existed due to the extraordinary increases in fuel costs, and granted the following extraordinary price cap increases for the Six Route Groups effective July 25, 2005 or as soon thereafter as practicable:

(a) By four per cent for Route Group 1, the major route group; and

(b) By six per cent for Route Groups 2 through 6, which consist of non-major routes.

5. The cost of fuel experienced by BC Ferries this Summer was significantly higher than the April 2005 forecast fuel oil price upon which the June 2005 Application was based. Notwithstanding the extraordinary price cap increases authorized by Order 05-02 and the fuel surcharges implemented immediately thereafter, the aggregate Deferral Account balance for the Six Route Groups (which was \$8 million as of April 1, 2005 and \$15.2 million as of July 31, 2005) increased to \$18.3 million as of October 31, 2005. As previously indicated, this represents an increase of 20% from July, whereas it had been anticipated that the fuel surcharges implemented on July 25, 2005 would limit the increase to 3% during that same period. <sup>1</sup>

6. BC Ferries has taken steps to enhance its understanding of the energy markets. BC Ferries retained an energy consulting firm, Purvin & Gertz, Inc. ("Purvin & Gertz"), which provided forecasts for Edmonton Par and Vancouver Rack prices. The significance of this new forecast information is that BC Ferries' fuel oil contracts are based on Edmonton Par and

current and forecast Deferral Account balances are dealt with in more detail in Parts D-F.						
	Date	Forecasted Deficit of Deferral Accounts at				
		March 31, 2005	March 31, 2006	March 31, 2008		
Established Deferral Account	September 2004	\$5.3 million	No forecast	No forecast		
Fuel Surcharge Application #1	Pre-July 25, 2005	N/A	\$29.5 million	\$53.9 million		
Commissioner Order 05-02	July 25, 2005	N/A	\$17.3 million	\$6.9 million		
Fuel Surcharge Application #2	November, 2005	N/A	\$22.2 million	\$33.2 million		

<sup>&</sup>lt;sup>1</sup> The following table summarizes the forecast aggregated Deferral Account balance as revised over time. The current and forecast Deferral Account balances are dealt with in more detail in Parts D-F. .

Vancouver Rack prices; therefore, the Company believes that forecasts of these prices are more meaningful than a forecast of the WTI. The Purvin & Gertz forecast provides a basis for a forecast fuel price of an average price of (US/bbl) \$67.70 for 2006, \$66.18 for 2007, and \$56.98 for 2008.<sup>2</sup>

7. The Commissioner recognized (at page 10 of the Reasons for Decision in support of Order 05-02) that another application by BC Ferries for a further extraordinary increase might be required:

The Commission fully recognizes that its final decision assumes that fuel prices through March 31, 2008 are close to the forecast relied upon by BC Ferries. If fuel prices are significantly higher than this major bank forecast it might be necessary to examine the case for an increase in the surcharge, subject to an application by BC Ferries.

8. BC Ferries has experienced higher than expected fuel oil costs since the Company made its June 2005 Application and Order 05-02 in July 2005. The Deferral Account debit balances have grown by 20% between July 31 and October 31, 2005, considerably more than the 3% increase expected during that same period following the implementation of the initial surcharges. Current forecasts suggest that the aggregate balance will reach \$33.2 million by March 31, 2008, which is over four times the balance of \$6.9 million forecast at the time of implementation of fuel surcharges in accordance with Order 05-02.<sup>3</sup> If the Deferral Accounts are not addressed in the short term, future customers will be confronted with significant price cap increases necessary to recover these balances. Additional extraordinary increases in the price caps for the Six Route Groups, which will allow the implementation of increased fuel surcharges, are required. In this Application BC Ferries seeks the following extraordinary price cap increases:

(a) By 2.5 per cent for Route Group 1, the major route group; and

<sup>&</sup>lt;sup>2</sup> As discussed later in this filing, BC Ferries has used a weighted average of Edmonton Par and Vancouver Rack prices forecast by Purvin & Gertz. The weighting is based on the amount of fuel contracted by BC Ferries at each price. – see Appendix A and Appendix B for further detail

<sup>&</sup>lt;sup>3</sup> Based on Order 05-02, the aggregate Deferral Account balance was forecast to grow to the end of the current year, before declining throughout 2006 and 2007. Specifically, the April 2005 forecast of WTI prices had been US\$55 bbl to March 31, 2006, US\$50 bbl to March 31, 2007 and US\$45 bbl to March 31, 2008. Please see also Order O5-02, Schedule A, p.10.

(b) By 6 per cent for Route Groups 2 through  $6.^4$ 

9. The increased fuel surcharges requested by BC Ferries, based on the current Purvin & Gertz forecast cost of fuel oil (Edmonton Par and Vancouver Rack prices) and an implementation date of February 1, 2006, should reduce the balance in the Deferral Accounts to close to zero by March 31, 2008.

#### A. Background

10. BC Ferries entered into the Coastal Ferry Services Contract with the Province of British Columbia as of April 1, 2003. The term of the Coastal Ferry Services Contract is 60 years and may be renewed by agreement of the parties for another 60 years. The first performance term under the Coastal Ferry Services Contract is the five-year period of April 1, 2003 through March 31, 2008. Pursuant to the Coastal Ferry Services Contract, BC Ferries operates, or contracts for the operation of, ferries on seven Route Groups. The Route Groups are: Route Group 1 (Major Routes); Route Group 2 (Horseshoe Bay/Langdale); Route Group 3 (Northern Routes); Route Group 4 (Discovery Coast); Route Group 5 (Brentwood Bay/Mill Bay); Route Group 6 (Minor Routes) and Route Group 7 (Langdale/Gambier/Keats).

11. Pursuant to section 39 of the Act the price cap relating to each Route Group effective April 1, 2003 was the average of the tariffs payable as at April 1, 2003 on the designated ferry routes that are included in that Route Group. Section 39 of the Act also provides that the price cap for each Route Group increases on November 1 in each year of the first performance term by, on average, 2.8% over the previous year's price cap for Route Group 1 (Major Routes) and, on average, by 4.4% over the previous year's price cap for all other Route Groups.

12. In September 2004 BC Ferries proposed that the Commissioner approve the establishment of a Deferral Account mechanism in order to reduce the effect of volatility of fuel oil prices. That filing with the Commissioner noted:

A number of significant cost pressures have been identified which are negatively impacting the Company's ability to meet the 2004/05 budget, most notably the current extraordinary increase in the price of fuel oil.

- 4 -

<sup>&</sup>lt;sup>4</sup> Percentage increases sought are based on the price cap excluding the extraordinary increase in Order 05-02.

The 2004/05 fuel budget was based on world energy markets forward contracts. At that time, the world markets were forecasting fuel oil price per barrel at US \$30 (CDN \$40). In August 2004 spot prices of WTI crude fluctuated between US \$42 and US \$49. On a per litre basis, the average delivered price of fuel oil (net of hedging gains) [for the 2004/05 fiscal year ending March 31, 2005] is forecast to be greater than \$0.44 compared to the \$0.40 budgeted which creates a negative variance of \$5.3 million [referring to the impact during the 2004/05 fiscal year].

13. BC Ferries did not apply for extraordinary price cap increases at the time of BC Ferries' proposal to the Commissioner respecting a Deferral Account mechanism. Oil prices were expected to be volatile but in the Fall of 2004 energy markets were forecasting that world oil prices would begin to decline over the course of the 2005 calendar year, and the Order establishing the Deferral Accounts provided that those accounts would be credited with the savings (variances from actual delivered prices below the set prices) when oil prices returned to lower levels. The Deferral Accounts were implemented by BC Ferries with the expectation that the Deferral Account mechanism would deal with the effect of fuel price volatility without impacting fares in an extraordinary way.

14. By Order 04-02 dated September 28, 2004 the Commissioner ordered:

- (a) Ferry operators are authorized to establish Deferral Accounts, to be operated as described in the attached Schedule A.
- (b) The Deferral Accounts will be maintained until March 31, 2008 at which time the Commissioner will decide on their continuation.
- (c) The balance in the Deferral Accounts, at a date prior to March 31, 2008, to be determined at the time of the price cap review required under Section 40, will be taken into account in setting the allowable price cap increase, by Route Group, for the performance term commencing April 1, 2008.
- (d) If an application is made by a ferry operator under Section 42 for an extraordinary price cap increase because of an increase in the price of fuel oil, and if such application is approved by the Commissioner to take effect before
   March 31, 2008, then the balance in the Deferral Accounts will be adjusted to reflect the extraordinary price cap increase.

(e) Any balance remaining in the Deferral Accounts at March 31, 2008, not taken into account in setting the price cap for the term commencing April 1, 2008, will be taken into account in a subsequent price cap review.

15. Order 04-02 provided that for the year commencing April 1, 2004 ferry operators shall charge to operating expenses, by Route Group, fuel oil costs calculated as the delivered price per litre budgeted for 2004/05 (the "set price") multiplied by the actual litres consumed to operate, re-deploy, refit and maintain vessels. Any variance between the set price for fuel oil established for each Route Group and the actual delivered price per litre is to be held, by Route Group, in the Deferral Accounts. Schedule A of Order 04-02 established set prices for fuel oil for each Route Group, calculated as the delivered price per litre budgeted for the 2004/05 year, and for years subsequent to 2004/05 the set price for each Route Group is increased by the percentage increase reported by Statistics Canada in the Consumer Price Index (Vancouver) for the previous calendar year. Any gains or losses on fuel oil futures contracts ("hedging" gains or losses) are to be charged or credited to the Deferral Accounts, proportionate to fuel oil use by Route Group.

16. Strategies to reduce the amount of fuel consumed are an important consideration and component of any discussion regarding the current price of fuel. For years, BC Ferries has been sensitive to the amount of fuel consumed because fuel is the Company's second largest operating cost. In looking back over the past ten years, cost impacts have compelled BC Ferries to alter its practices and procedures. In recent years, BC Ferries has responded to the high price of fuel oil used in its operations by implementing significant changes to its operations in order to further reduce the volume of fuel consumed. In 2001, BC Ferries' annual consumption was 127.6 million litres of fuel. In the last fiscal year, ending March 31, 2005, BC Ferries' annual consumption had dropped to 122.2 million litres (a 4.2% reduction) while providing the same or better levels of service. This reduction is the result of the changes to the operating profile, the commitment of the Company to on-time performance, and improvements in technology.

17. Programs and initiatives introduced by BC Ferries that have successfully reduced fuel consumption and emissions include:

 (a) Vessel Re-engines: The largest savings in fuel consumption has been achieved by replacing old engines with new ones that utilize state-of-the-art engine technology. In the most recent upgrade program, BC Ferries has undertaken to re-engine certain classes of smaller vessels.

- Re-engining 3 vessels in the Bowen class; the replacement engines consume 17.5% less fuel in comparable service<sup>5</sup>;
- Re-engining 3 vessels in the "K" class; with operating reductions in fuel consumption that range between 6% and 30%;
- Capital Planning: New vessels are being designed from the outset with fuel efficiency as a priority. All major vessels have fuel consumption monitoring equipment installed to assist their crews with fuel conservation; and
- With the three new Super C class vessel slated to be introduced into service in 2007 and 2008, BC Ferries is expecting fuel savings of approximately 9%.
- (b) Operational Scheduling:
  - BC Ferries crews have taken steps with respect to managing fuel consumption. Crews are operating the vessel with the propellers at a reduced pitch and reducing the RPM.
  - For Summer 2005, BC Ferries adjusted schedules around the fleet in order to maximize fuel efficiency. For example, the schedule for the route operating between Horseshoe Bay and Nanaimo was changed to allow more time in dock and in transit. This had the benefit of allowing the vessel to operate at slower speeds while maintaining the on-time performance. Fuel savings were significant. However, there were some additional costs that were incurred due to overtime. BC Ferries is currently reviewing this schedule change to determine if further changes can be made that will maximize the efficiency of the operation.
  - Installing fuel meters on vessels to allow the crew to manage fuel consumption efficiently.
  - Develop and implement a post-refit engine tests and trials program to determine specific fuel consumption and provide vessel operators with the best information about efficient ship speeds.
  - Develop and implement a program to test fuel quality.

<sup>&</sup>lt;sup>5</sup> Absolute savings on the applicable routes were not as significant as 17.5% due to changes to operating and service profiles once the vessels returned to service.

- Maintenance Undertaken: In addition to the large projects referenced above, BC
   Ferries' regular maintenance programs have incorporated the following
   procedures to reduce engine loads and therefore save fuel:
  - Smoothing of hulls and renewal of underwater coatings to reduce resistance;
  - Polishing and maintaining propellers for maximum efficiency;
  - More efficient propellers were fitted on two smaller vessels; and
  - Engine maintenance procedures emphasize the need to reduce fuel consumption.
- (d) New Technologies Under Consideration: BC Ferries is exploring the opportunity for further savings through new technologies; however, there are challenges that must be addressed prior to any of these technologies being introduced into the fleet. For example, fuel additives that improve fuel consumption will have to be approved by the engine manufacturer to ensure that engine warranties are honoured. Other possible options are:
  - engine mechanical upgrades from manufacturers;
  - alternative fuels;
  - special lubricants to reduce friction in engines;
  - hull and appendage enhancements;
  - hull resurfacing; and
  - Controllable pitch propeller blade replacements.

18. The initiatives undertaken in this fiscal year have resulted in BC Ferries forecasting a further reduction in fuel consumption to 121.8 million litres to March 31, 2006. Notwithstanding the reductions in this fiscal year, BC Ferries remains committed to examining further improvements in fuel efficiency for future years.

19. The consumption reduction that will result from fuel conservation strategies is not capable of solving the current problem of extraordinarily high fuel costs. Section 42 of the Act

allows a ferry operator to apply to the Commissioner for, and the Commissioner to authorize, extraordinary price cap increases if an extraordinary situation exists, such as an extraordinary increase in the price of a non-controllable input such as fuel.

20. On June 13, 2005 BC Ferries applied for an extraordinary price cap increases due to an extraordinary increase in the price of fuel. Order 05-02, the Commissioner's final decision on the June 2005 Application, provided that:

- (a) Price caps applicable to the Six Route Groups were increased effective July 25, 2005 or as soon thereafter as practicable as follows:
  - By four percent for the Major Route Group; and
  - By six percent for the remaining Route Groups (the "other routes").
- (b) The price for fuel charged to BC Ferries operations (the "set price") were to increase by five percent on July 24, 2005 thereby increasing fuel costs charged to operations by five percent for the balance of the 2005/2006 fiscal year and for the two succeeding fiscal years. The Commissioner noted that this adjustment would reduce the amount projected to be added to the Deferral Account balances for those years by an amount equal to the five percent increases in fuel operating costs.
- (c) The fuel surcharges to ferry customers were, as long as the fuel surcharges remain in effect, to be shown on the fare ticket and the amount collected to be used to reduce the balances of the Deferral Accounts for the respective Route Groups.
- (d) The fuel surcharges are to cease no later than March 31, 2008.
- (e) The price cap increases authorized by Order 05-02 were conditional on
  - the fuel surcharges for Route Group 1 being reduced or eliminated as and when the balance in the Deferral Account for Route Group 1 reaches zero, with the adjustment of the fuel surcharges to be to the extent that the reduced fuel surcharges are forecast to maintain the Deferral Account for the Route Group 1 at approximately zero; and

- the fuel surcharges for Route Groups 2 through 6 being reduced or eliminated as and when the aggregate balance in the Deferral Accounts for Route Groups 2 through 6 reaches zero, with the adjustment of the fuel surcharges to be to the extent that the reduced fuel surcharges are forecast to maintain the aggregate balance in the Deferral Accounts for the Route Groups 2 through 6 at approximately zero.
- (f) The increase in the Route Group price caps authorized by Order 05-02 were not to be included in the price cap indexes for purposes of calculating future annual statutory increases in the price cap indexes.

21. BC Ferries has experienced higher than expected fuel oil costs since the Commissioner's Order 05-02 became effective on July 25, 2005. The aggregate Deferral Account balance has grown to \$18.3 million as of October 31, 2005, which is \$2.6 million more than the increase anticipated during this same period<sup>6</sup> when the Commissioner issued Order 05-02. BC Ferries has calculated, based on the fuel costs experienced since Order 05-02 and the current forecast of fuel oil costs to 2008, that the aggregate Deferral Account balance as at March 31, 2008 will be \$33.2 million, rather than being reduced and moving towards zero as contemplated in Order 05-02. These calculations take into account the existing extraordinary price cap increases authorized by Order 05-02 and the associated fuel surcharges. In this Application, BC Ferries is applying for further extraordinary price cap increases relating to the Six Route Groups. BC Ferries is not seeking an increase in the price cap for Route Group 7 (Langdale/Gambier/Keats).

22. If, as requested, the Commissioner authorizes extraordinary price cap increases, then BC Ferries will increase the existing fuel surcharges on passenger and vehicle fares. In general terms, BC Ferries intends to implement increased fuel surcharges sufficient, based on the current Purvin & Gertz Edmonton Par and Vancouver Rack price forecast, to reduce the balance in the Deferral Accounts to close to zero by March 31, 2008. Details of the proposed increases in the fuel surcharges and BC Ferries' implementation strategy are set out later in this filing.

23. This Application, like the June 2005 Application, distinguishes between the extraordinary price cap increase sought for Route Group 1 (Major Routes), which consists of route 1 (Swartz Bay to Tsawwassen), route 2 (Horseshoe Bay to Nanaimo), and route 30 (Tsawwassen to Duke

<sup>&</sup>lt;sup>6</sup> As indicated on page 10 of Schedule A to Order 05-02, "...the Deferral Account balances are forecast to rise slightly by March 31, 2006 before declining to under \$7 million by March 31, 2008."

Point); and extraordinary price cap increases sought for Route Groups 2 through 6 collectively, which consist of non-major routes. In this Application BC Ferries seeks an extraordinary increase of 2.5% in the price cap for Route Group 1 (in addition to the extraordinary increase of 4% that was ordered in Order 05-02), and a separate and common extraordinary increase of 6% in the price caps for Route Groups 2 through 6 (in addition to the extraordinary increase of 6% that was ordered in Order 05-02).

24. The rationale for seeking different increases for Route Group 1 and Route Groups 2 through 6 is twofold:

(a) First, section 38(1) of the Act stipulates that cross-subsidization from the Major Routes to other ferry routes is be to eliminated by the end of the first performance term (March 2008) and, in the interim, is to be minimized. Route Group 1, therefore, should recover only those fuel costs incurred on the Major Routes. There is no similar provision in the Act respecting the relationship among the other routes.

(b) Second, the Province pays Service Fees to BC Ferries pursuant to the Coastal Ferry Services Contract in respect of Designated Ferry Routes, which are all the routes other than those in Route Group 1. As only a portion of the costs of BC Ferries for the ferry services provided on Route Groups 2 through 6 is recovered through fares (with the Provincial Service Fees covering the other portion of the costs), the percentage increase in the price caps for Route Groups 2 through 6 must be greater than the percentage increase for Route Group 1, since the fuel surcharges that BC Ferries intends to implement relate only to the fares paid by customers, and not to the Service Fees from the Province.

25. Different increases for Route Group 1 and Route Groups 2 through 6 was also adopted by the Commissioner in Order 05-02.

26. The current "set price", as adjusted to account for CPI and to incorporate the changes required by Order O5-02, is discussed in Part B of this filing. The implementation of Order 05-02 is discussed in Part C. Subsequently, in Parts D through G of this filing, BC Ferries explains the Deferral Account balances, the forecast fuel cost and the forecast Deferral Account balances,

and the necessity for extraordinary price cap increases beyond those granted by the Commissioner in Order 05-02. Part H sets out the calculations of the price cap increases. Part I sets out BC Ferries' implementation strategy.

#### B. The Adjusted "Set Price"

27. Schedule A of Commissioner Order 04-02 established a "set price" in Canadian dollars per litre for fuel oil to be used for purposes of the Deferral Accounts. The "set price" established by Order 04-02, by Route Group, for the 2004/05 year (commencing April 1, 2004) is displayed in column three of Table 1 below.

28. On April 1, 2005 the "set price" established by Order 04-02 was adjusted by 1.97% to reflect Vancouver CPI. The CPI-adjusted "set price" for the Route Groups are set out in column four of Table 1 below.

29. Order 05-02 provided that the "set price" be adjusted upwards by an additional 5%. The Commissioner noted that this additional adjustment would reduce the amount projected to be added to the Deferral Account balances for those years by an amount equal to the five percent increases in fuel operating costs.

30. The set prices, after inclusion of the 5% adjustment, are set out in column 5 of Table 1 below.

	Table 1						
1	2	3	4	5			
Route Group	Routes	Set price (C\$ per litre) for 2004/05 per Order 04-02	Adjusted set price (CPI) as of April 1, 2005	Adjusted set Price (by 5%) per Order 05- 02			
1	Major Routes	0.3978	0.4056	.4259			
2-6	All Other Routes <sup>7</sup>	0.4079	0.4156	.4362			

<sup>&</sup>lt;sup>7</sup> The aggregate set prices for Route Groups 2 through 6 as identified in Table 1 were determined by taking a weighted average based on volume.

31. BC Ferries acknowledges the Commissioner's desire, as expressed in Recital F of Order 05-02, to share increased fuel costs among ferry customers and BC Ferries. BC Ferries further acknowledges that the Commissioner implemented this objective in Order 05-02 by increasing the set prices by 5%. The Commissioner explained his rationale as follows at page 7 of the Reasons for Decision:

Even under normal circumstances it could be expected that there would be some "ordinary" variance between the budget price for oil and the actual price paid. If changes in fuel prices are allowed full pass-through to ferry customers, then BC Ferries loses the incentive to use fuels more efficiently. An increase in the price of fuel is the means by which a market economy signals the need for greater efficiency. The intent of price cap regulation has been to allow market price signals to operate as much as possible on regulated firms, while preventing exploitative returns. Thus, a regulatory policy, which would remove any incentive for efficiency on the part of BC Ferries, would seem to be counter to the purpose of price cap regulation.

At the same time, price cap regulation is intended to preserve incentives for efficiencies by allowing BC Ferries to retain all productivity gains during the period between price cap reviews. This would suggest that the price-cap-regulated BC Ferries should not be required to share any productivity gains it has achieved prior to the price cap review.

A way to resolve this seeming paradox is to allow only a partial pass-through of the fuel price increase. This approach would preserve incentives to become more efficient in the use and choice of fuel. It results in the sharing of forecast risk regarding fuel prices by both the ferry customers and BC Ferries.

The issue then arises as to exactly how much of the fuel price increase should be passed though. <u>One approach to this is to</u> recognize that some part of the fuel price increases would be considered to be ordinary (rather than extraordinary) and only the amount of increase in fuel prices above the ordinary/extraordinary threshold should be allowed. This requires the Commission's judgment as to what degree of risk sharing is appropriate. The Commission has to balance incentives for fuel efficiency, with the requirements of the BC Coastal Ferry Act that priority is to be placed on the financial sustainability of ferry operators. [Emphasis added.] 32. The Commissioner's rationale for the division of fuel cost increases between BC Ferries and ferry customers was that the first 5% of the fuel price increase experienced by BC Ferries over the pre-Order 05-02 price represented an "ordinary" variance between the budget price for oil and the actual price paid, i.e. only costs above 5% were extraordinary. Order 05-02 addressed the period to March 31, 2008 by ordering extraordinary price cap increases that allowed fuel surcharges to be put in place during that period. In effect, the Commissioner ordered that over the period to March 31, 2008 BC Ferries should absorb the first 5% of the increase in fuel costs over the pre-Order 05-02 costs and ferry customers should be responsible for the balance of the fuel cost increases above the first 5% absorbed by BC Ferries. The increased costs that prompted this Application are over and above those costs that the Commissioner has already deemed to be extraordinary, i.e. the remaining fuel cost increases in Order 05-02, and ought to be recoverable through increased fuel surcharges. This would have been the result had BC Ferries obtained a single, but larger, extraordinary increase in the price caps (for example, based on a forecast similar to the Purvin & Gertz forecast) in July 2005, as opposed to making two separate applications.

33. Further, it is apparent that the Commissioner considered that ordering a 5% increase in the set price was sufficient to incent BC Ferries to be efficient. BC Ferries remains committed to operational efficiency; nothing has occurred to call the Commissioner's determination into question. Measures taken by BC Ferries (described above) this fiscal year are forecast to reduce consumption to 121.8 million litres as of March 31, 2006.

#### C. Implementation of Order 05-02

34. BC Ferries implemented the initial fuel surcharges on July 25, 2005, the effective date of Order 05-02. The surcharges applied to all traffic, both vehicles and passengers, and the change appeared as a separate line item on the fare ticket. The amount collected since implementation of the fuel surcharges was \$4.8 million to October 31, 2005. This amount is reflected in the aggregate Deferral Account balance of \$18.3 million as of October 31, 2005; the aggregate Deferral Account balance would have been \$23.1 million if the first fuel surcharge had not been implemented.

- 14 -

#### D. Deferral Account Balances since July 25, 2005

35. The June 2005 Application was based on a forecast developed with reference to forecasts of Canadian banks<sup>8</sup> that over the next three years the price of WTI crude would range from US\$55 for 2005 and US\$45 in 2007. Based on these forecasts, the extraordinary price cap increases granted in Order 05-02 were expected to be sufficient to permit BC Ferries to implement fare increases that would move the aggregate Deferral Account balance downward and, for Route Group 1, would reach approximately zero by March 31, 2008.

36. Table 2 below summarizes the set price per litre from July 24, 2005 (column 2), the average delivered price per litre (column 3), the volume consumed (column 4), and the Deferral Account balances as of October 31, 2005 after taking into account hedging gains and losses (column 5).

Table 2						
1	2	3	4	5		
Route Group	Set price (C\$ per litre) from July 24, 2005	Average delivered price per litre for 7 months ended October 31	Volume of fuel consumed (million litres) for 7 months ended October 31	Deferral Account (debit) balance as of October 31, 2005 (\$000)		
Route Group1	.4259	.5916	46.3	9,060.5		
Aggregate of Route Groups 2 through 6	.4362	.6439	28.5	9,248.6		
Total			74.8	18,309.1		

Table 2

<sup>&</sup>lt;sup>8</sup> BC Ferries refers to these banks as a "bankers' syndicate" in this filing. This syndicate was formed for BC Ferries' capital market borrowing and includes the following banks: CIBC World Markets Inc., BMO Nesbitt Burns Inc., RBC Dominion Securities Inc., Scotia Capital Inc. and TD Securities Inc. From the information provided by the banker's syndicate, BC Ferries developed a single price forecast (the "bankers' syndicate forecast") by removing the highest and lowest forecast and averaging the remaining forecasts.

37. As stated above, the banker's syndicate forecast of WTI for fiscal year 2005 averaged US\$55. For fiscal 2005/06, the year to date average for WTI is US\$58.80. In order to return to an average price of US\$55, the price of fuel would have to drop, on average, to US\$48.15 between December 1, 2005 and March 31, 2006.

#### **E.** Current Forecast of Extraordinary Fuel Cost

38. The degree to which the bankers' forecast of world oil prices (used in the June 2005 Application) departed from BC Ferries' actual experience to date prompted BC Ferries to retain an energy consulting firm, Purvin & Gertz to provide additional expertise and to enhance the Company's understanding of the fuel prices it is experiencing. Founded in 1947, Purvin & Gertz is an independent energy industry consulting firm with headquarters in Houston, Texas and an international network of offices in Canada (Calgary), Europe, South America and Asia. Purvin & Gertz has maintained an office in Calgary for over 30 years, which has enabled the company to sustain a high level of expertise and knowledge regarding Canadian oil markets. It has provided advice on the development of the Canadian oil sands. Its client lists include not only the private sector but also regulated and state-owned energy companies as well as government agencies.

39. BC Ferries believes that one of the benefits of obtaining a forecast from a highly regarded independent consultant like Purvin & Gertz is that it will not reflect any tendency in the bankers' syndicate forecast towards conservatism (potentially arising due to the fact that the bankers' forecasts will be used by companies seeking financing, among other things, from those same banks).

40. The Purvin & Gertz forecast, as attached in **Appendix A**, provides a WTI forecast. In addition, Purvin & Gertz has provided BC Ferries with a fuel forecast for Edmonton Par and the Vancouver Rack price. The bankers' syndicate forecast, used in the June 2005 Application, did not provide forecast prices for either Edmonton Par or Vancouver Rack. BC Ferries believes that these forecasts of Edmonton Par and Vancouver Rack prices are more relevant and meaningful than WTI crude forecasts because BC Ferries currently procures 83% of its fuel based on the Edmonton Par price and 17% based on the Vancouver Rack price.

41. Historically, the Edmonton Par price tracks closely to the WTI price. The Vancouver Rack price is more volatile. Table 3 illustrates the price movement between these markets.

Table 3						
	2001	2002	2003	2004		
WTI	25.93	26.16	31.06	41.49		
Edmonton Par	25.50	25.73	31.06	40.80		
Vancouver Rack	34.57	32.12	41.21	55.27		

42. For the information of the Commissioner, and to facilitate a comparison with the forecasts used in support of the June 2005 Application, BC Ferries is providing a revised bankers' syndicate forecast as well of the other forecasts. Table 4 provides an overview of the different forecasts.

	FY2006	FY2007	FY2008			
Bankers' Syndicate Forecast at April 2005	\$55 US	\$50 US	\$45 US			
Bankers' Syndicate Forecast at Sept 2005	\$57.97 US	\$50.26 US	\$50.61 US			
Purvin & Gertz WTI	\$60.58 US	\$64.00 US	\$55.03 US			
Purvin & Gertz Edmonton Par	\$61.05 US	\$63.59 US	\$54.64 US			
Purvin & Gertz Vancouver Rack	\$83.59 US	\$78.29 US	\$67.94 US			

43. Using the Purvin & Gertz forecast, BC Ferries has calculated a fuel price using a weighted average price between the Edmonton Par and Vancouver Rack forecast prices (calculated according to the percentage of fuel purchased from these markets). BC Ferries is

projecting the fuel price will be \$67.70 US barrel for 2006, \$66.18 US barrel for 2007, and \$56.98 US barrel for 2008. The factors that go into the conversion of these prices to the actual delivered fuel price for BC Ferries include: weighted average between fuel procured between Edmonton Par and Vancouver Rack, US exchange rate, delivery fee, discounts, provincial taxes, federal taxes (including fuel tax and GST), tax recoveries, and input tax credits.

44. For further information, Table 6 provides the market price. This is the price at which crude oil is currently trading<sup>9</sup> and includes the spot and future forward prices for WTI as at November 21, 2005.

November 21	Spot Price	6 months	1 year	3 years	5 years
WTI Price	\$57.70 US	\$57.93 US	\$58.69 US	\$59.31 US	\$58.09 US

Table 6

# F. Forecast Impact of Extraordinary Fuel Costs on the Deferral Accounts

45. Based on the current forecast of fuel prices, the aggregate balance in the Deferral Accounts are forecast to increase to \$33.2 million as at March 31, 2008. BC Ferries needs to be able to implement additional fuel surcharges to keep the Deferral Accounts within reasonable levels and bring them close to zero by the end of the First Performance Period. The extraordinary price cap increases proposed in this Application have been calculated so as to permit increased fuel surcharges sufficient, based on current forecasts, to take the aggregate Deferral Account balance to close to zero by March 31, 2008.

<sup>&</sup>lt;sup>9</sup> Source: NYMEX

46. The forecast cumulative Deferral Account balances at the end of each fiscal year, assuming no further increase in the price caps, is set out on Table 7.

Route Groups (\$ millions)	March 31, 2005 (actual)	October 31, 2005 (actual)	March 31, 2006	March 31, 2007	March 31, 2008
Major Routes	\$4.2	\$9.1	12.1	\$16.4	\$15.4
Route Groups 2 - 6	\$3.8	\$9.2	\$10.1	\$15.5	\$17.8
Total	\$8	\$18.3	\$22.2	\$31.9	\$33.2

Table 7 Forecast in C\$

47. The forecast Deferral Account balances over the next three years are a function of forecast delivered fuel prices, forecast consumption, the set prices for fuel (first established by Order 04-02 and adjusted for CPI increases and pursuant to Order 05-02), and the number of vehicles and passengers.

48. The calculations of the future Deferral Account balances appearing in Table 7 above are based on Purvin & Gertz's forecast of Edmonton Par and Vancouver Rack prices over three years.

49. BC Ferries has included in **Appendix B** the calculations performed to convert the Purvin & Gertz forecast prices into delivered prices and the resulting Deferral Account balances.

50. The calculations also assume budgeted fuel consumption at 121.8 million litres annually for Route Groups 1-6 collectively, or 75.7 million litres for Route Group 1 and 46.1 million litres for Route Groups 2 to 6 collectively.

51. The calculations also include CPI inflationary increases of the set price, which for the purposes of the forecasts is assumed to be 2% on April 1 of each year.

52. The deferral amounts are net of annual reductions of \$1.7M for fuel discounts, tax recoveries, and Input Tax Credits. The deferral amounts do not take into account any future changes in pricing (such as delivery charges, margins, excise tax, and B.C. fuel tax), which may increase with a new fuel contract in 2006. It is assumed there are no gains or losses for outstanding hedges.

53. The assumed traffic counts are set out in **Appendix C**. BC Ferries traffic is down in this fiscal year and current forecasts have been revised. For the purposes of this Application, BC Ferries has assumed that passenger traffic is lower than the June 2005 Application by 1.6% and vehicle traffic is lower than the initial application by 0.1%. The traffic forecasts assume that in 2006/07 there will be small growth to accommodate an Easter weekend (2005/06 fiscal year did not have Easter) and, in the following year, there will be no growth or decline.

#### G. The Importance of Further Increasing the Price Caps

54. The April 2005 forecast had assumed an average fuel price of WTI for 2006 at \$55 US bbl. Based on this price forecast BC Ferries forecast the balance in the Deferral Accounts would be \$15.7 million by October 31, 2005 and \$17.3 million by March 31, 2006.

55. The current balance of the Deferral Accounts to October 31, 2005 is \$18.3 million, and without increases in the price caps, is expected to be \$22.2 million by March 31, 2006. BC Ferries believes that it is not a viable option to wait further to address the growing debit balances in the Deferral Accounts. The current forecast balance on March 31, 2008 is smaller than the \$54 million forecast prior to the implementation of fuel surcharges, but it remains very material at \$33.2 million.

56. As explained in the June 2005 Application, an undesirable situation for customers and for BC Ferries will be created if there is delay in further increasing the price caps, and implementing fuel surcharges on fares. Current customers are not covering the full cost of the service unless increased fuel surcharges are implemented as requested in this Application. Customers travelling in the future will have to pay costs that should be recovered today. The

Commissioner, in recital E of Order 05-02, emphasized the desirability of prompt action "in order to avoid major increases in fares for ferry customers in the future and to provide BC Ferries with certainty regarding the disposition of the deferred costs."

57. Dominion Bond Rating Service (DBRS), one of BC Ferries' bond rating agencies, has raised concerns about the sufficiency of the fuel surcharge arising out of Order 05-02. While DBRS continues to grade BC Ferries in the "stable" trend, an increased variance between the price caps and the actual cost of fuel raises the prospect of a negative rating action. In addition, DBRS deducted the Deferral Account balances (\$8 million) from last year's net profits in their analysis of BC Ferries financial position. A larger cumulative Deferral Account balance, which will exist even if fuel prices decline, may put BC Ferries' rating under review. The referenced DBRS report is attached to this filing as **Appendix D**.

58. As indicated in the June 2005 Application, BC Ferries believes that a proactive approach in addressing the extraordinary cost of fuel is consistent with section 38(1)(b) of the Act, which provides that regulation of BC Ferries must be undertaken in accordance with the principle that "ferry operators are to be encouraged to adopt a commercial approach to ferry service delivery." Moreover, recital "G" of the Coastal Ferry Services Contract acknowledges that "For the travelling public, fares…should be predictable…when financially viable."

#### H. Calculation of the Required Extraordinary Price Cap Increases

59. BC Ferries has calculated that the extraordinary price cap increase required for Route Group 1 is 2.5% and that the extraordinary price cap increase required for Route Groups 2 though 6 is 6%. This section of the filing summarizes the principles and assumptions, by which BC Ferries determined the extraordinary price cap increases. The calculation methodology is described in **Appendix E.** 

60. BC Ferries acknowledges that in Order 05-02, the Commissioner determined that the increased fuel costs should be "recovered, if possible between the present date and the end of fiscal 2008." (Recital F) BC Ferries has adopted in this Application an implementation approach based on the period to March 31, 2008. The amount of the extraordinary price cap increases for which BC Ferries is applying, and the amount of the associated fuel surcharges, were determined

on the basis that the extraordinary fuel costs that BC Ferries will incur in the period to March 31, 2008 should be covered by the fuel surcharges, and an additional amount recovered to reduce the balances currently in the Deferral Accounts to close to zero by 2008. All revenues from the fuel surcharges will be recorded in the applicable Deferral Account.

61. BC Ferries still considers that the elimination of the Deferral Account balances by March 31, 2008 is a reasonable objective in the circumstances of high and volatile fuel oil prices. A supporting rationale for this objective is that if fuel prices increase beyond the forecast price levels, the Deferral Accounts should not deteriorate beyond the current levels. Further, since all revenue from the fuel surcharges will be credited to the Deferral Accounts, if fuel prices decrease, the effect will only be to reduce the actual balance of the Deferral Accounts at a faster rate.

62. The explanation for the differing percentage increases between Route Group 1 and the other five Route Groups relates primarily to the Service Fees that the Province provides in respect of the routes other than those in Route Group 1. Under the Coastal Ferry Services Contract BC Ferries receives Service Fees from the Province in respect of the Route Groups other than Route Group 1. Since Route Groups 2 through 6 recover a smaller percentage of their costs from fares, the fuel surcharge must be higher (when calculated as a percentage of the fares paid by customers) to recover the extraordinary increase in fuel costs. The price cap for Route Groups 2 through 6 must be increased accordingly. Other reasons for the difference between the percentage increase in the price cap that is required for the Major Routes and that required for the other routes include:

- (a) the opening balance in the Deferral Accounts;
- (b) the delivered price of fuel which is generally higher for other routes;
- (c) the traffic levels: the Major Routes carry more passengers and vehicles than the other routes; and
- (d) the higher fares on the Major Routes: so that a percentage increase equates to a value that is generally higher than a similar percentage increase on the other routes.

63. As stated earlier, left unattended, the Deferral Accounts will reach \$33.2 million (approximately \$15.4 million for Route Group 1 and approximately \$17.8 million for the other five Route Groups) by March 31, 2008. The increased fuel surcharges that BC Ferries intends to implement upon the extraordinary price cap increases being authorized by the Commissioner will address these balances (based on the Purvin and Gertz, Inc. forecast for the same period to calculate a weighted average fuel price, and based on an assumed February 1, 2006 implementation date of the increased fuel surcharges). All amounts recovered by way of fuel surcharges will be credited to the Deferral Accounts established by Order 04-02.

64. This Application reflects BC Ferries' view that all users of the system should pay a fuel surcharge. The distribution of the fuel surcharge recovery between Route Group 1 and Route Groups 2 through 6 is based on the principle that there should be no cross subsidy between Route Group 1 and Route Groups 2 through 6; that customers on both Route Group 1 and Route Groups 2 through 6 should pay the current fuel oil costs being incurred by BC Ferries; and that customers on Route Group 1 and should contribute to the reduction of the Deferral Account associated with Route Group 1 and Route Groups 2 through 6, collectively. The Commissioner appears to have endorsed this principle in paragraph 3 of Order 05-02, which provided that the fuel surcharge paid by ferry customers shall "be used to reduce the balance of the Deferral Accounts for the respective route groups."

65. BC Ferries will incorporate the increased fuel surcharge into the current fuel surcharge line item on the fare ticket. In Order 05-02 (paragraph 3), the Commissioner endorsed the principle of including the surcharge on a separate line item. Continuing to have only one fuel surcharge line on the ticket will ensure that each customer understands the extent of the total additional fare (fuel surcharge) that is being collected in respect of the extraordinary fuel costs being experienced by BC Ferries.

66. As per paragraph 7 of Order 05-02, when the balance in the Route Group 1 Deferral Account reaches zero, BC Ferries will reduce fuel surcharges on Route Group 1 to the level at which the balance in that Deferral Account is forecast, based on the then prevailing Purvin & Gertz forecast (Edmonton Par and Vancouver Rack prices), to remain at approximately zero.

- 23 -

Similarly, when the aggregate balance in the Deferral Accounts for Route Group 2 through Route Group 6 reaches zero, BC Ferries will reduce fuel surcharges on Route Groups 2 through 6 to the level at which the aggregate balance in those Deferral Accounts is forecast, based on the then prevailing Purvin & Gertz forecasts of oil prices, to remain at approximately zero.

67. **Appendix C** provides details of the ferry traffic assumed in the calculation of the fuel surcharge recovery. The forecast recovery of the debit balances assumes that there is no further price elasticity between the number of persons using ferry services and the price of those ferry services; that is, the implementation of the increased fuel surcharges will have no impact on ridership. To the extent that the assumption of no further price elasticity is incorrect, and customers decide to reduce their use of BC Ferries services because of the fuel increased surcharges, the forecast recovery from fuel surcharges will decrease and debit balances in the Deferral Accounts will remain as of March 31, 2008.

68. The calculations assume a February 1, 2006 implementation of the further fuel surcharges.

#### I. Implementation Strategy Upon Authorization of Extraordinary Price Cap Increases

69. In this section, BC Ferries addresses how it proposes to deal with the potential for increased Service Fees from the Province, and also sets out its intentions respecting the implementation of further fuel surcharges upon the Commissioner authorizing the extraordinary price cap increases sought by BC Ferries.

70. Subsection (5) of section 42 of the Act provides that the Commissioner must promptly, and in any event within one month after receiving the full information required by the Commissioner in relation to an application for an extraordinary price cap increase, issue to the ferry operator and the government the Commissioner's preliminary decision on the application. Subsection (6)(b) provides that the preliminary decision may be amended by the Commissioner.

71. Article 5 of the Coast Ferry Services Contract sets out a process to be followed on an application by BC Ferries for an extraordinary price cap increase and a preliminary decision by the Commissioner, in order to provide the Province with the opportunity to consider increasing its Service Fees. Article 5 provides in part:

- 5.02 If BC Ferries applies to the Commissioner under the Act for an extraordinary price cap increase in relation to a Designated Ferry Route or Route Group and the Commissioner issues a preliminary decision in respect of that application, then, within 10 days after receiving the preliminary decision, the parties will meet to review the preliminary decision and to discuss whether the Province is willing to increase the Service Fees in relation to the Designated Ferry Route or Route Group that is the subject of the preliminary decision for the remainder of the Performance Term.
- 5.03 If the Province agrees to increase the Service Fee in relation to the Designated Ferry Route or Route Group, the parties will promptly, and in no event later than 20 days after receiving the preliminary decision
  - (a) amend the Agreement to incorporate the agreed Service Fee in relation to that Designated Ferry Route or Route Group for the remainder of the Performance Term; and
  - (b) notify the Commissioner of the amendment.
- 5.04 If the Province chooses not to increase the Service Fee in relation to the Designated Ferry Route or Route Group, the parties will promptly, and in no event later than 20 days after receiving the preliminary decision, so inform the Commissioner.

72. Pursuant to Article 5 of the Coastal Ferry Services Contract, upon the Commissioner authorizing extraordinary price cap increases for Route Groups 2 though 6, BC Ferries will meet with the Province to review the preliminary decision and to discuss whether the Province is willing to increase the Service Fees. If the Province agrees to increase the Service Fees in relation to any of Route Groups 2 though 6 the Coastal Ferry Service Contract will be amended and the Commissioner notified. The Commissioner will then have the opportunity to consider whether the preliminary decision should be amended.

# J. Fuel Surcharge Details

73. The further fuel surcharges that BC Ferries intends to implement, in the absence of any increase in the Service Fees that BC Ferries receives from the Province, for most of its fares on each of the routes in Route Groups 1 through 6 are set out in **Appendix F**. The increased fuel surcharges for passenger and underheight passenger vehicles, as set out in **Appendix F**, will be applicable to both full fare payments and to prepaid discount tickets. In addition to the increased fuel surcharges set out in **Appendix F**, increased fuel surcharges will also be implemented with

respect to the other existing fares, such as the fares for motorcycle and bicycle traffic, on an equivalent basis.

#### Conclusion

74. A further extraordinary increase in the price caps is required to address the further extraordinary increase in the cost of fuel that has been, and continues to be, experienced by BC Ferries since the Commissioner issued Order 05-02 on July 24, 2005. BC Ferries regrets that increased fuel surcharges must be imposed, but believes that an increase in the price caps and the implementation of increased fuel surcharges is necessary to address the higher fuel prices experienced and forecast, and the unanticipated growth of the debit balances in the Deferral Accounts. BC Ferries believes that extraordinary increases in the price caps consistent with this Application will result in the aggregate Deferral Account balance reaching close to zero by March 21, 2008, the end of the First Performance Term.

# APPENDIX A PURVIN & GERTZ, INC. FORECAST

# NORTH AMERICAN CRUDE OIL AND DISTILLATE PRICE OUTLOOK

**Prepared For** 

# British Columbia Ferry Systems, Inc.

Prepared By



Buenos Aires - Calgary - Houston London - Los Angeles Moscow - Singapore

November 21, 2005 C-2553 S.N. Fekete

ABOUT THIS REPORT

The British Columbia Ferry Services Incorporated ("BC Ferries") retained Purvin & Gertz, Inc. ("PGI") to provide a crude oil and distillate product price forecast as part of a filing with provincial regulators regarding proposed fares. This report outlines the basic assumptions and criteria used in developing a West Texas Intermediate crude oil (Cushing) and No. 2 diesel fuel forecast (U.S. Gulf Coast, New York, Vancouver). The crude oil and product price forecasts are shown in Table 1 of this report.

PGI prepared this report for the sole benefit of BC Ferries. Any third parties receiving this report accepts the Terms and Conditions under which PGI's report was commissioned, as they include a limitation of liabilities and on third-party distribution of the documents. **PGI denies liability for consequences of use of the analysis by any party that has not accepted this limitation of liability.** Any other party in possession of the report may not rely upon its conclusions without the written consent of PGI. Possession of the report does not carry with it the right of publication.

This report includes forward-looking statements reflecting assumptions, expectations, projections, intentions or beliefs about future events. These statements are identifiable since they do not relate strictly to historical or current facts. They use words such as "anticipate," "estimate," "future", "projections," "forecast," "may," "will," "should," "expect" and other words of similar meaning. In particular these include, but are not limited to, statements relating to projected or forecast pricing.

Any or all of the forward-looking statements may turn out to be inaccurate. They can be affected by inaccurate assumptions or by known or unknown risks and uncertainties, such as unforeseen changes in commodity prices, competition and the regulatory environment. Many of these factors will be important in determining actual future results. Consequently, no forward-looking statement can be guaranteed. Actual future results may vary materially from those expressed or implied in any forward-looking statements.

PGI prepared this report utilizing reasonable care and skill in applying methods of analysis consistent with normal industry practice. All results are based on information available at the time of review. Changes in factors upon which the review is based could affect the results. Forecasts are inherently uncertain because of events or combinations of events, which cannot reasonably be foreseen including the actions of government, individuals, third parties and competitors. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY.

Some of the information on which this report is based has been provided by others. PGI has utilized such information without verification unless specifically noted otherwise. PGI accepts no liability for errors or inaccuracies information provided by others.

#### WORLD PETROLEUM SUPPLY / DEMAND OUTLOOK

The price of oil and the world economy are both independent and interdependent. In the short term, oil prices can react sharply to events such as political disruptions and supply interruptions. In the long term however, economic growth is perhaps the most important factor affecting oil prices. Over the past 150 years, the petroleum industry has repeatedly shown that supply can expand to meet growth in demand. We expect strong growth in non-OPEC production to help ease the current tight market over the next several years. However, in the longer-term, declining spare OPEC (Organization of Petroleum Exporting Countries) capacity and rising finding and development costs will push prices higher.

#### WORLD ECONOMIC OUTLOOK

The world economy has been rocked by a series of shocks over the past several years the sharp declines in global equity markets; the terrorist attacks of September 11, 2001; the political crisis in Venezuela; the war in Iraq; the SARS outbreak in Asia; ongoing terrorist actions throughout the world, and acts of nature such as hurricanes. These disruptive events have helped to contribute to a period of sustained high crude oil prices. Although the cumulative impact of these shocks has likely impaired economic growth, growth has remained robust, so much that the very strong economic and demand growth experienced in 2004-2005 has been a major contributor to the current strength of crude prices. Global growth seems to be remaining on track, although sustained high energy prices have the potential to impair economic performance. However, if energy prices decline as projected, economic growth will benefit. We see most regions participating in strong world growth. The dramatic swing from negative to positive growth for some of these regions has had a beneficial impact. In the near-term, growth in the 3.0% to 3.5% range is projected for the world. Longer term, we expect growth to average about 3% per year.

#### WORLD PETROLEUM DEMAND

After recovering from the weak growth in the early 1990s, world petroleum demand grew strongly in the mid-1990s until the effects of the Asian financial crisis hit in 1998. Demand recovered in 1999, but high prices and the global economic slowdown pushed growth to very low levels in 2000 and 2002. Growth in 2003 averaged about 2.0%. Boosted by the global economic recovery, particularly in Asia, growth reached 3.5% in 2004. However, the high prices experienced in 2004-2005 have already begun to affect petroleum demand patterns. Longer term, we anticipate demand growth of around 1.5-2.0% per year, declining towards 2020. Increased consumption of natural gas will significantly reduce growth in world petroleum demand, along with the continuing shift of the economy towards less energy-intensive sectors and higher efficiency.

#### WORLD PETROLEUM SUPPLY

From the early 1980s through the 1990s, the challenge of OPEC and all producers was managing the large overhang of excess capacity. This excess capacity developed because of



the decline in demand following the large price increases in the 1970s and increased supplies that developed in anticipation of continued high prices. This surplus capacity has now fallen to low levels, and supply and demand are near balance. By 2015, total petroleum supply will need to increase by over 15 million B/D even at the rather modest demand growth rates forecast. The petroleum industry must face the ongoing challenge of finding, developing, and financing increases in supply while at the same time fighting the natural decline of mature producing oil provinces.

OPEC's contribution to world oil supply is expected to move through two significant transitions over the next 15 years. As a surge of non-OPEC output enters the market over the next few years, OPEC production will have to accommodate it. Later in the decade, however, demand growth will begin to outpace non-OPEC supply. OPEC's production and market share will begin to increase. As non-OPEC production grows in this decade, OPEC production is projected to remain near current levels for the next several years, but increase by about 2 million B/D by 2010 and by 6 million B/D by 2015.

#### **CRUDE OIL PRICE FORECAST**

The long-term level of crude oil prices will be based on the cost of finding, developing and producing required new sources of production. If prices are too high, supplies will increase because economics favour developing new reserves or producing existing reserves at higher rates. At the same time, demand is decreased by the use of alternative fuels such as coal, natural gas, or nuclear energy, and by conservation efforts. The resulting imbalance of supply versus demand forces prices back down. In the same manner, if prices are too low, demand is stimulated, alternative energy supply development is constrained, new reserve additions become less economical, and natural decline rates quickly reduce production capacity. Ultimately, low prices cause demand to approach capacity limits on production, and the resulting competition for supply drives prices back up.

The behavior pattern above suggests that capital investment cycles will lead to price cycles. When capital investments outside OPEC (and to a lesser extent inside OPEC) led to increases in production sufficient to challenge OPEC's minimum acceptable production levels, prices declined and capital invested outside OPEC slowed. While we do not project that non-OPEC growth will result in a collapse in world oil prices, a period of sustained weak prices could impair the outlook for future non-OPEC production.

The price of Brent (light, sweet) crude oil, FOB Sullom Voe is used by Purvin & Gertz as the starting point for forecasting the prices of major world crude oils. Brent serves North American as well as European markets and competes directly with the Middle Eastern and African crude oils that serve all major markets. The analysis of the cost of finding, developing and producing new reserves shows that a price of Brent above the mid \$20 per barrel range is needed to support the development of new reserves in some parts of the world, and even higher in other parts of the world. Most new non-OPEC reserves will be in hostile environments such as deepwater or Arctic areas, or will have high operating costs such as synthetic crudes. Technological improvements have been sufficient to contain costs, but recent trends indicate rising finding and development costs. Due to the inherent unpredictability of new discoveries



and demand shocks, we have not attempted to forecast the timing of cycles, except the movement of the current cycle towards levels consistent with the long-term cost trend.

World crude prices have been on a strong upward track since mid-2003, moving above \$40 per barrel in May-June 2004. Following a brief respite, prices pushed up to over \$50 and remained exceptionally high into November 2004. Many factors contributed to this strength, including attacks on Iraqi oil infrastructure, other terrorist attacks, tight U.S. gasoline markets, and strong Chinese petroleum demand. Supply disruptions caused by several Gulf of Mexico hurricanes tightened supplies of light, sweet crudes, and contributed to the market peak.

Prices fell sharply into December 2004, but the softening trend soon reversed. NYMEX (New York Mercantile Exchange price of West Texas Intermediate crude oil) prices moved up to a peak of around \$58 per barrel in late March and after a period of extreme volatility, prices began a sharp upward move in late May exceeding \$65 per barrel in August 2005. During this time, inventories have been building steadily and supplies appear ample. However, concerns remain regarding non-OPEC performance, demand strength in 2005, and OPEC spare capacity. Our short-term outlook reflects the current tight balance and the possibility of further disruption, with the NYMEX crude price remaining over \$63 per barrel through 2006.

Longer term, we project that prices will decline markedly in 2007 and onward. Travel statistics, vehicle purchasing patterns, and slowing Chinese demand growth are indicating that demand responds to price signals. As demand growth weakens and non-OPEC production grows, prices are then expected to move toward the long-term forecast levels. However, world prices will remain vulnerable to price shocks resulting from terrorist activities, as the political situation in Iraq and the Middle East will remain highly volatile. Regardless, the tight supply balance means that markets will remain vulnerable to actual and threatened disruptions, and the strong speculative influences will magnify market responses.

### WEST TEXAS INTERMEDIATE

West Texas Intermediate ("WTI") spot Cushing is used as a measure of U.S. inland prices. It is the most widely traded crude oil in the world and thus has particular importance. The physical volume of WTI production is relatively small and declining. However, the use of WTI, Cushing as the physical basis of the NYMEX light sweet crude contract has resulted in traded volumes of many times WTI's physical volumes. WTI thus has an importance to world oil markets, which far outweighs its importance as a feedstock for refiners in West Texas and the U.S. Midwest. Regardless, the link between the physical and futures markets requires that the markets converge as each month's contract approaches expiration. This physical tie means that the supply/demand balance in the U.S. Midcontinent region ultimately determines the value of WTI relative to the Gulf Coast and other markets. The pricing of WTI is quite complex as it depends on the direction of marginal crude flows within the inland region, and thus reflects the declining volume of WTI, changes in pipeline capacities, flows from the Gulf Coast and from Western Canada, and many other factors. The forecast WTI premium relative to Gulf Coast crude oils grows as crude supply in the inland region tightens and increased shipments of Gulf Coast-sourced crudes are required to balance inland markets. Relative to Brent and other non-U.S. crudes, WTI prices have been boosted by high tanker rates which impact the netback price of foreign crude oils delivered to North America, but which are projected to decline.



Supplies of all types of Canadian crude oil exceed domestic requirements and the surplus is primarily shipped to the U.S. Midwest market. Canadian crude oils compete against U.S. and foreign crude oils delivered from the U.S. Gulf Coast via multiple pipeline routes. Edmonton Par is often used a proxy for pricing Canadian crude oils from the Edmonton market. Par crude oil is assumed to have a similar quality to WTI (40° API, 0.3 wt% sulphur) and is only used as a proxy crude for pricing purposes as it is not produced in practice. A forecast of Edmonton Par crude oil was developed based on our forecast for Canadian Mixed Sweet crude oil (MSW) and adjusted for quality difference and location (transportation costs) assuming the clearing market is Chicago. Historically, Edmonton Par has a premium to Canadian MSW and is discounted to WTI, Cushing. Through the first three quarters of 2005, there was a shortage of synthetic crude oil from Canada due to a major fire in January 2005 at the Suncor upgrader, which halved production for most of the year, as well as operating problems during the 1<sup>st</sup> quarter at Syncrude and AOSP. As a result, there was greater demand for Canadian MSW resulting in abnormally high premiums for Canadian MSW versus WTI, which subsequently resulted in Edmonton Par being priced at a premium to WTI. With synthetic crude production returning to normal in the 4<sup>th</sup> quarter 2005 as well as various expansion activity, we forecast Canadian MSW to have lower premiums to WTI in 2006, as well as a return to more historic Edmonton Par price differentials to WTI. Our forecast for WTI and Edmonton Par crude oils is shown in Table 1.

# DIESEL FUEL OUTLOOK

### NORTH AMERICAN DISTILLATE DEMAND

Distillate fuel oil markets have been influenced by the rapid growth in on-road diesel fuel demand and modest growth in off-road No. 2 fuel oil demand. On-road diesel fuel demand has grown at about 3% annually over the past five years, driven primarily from consumption in commercial vehicles rather than the personal automotive fleet, which remains very small in the U.S. Future growth in on-road diesel fuel demand of about 3% annually is expected in this decade with moderate slowing after 2010. Continued economic growth will increase the need for trucking. Diesel penetration of the personal automobile fleet is expected to be small, primarily due to personal preferences, the structure of U.S. vehicle emission regulations and lack of regulatory or taxation support as in Europe.

Distillate fuel oil demand outside the transportation sector is expected to be flat with continued declines in the residential, commercial and industrial sectors. Bunker use of distillates is expected to continue to grow, offsetting declines in other off-road sectors.

# **REFINERY UTILIZATION**

A petroleum refinery is required to convert crude oil to refined products such as gasoline and diesel fuel. Refinery utilization rates have improved over the last decade both because of growing demand, especially in Asia, and, to a lesser degree, because of rationalization of capacity. In the U.S., refineries are operating near their maximum capacity level. Based on analyzing market behavior in strong margin cycles, we estimate the maximum rate in the U.S. is about 95% of nameplate capacity. Over time, the maximum level has increased with better technology and a more complete integration of the supply system.

Due to the current high level of refinery utilization worldwide, very little supply flexibility is currently available. Disruptions in the availability of higher quality crude oils, unplanned refinery outages, and other such events have resulted in rapid increases in product prices and refining margins in recent months. However, the current environment of high product demand growth and high refining margins has resulted in a high level of interest in the development of new capacity, as well as a number of new project announcements. The global balance between product demand and refining capacity thus provides a guide to the future path of refinery margins.

# **PRICE OUTLOOK**

Regional product prices are developed from a forecast of refining margins in each region as a function of refinery complexity. The key variables in this analysis are the refinery margin and the regional light/heavy differential. The light/heavy differential is defined as the difference in price between light petroleum products (gasoline, distillates) and heavy petroleum products (Residual fuels oils). Refinery economics establish various grade differentials among products once the light/heavy spread has been determined.

Refined product prices are a function of feedstock costs and the projected level of refinery profitability. Refinery profitability is related to operating rates and supply/demand factors. The prices of individual light products are a function of supply/demand factors and refining economics. The relationship between light and heavy products is related to global trends in conversion utilization as well as local factors.

The supply/demand factors that determine refinery margins and product prices involve trends, cycles and random events. Some examples are:

Trends	Cycles	Random Events
Product Quality	Major Capacity Additions	Weather
Crude Oil Quality	Heavy Crude Projects	Refinery Outages
Trade Patterns	Other Capital Projects	Supply Disruptions

In our long-term forecasts, we do not attempt to forecast cycles except to return from the current point in the cycle to the average of the cycle. Trends are the most important element of the forecast because they show the direction of supply/demand pressures. The cyclic elements typically involve the industry under- or over-reacting to the trends. For example, refiners often will not add conversion capacity until margins reach levels sufficient to justify the investment. Because of the time lag for investments, the light/heavy spread will typically overshoot its equilibrium level. The unusually high returns generate even more investments ultimately leading to an over reaction in the opposite direction.

Since 1980, major cycles have occurred in the light/heavy spread about every ten years and minor cycles about every 5 years. Cycle frequency is dependent on the rate of growth of

product demand and the lag time for construction. Higher growth rates tend to result in greater volatility in the light/heavy spread through the cycle. In periods of high growth rates, a widening of the light/heavy spread tends to occur as conversion capacity is fully utilized. This creates incentive for large investment projects, which once complete, can lead to a compression of the light/heavy spread. As high growth continues, the cycle repeats. Conversely, periods of very low growth rates typically result in greater light/heavy price spread stability, as demand requirements are met by more gradual, on-going investment. For example, growth in product demand is forecast to be less than two percent per year worldwide and much lower in more developed markets. Except for several rapidly growing developing countries, this rate of growth can be met without long lead-time major capital projects. Instead, debottlenecking, incremental expansions along with major investments for conversion capacity and clean fuel projects, and technological improvements provide sufficient capacity creep. As a result, the industry can adapt quickly to the trends as well as to random events.

#### DISTILLATE PRICE FORECAST

Distillate price forecasts through 2008 for a U.S. Gulf Coast (Houston), New York Harbour, and Vancouver are presented in Table 1. New York product pricing is closely linked to the U.S. Gulf Coast with local production and import supplies being price takers in the New York market. Distillate movements into the New York Harbour area are fairly regular, but we expect distillate prices to be close to full transportation parity from the Gulf Coast. Given high refinery utilization and global demand, the differential between diesel fuel oil and crude oil has been very wide in 2005, but is expected to temper somewhat moving forward in the forecast period.

Most of the supply of diesel fuel in Vancouver is sourced from the local Chevron refinery as well as from Edmonton via the Trans-Mountain pipeline system. Incremental supplies are generally based on a Los Angeles price plus transportation (import parity), but which has a high degree of volatility month-to-month dependent on market conditions. A price forecast for Vancouver No. 2 diesel fuel is provided in Table 1. Vancouver diesel prices are expressed on a rack basis, given historical data available, compared to the New York and U.S. Gulf Coast prices, which are expressed on a spot basis. Spot prices are generally defined as the price realized by a refiner for a particular product at the refinery gate for shipment by pipeline. Rack prices are considered the next step in the supply chain with prices generally US\$0.42 to US\$0.84 per barrel higher than the spot price for a given commodity. The rack price is considered the wholesale price of a petroleum commodity. Only historic rack prices are available for Vancouver diesel fuel whereas the U.S. Gulf Coast and New York spot markets are widely quoted and are the basis for our petroleum products forecast.

		2005				2006		FORECAST		2002		
	<u>1st Qtr</u>	2nd Qtr	<u>3rd Qtr</u>	4th Qtr	1st Qtr	2nd Qtr	<u>3rd Qtr</u>	4th Qtr	1st Qtr	2nd Qtr	<u>3rd Qtr</u>	4th Qtr
WTI, Cushing	49.92	53.09	63.18	61.27	64.76	65.25	64.57	64.09	62.10	59.50	56.86	54.68
Par, Edmonton	50.58	53.39	64.04	62.34	64.42	64.80	64.11	63.70	61.76	59.20	56.45	54.37
No. 2 Distillate, USGC (Spot)	57.38	62.71	76.64	77.47	74.01	71.77	70.84	71.39	69.08	64.83	62.17	60.91
No. 2 Distillate, New York Harbour (Spot)	59.03	63.38	75.32	74.94	75.57	72.83	71.79	72.53	70.67	65.90	63.13	62.07
No. 2 Distillate, Vancouver (Rack)	71.76	72.36	86.30	93.81	81.89	79.16	78.12	78.85	77.04	72.27	69.48	68.39
Exchange Rate (US\$ per CDN \$)	0.815	0.804	0.833	0.850	0.848	0.846	0.843	0.841	0.837	0.832	0.827	0.822
							FORECAST	AST				
	2000	2001	2002	2003	2004	2005	2006	2007	2008			
WTI, Cushing	30.37	25.93	26.16	31.06	41.49	56.86	64.67	58.28	49.06			
Par, Edmonton	29.96	25.50	25.73	31.06	40.80	57.64	64.25	57.92	48.54			
No. 2 Distillate, USGC (Spot)	33.95	28.92	27.64	33.78	45.44	68.51	71.99	64.23	54.11			
No. 2 Distillate, New York Harbour (Spot)	35.72	29.53	28.35	35.22	46.58	68.14	73.16	65.42	55.32			
No. 2 Distillate, Vancouver (Rack)	39.05	34.57	32.12	41.21	55.27	80.97	79.51	71.79	61.63			
Exchange Rate (US\$ per CDN \$)	0.674	0.646	0.637	0.716	0.770	0.826	0.845	0.829	0.810			

TABLE 1 CRUDE OIL AND PRODUCT FORECAST US DOLLARS PER BARREL

# APPENDIX B BC FERRIES' CALCULATION OF PURVIN & GERTZ, INC. FORECAST TO ACHIEVE DEFERRAL BALANCES

#### Market Price Forecast:

#### Year 1 - 2005/06 (Q3 & Q4 only)

- Remainder of the year (ROY) forecast price calculated by weighting Q3 and Q4 Market prices by quarter over BCF ROY fuel consumption.

Forecast Price - weighted:

Edmonton Par	US \$63.36/bbl
Vancouver Rack	US \$88.03/bbl

 Historical physical procurement by supplier: Chevron - 82.4% (priced off of Edmonton Par) Others - 17.6% (priced off of Vancouver Rack)

= (\$63.36\*0.824) + (\$88.03\*0.176)

= US \$67.70/bbl

#### Year 2 - 2006/07

- = (\$63.59\*0.824)+(\$78.29\*0.176)
- = US \$66.18/bbl

#### Year 3 - 2007/08

- $= (\$54.64 \times 0.824) + (\$67.94 \times 0.176)$
- = US \$56.98/bbl

#### BCF Price Forecast:

- Weighted Market Price multiplied by USD/CAD Exchange = C\$ per bbl
- C\$ per bbl divided 159 (litre equivalent per bbl) = C\$ per litre
- C\$ per litre plus Margins plus (Bridging + Provincial Tax + Federal Tax) = BCF C\$ per litre price (2005/06 weighted average per litre = \$0.1228/litre)
- BCF C\$ per litre multiplied by GST (7%) = Gross BCF C\$ per litre price
- Gross BCF C\$ per litre less (supplier discounts, tax recoveries, and ITC's) = Net BCF C\$ per litre price (2004/05 actual \$1.7 million)

#### Year 1 - 2005/06

- = \$67.70\*(1/0.8492)/159
- = \$0.5014 + \$0.1228
- = \$0.6242 \* 7%
- = \$0.6679 \$0.0140
- = \$0.6539/litre

#### Year 2 - 2006/07

= \$0.6466/litre

#### Year 3 - 2007/08

= \$0.5838/litre

### **Route Group Pricing:**

- Annual BCF price calculated for each route group by applying the 2004/05 route group price per litre as a percentage of the Corporate fuel price to the Corporate forecast price;

- Route group benchmark set price increased by 2.0% for 2007 and 2008;

#### Deferral:

- Route group price less route group benchmark set price = deferral total;

#### Interest Expense:

- Interest compounded monthly at a rate of 6% on deferral balance (i.e monthly deferral transfer less fuel surcharge)

#### Year 2 - 2006/07

Route Group 1 - Majors

Consumption Gross Deferral	75.7 million litres <b>\$14.5 million</b>
Route Group Forecast Price	\$0.6265/litre
Benchmark Set Price	\$0.4344/litre

# APPENDIX C TRAFFIC FORECAST

Passengers	05/06 Budget	05/06 Forecast	06/07 Forecast	Compared to 05/06	07/08 Forecast	Compared to 06/07
(000's)	Passengers	Passengers	Passengers	Forecast	Passengers	Forecast
1	6,404	6,048	6,064	0.3%	6,064	0.0%
2	3,635	3,575	3,584	0.3%	3,584	0.0%
30	1,363	1,360	1,363	0.2%	1,363	0.0%
Majors	11,402	10,983	11,012	0.3%	11,012	0.0%
3	2,720	2,658	2,665	0.3%	2,665	0.0%
Minors	7,943	7,755	7,800	0.6%	7,800	0.0%
Route 12	150	160	162	1.1%	162	0.0%
Northern	118	119	119	0.1%	119	0.0%
System	22,333	21,676	21,758	0.4%	21,758	0.0%

Vehicles	05/06 Budget	05/06 Forecast	06/07 Forecast	Compared to U5/U6	07/08 Forecast	Compared
(000's)	Vehicles	Vehicles	Vehicles	Forecast	Vehicles	Forecast
1	1,954	1,905	1,910	0.2%	1,910	0.0%
2	1,321	1,310	1,313	0.2%	1,313	0.0%
30	569	570	571	0.2%	571	0.0%
Majors	3,844	3,786	3,794	0.2%	3,794	0.0%
3	1,144	1,134	1,136	0.1%	1,136	0.0%
Minors	3,580	3,518	3,531	0.4%	3,531	0.0%
Route 12	0.08	0.08	0.08	3.6%	0.08	0.0%
Northern	37	38	38	0.1%	38	0.0%
System	8,680	8,550	8.576	0.3%	8,576	0.0%

# APPENDIX D DBRS REPORT

# British Columbia Ferry Services Inc.

RatingTrendA (low)Stable(All figures in Canadian do	Confirme	ed	Debt Rated Senior Secured I	Bonds	June 1, 2004 FA/Paul Judson 77 x2252/x2261 emin@dbrs.com
<b>RATING HISTORY</b> Senior Secured Bonds	<u>Current</u> A (low)	<u>2004</u> A (low)	<u>2003</u> NR	<u>2002</u> NR	

#### **RATING UPDATE**

Dominion Bond Rating Service ("DBRS") has today confirmed the long-term rating of British Columbia Ferry Services Inc. ("BC Ferries" or the "Company") at A (low), with a Stable trend. Despite soaring fuel prices, operating results remain solid as the Company continues to show considerable spending restraint while benefiting from sound revenue growth. While debt is slated to rise steadily in the years ahead due to capital investments, and fuel prices continue to dampen profitability, DBRS takes comfort in the prudent approach used by the Company in managing operating and capital expenditures, as well as legislated fare increases, the sound economic outlook of British Columbia (the "Province") and the essential nature of the services provided.

BC Ferries posted another strong performance in 2004-2005, closing the year with a surplus of \$31.8 million (DBRSadjusted), up from \$28 million the year before. Traffic growth in excess of 3%, along with legislated fare increases implemented in November and expanded retail spaces, helped boost revenue by 5.8%, while fuel prices and property taxes were the key factors behind the 5.3% increase in expenditures. Fuelled by capital investments, total debt increased by \$70 million to \$500 million in 2004-2005, but remained notably below projections, owing to modest delays in various projects and favourable payment terms under a contract

**RATING CONSIDERATIONS** 

Strengths:

- Substantial barriers to entry •
- Essential service
- Right to re-sell vessels to the Province in specific circumstances
- Independent regulator reduces potential for political interference and protects ferry operators' financial integrity
- Competitive fares

# FINANCIAL INFORMATION

recently concluded for the construction of three Super C-class vessels. This, combined with low interest rates and sound earnings, helped keep the interest coverage ratio in excess of four times.

Oil prices remain the primary source of downside risk in the near term. Fuel costs grew by nearly 15% in 2004-2005 and could jump by more than 25% this year, as oil prices remain high and hedges were only recently put in place at fairly high prices. In July, the British Columbia Ferries Commissioner (the "Commissioner") authorized the implementation of a fuel surcharge of 4% on major routes and 6% on other routes. However, the incremental revenue is not expected to fully cover the added costs, which should lead to a notable earning decline in 2005-2006. BC Ferries has some flexibility to absorb a temporary surge in costs. In addition, the outlook for traffic remains sound, while a seven-year labour agreement recently concluded will ensure affordable increases for BC Ferries' main expenditure item. As a result, the erosion in operating results and interest coverage should be manageable in 2005-2006, helped by moderate new borrowing anticipated for the year. Nevertheless, a continuation of the high oil prices through next year would likely require another fuel surcharge to preserve the Company's operating and credit profiles.

#### Challenges:

- Limited operating flexibility due to fare regulation, minimum service requirements, and high fixed costs
- Exposure to fuel price volatility
- Heavy capital requirements going forward
- Heavy labour unionization adds rigidity to cost structure
- Low traffic growth outlook

FINANCIAL INFORMATION					
	For the year ende	d March 31			
	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001
DBRS-adjusted recurring surplus (\$ thousands) (1)	31,814	27,985	24,385	17,378	10,714
Operating cash flow before work. cap. (\$ thousands)	80,728	78,567	89,340	65,345	64,091
Long-term debt (\$ thousands) (2)	500,402	430,116	2,665	18,630	21,304
Debt service coverage (times) (3)	4.3	4.4	51.4	37.4	40.2
Net capital expenditures (\$ thousands)	122,153	41,653	58,114	54,805	55,418
Passengers carried (thousands)	22,027	21,367	21,624	21,246	21,369
Vehicles carried (thousand AEQ*)	9,665	9,350	9,403	9,150	9,049
* Automobile equivalents. (1) Excludes one-time item and fuel c (2) Includes capital lease obligations (if any). (3) EBITDA as cal	5	1 5			

#### THE COMPANY

The British Columbia Ferry Corporation was established as a Crown corporation on June 30, 1976. On April 2, 2003, the corporation was converted into an independent, regulated company and renamed British Columbia Ferry Services Inc. Through a network of 25 routes, the Company serves Vancouver Island, the Gulf Islands, the Queen Charlotte Islands, and the mainland using a fleet of 35 vessels. It also administers ferry service delivery on nine other routes serviced by independent contractors.

#### Infrastructure Finance

# **DOMINION BOND RATING SERVICE**



August 24, 2005

August 23, 2005

Report Date: Press Released: Previous Report:



#### **RATING CONSIDERATIONS**

<u>Strengths</u>: (1) While no legislation protects BC Ferries against competition, the capital-intensive nature of ferry services and the exclusive use of ferry terminals and access roads granted to the Company under the 60-year lease agreements constitute significant barriers to entry. Currently, two operators compete with BC Ferries for cargo traffic between Vancouver Island and greater Vancouver. One operator also provides high-speed passenger-only services between Vancouver and Nanaimo. However, this is a small operation and the development of new material competition seems unlikely going forward.

(2) The ferry system is integral to the development and growth of the Province's economy. For several coastal communities, it is the most cost-effective way of getting goods and people to their destinations, making it an essential service from an economic as well as a cultural perspective. The essentiality of BC Ferries' services is also enshrined in legislation under the Coastal Ferry Act (the "Act"), which ensures continued support from the Province. (3) Under the Coastal Ferry Services Contract, BC Ferries can require the Province to purchase at net book value surplus vessels resulting from the authorized discontinuance of a route that is no longer financially sustainable. The Province must also reimburse to BC Ferries the remaining net book value of a terminal property if all routes to/from this terminal are discontinued and such discontinuation is not the result of any default of BC Ferries' obligations. Such a structure places BC Ferries in a strong bargaining position when negotiating with the Province, and limits investors' financial exposure.

(4) The presence of an independent regulator that oversees all key matters related to ferry services greatly limits the possibility of political interference, which has historically plagued the performance of the ferry operator. The Commissioner oversees the application of the Act, ensuring that the price caps and minimum service requirements are met and do not undermine the financial sustainability of BC Ferries. Given the high-profile and essential nature of ferry services, however, BC Ferries will never be completely sheltered from detrimental government interventions.

(5) Tariffs are relatively low compared with those of other North American ferry operators, suggesting there remains room for upward fee adjustments. However, any notable fare increase could adversely affect traffic and revenue growth, while attracting public criticism.

<u>Challenges</u>: (1) Minimum service requirements and constraints on fare increases limit BC Ferries' ability to react to unforeseen events. BC Ferries may apply for extraordinary fare increases and service reductions in specific circumstances, but the outcome of such a process remains subject to the discretion of the Commissioner. The fare review framework was tested for the first time in June 2005, when the Company applied for a surcharge to offset

rising fuel prices (on top of the legislated annual fare increases). The Commissioner awarded surcharges of 4% on major routes and 6% on other routes, compared to the surcharges of 8% and 13% initially requested, assuming that BC Ferries will recover the balance over time. According to the Act, tariffs should enable operators to recover their costs and receive a commercial pre-tax return on equity.

(2) Fuel consumption accounts for a considerable portion of operating costs, exposing operating results to significant volatility. Fuel costs were up nearly 15% in 2004-2005, and are expected to rise by another 26% to more than \$72 million this year, which will likely weaken earnings before deferrals. As a regulated entity, the Company is allowed to defer the recognition of the difference between the forecasted and actual fuel costs for future recovery. However, such practice does not eliminate the volatility inherent to fuel prices, and exposes the Company to the accumulation of sizeable deferred amounts. Although BC Ferries currently has hedges in place for only 32% of fuel requirements for the next five to six months, it intends to systematically increase hedging to 70% of fuel requirements.

(3) BC Ferries plans to invest approximately \$1.9 billion over the next ten years to replace aging vessels and upgrade terminal structures. The average age of the fleet is 32 years, with more than half of the vessels in the last quarter of their economic lives. Also, 80% of all terminal marine structures are beyond the midway of their economic lives, including 31% beyond their economic lives. The current capital plan will address much of BC Ferries' capital needs, but will also increase operating risk while adding a considerable amount of new debt.

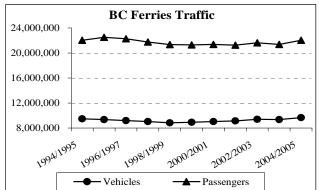
(4) 94% of BC Ferries' labour force is unionized, which introduces some inflexibility in the cost structure and results in above-market wages in various sectors of the Company. As a result, plans to improve efficiency through initiatives such as more flexible work rules, outsourcing, or staff reduction are likely to meet considerable resistance. However, a new agreement was recently concluded with the main employee group that secures affordable salary increases (average of 2% or less per year) and provides considerable cost certainty for the Company until 2011. While labour cost increases other than those caused by regulatory changes would not justify extraordinary price cap increases, they are taken into consideration when rate caps are reviewed every four years.

(5) Despite sound population growth in the Province, vehicle and passenger traffic has remained virtually unchanged over the past ten years. While growth in passenger and vehicle traffic was solid in 2004-2005, at 3.1% and 3.4%, respectively, it is expected to average a much more modest 1.1% per year over the longer term. As a result, ridership growth should provide only modest support to revenue going forward.

#### **ISSUE DETAILS**

- Series 04-1: \$250 million, 5.74% Senior Secured Bonds due May 27, 2014 (ten-year non-amortizing).
- Series 04-4: \$250 million, 6.25% Senior Secured Bonds due October 13, 2034 (thirty-year non-amortizing).
- **Ranking**: Pari passu with all present and future indebtedness secured pursuant to the indenture.
- **Redemption**: Allowed at any time prior to the maturity date at the option of the Company, upon not less than 30 days and not more than 60 days notice, at the greater of par and the Canada Yield Price (as defined in the indenture), plus accrued interest.
- Security: (1) First mortgage and charge on all vessels owned by BC Ferries and its Designated Subsidiaries; (2) First mortgage and charge on the leasehold or ownership interests in all terminals; (3) Security interest over all present and future personal property of BC Ferries and its Designated Subsidiaries, including all assets held in the Debt Service Reserve Fund and all material contracts; (4) Floating charge on all present and future right and title to all real property interests and described personal property not above; and (5) Guarantees from Designated Subsidiaries.
- **Key Covenants**: Restrictions on the giving of security in respect of indebtedness, the disposition of assets or leasehold interest in the Major Ferry Terminal Properties, the participation in sale/leaseback and lease/leaseback transactions, the termination or amendment of any

#### **OPERATING PERFORMANCE**



#### 2004-2005 Results

- Despite soaring oil prices, BC Ferries managed to strengthen its operating position in the 2004-2005 fiscal year with recurring earnings of \$31.8 million (DBRS-adjusted), up nearly 14% from the prior year.
  - Reported earnings were even higher, at \$39.8 million, reflecting the deferral of \$8 million in fuel costs.
  - While the deferral is in accordance with accounting practices for regulated entities and is expected to be recovered through future fare adjustments, it is excluded by DBRS in order to capture underlying trends in operating results.
- Operating cash flow generation was a solid \$80.7 million, compared to \$78.5 million in 2003-2004.
- Total revenue advanced by \$30.7 million or 5.8%, primarily supported by higher traffic and fares.

material contract, the creation of guarantees, the issuance of additional debt, and on distributions.

- Additional Indebtedness: Permitted only if: (1) no Default or Event of Default exists or would exist as a result of the new debt; (2) the Debt Service Coverage Ratio (DSCR) remains in excess of 1.5 times [EBITDAR (net of fuel cost deferral) less income taxes/net debt servicing charges]; (3) the amounts held in the Debt Service Reserve Fund and any Sinking Fund remain appropriately funded; (4) the new debt ranks pari passu with existing indebtedness; and (5) the Leverage Ratio remains within prescribed thresholds.
- **Distributions**: Permitted only if: (1) the Debt Service Reserve Fund is fully funded; (2) no Event of Default has occurred and is continuing; and (3) and the DSCR and the Leverage Ratio remain within prescribed thresholds.
- **Debt Service Reserve Fund**: An amount equivalent to at least six months of forecasted debt servicing for each series of bonds outstanding shall be maintained in a segregated fund.
  - The requirements rise to nine months of forecasted debt servicing if the DSCR drops below 1.75 times, and to 12 months if coverage is less than 1.5 times.
- Trustee: Computershare Trust Company of Canada.
  - Passenger and vehicle traffic were both up by more than 3%, stimulated by healthy economic conditions and a particularly notable increase in bus tours.
  - Fares were raised by an average of 2.8% on the three major routes and 4.4% on the remaining routes.
- BC Ferries' revitalized commercial strategy also started paying off in 2004-2005, with concession revenues up 7.2% year-over-year on expanded retail space on key ships and a 3% food price increase implemented in January.
- Expenditures rose by \$26.9 million or 5.3% due primarily to fuel costs and property taxes.
- Even though 32% of fuel requirements were hedged in 2004-2005, soaring oil prices pushed fuel costs nearly 15% above last year's level.
  - For reporting purposes, the Company was allowed to defer the increase, which explains the difference with the recurring earnings calculated by DBRS.
- Upgrades to the computer system and a shift from payments in lieu of municipal taxes to a tax based on property values also acted as significant drivers, adding nearly \$11 million to expenditures.
- Interest charges rose slightly to \$24.5 million, but remain notably below projections due mainly to favourable financing rates and advantageous payment terms for the three new Super C-class vessels.



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# Medium-Term Operating Outlook

- Despite sound demand for services, operating results are expected to weaken in 2005-2006, adversely affected by record high fuel prices and limited ability to adjust fares.
- Barring another spike in fuel prices, earnings should slowly rebound thereafter, however, supported by slowly rising traffic, scheduled fare increases, and affordable labour cost increases secured under a seven-year agreement.
- Traffic is projected to rise by 1.4% in 2005-2006 and by 1.1% per year over the longer term, although the 2010 Winter Olympics present significant upside potential.
- The June 10 incident involving the Queen of Oak Bay is not expected to have a material impact on results or traffic.
  - The vessel, which sails between Nanaimo and Horseshoe Bay, ran aground while coming into Horseshoe Bay as a result of a mechanical failure.
  - No one was injured and vessel damages were minimal.
  - The cost of the incident is estimated at \$2.9 million, of which nearly half should be covered by insurers.
- Annual fare increases are set at 2.8% on major routes and 4.4% on minor routes under the Coastal Ferry Services Contract between 2003-2004 and 2007-2008.
- Oil prices remain the key concern in the near term, given the limited ability to adjust fares and the relatively high prices secured under the hedges currently in place.
  - The Commissioner recently authorized a fuel surcharge of 4% on major routes and 6% on other routes.
  - While encouraging, the surcharge is insufficient to cover current fuel costs, which are expected to rise at least 25% or \$14 million in 2005-2006. If high fuel prices persist, another surcharge will likely be needed to protect BC Ferries' operating and credit profiles.

#### DEBT PROFILE

- Total debt increased by \$70 million to \$500 million in 2004-2005, driven by accelerating capital investments.
- Two series of bonds totalling \$500 million were issued during the year, but were partially offset by the repayment of the \$427 million debenture held by the Province.
- Interest coverage as calculated by DBRS remained high, at 4.3 times, little changed from the prior year.
  - In its calculation of the DSCR, DBRS excludes the effect of fuel deferral.
- The last actuarial valuation (as at March 31, 2002) of the defined benefit pension showed a surplus position.
  - While the plan's position may have weakened since then, a joint trusteeship greatly reduces the risk related to the plan by sharing responsibility for any shortfall between the employer and plan members.
  - The next valuation is scheduled for 2006.
- A \$77.5 million 364-day revolving credit facility and a \$77.5 million three-year revolving extendible facility maintained with a syndicate of Canadian banks provide adequate liquidity support, making up for the generally low cash balances of the Company. Under the facility agreement, BC Ferries must maintain a DSCR of

#### Capital Plan

- As part of the capital renewal strategy, \$127 million invested in a wide range of projects in 2004-2005, including mid-life upgrades to the Queen of Cowichan and the Queen of Oak Bay, and upgrades of terminals and marine structures.
- Over the next ten years, approximately \$1.9 billion will be spent on capital initiatives, of which about half should be debt-financed.
  - \$176 million planned for 2005-2006.
- About 70% of the budget is earmarked for the fleet, including the replacement of 14 vessels and upgrades to six others.
  - Fixed-price contracts for the construction of the first three Super C-class vessels were awarded last September, with deliveries scheduled from late 2007 to mid-2008, and all construction and performance risks assumed by the shipbuilder.
- Nearly \$300 million will be allocated to terminal development and renovations, with the priority placed on upgrading aging marine structures, improving customer access and service, and growing ancillary revenue.
- Prudent procurement practices should help mitigate the financial risk related to such a large capital program:
  - Large projects to be pre-approved by the Commissioner to ensure the costs can be recovered through operations;
  - Fixed-price contracts for major items; and
  - Reliance on proven design and technology.
- All major projects are expected to be submitted to the Commissioner for pre-approval, which will ensure that the costs can be incorporated into the determination of future price caps.

1.5 times and remain at least 51% owned by the BC Ferry Authority or the Province.

- Both facilities remain undrawn.
- A six-month Debt Service Reserve Fund provides back-up liquidity support (\$15 million at March 31, 2005).

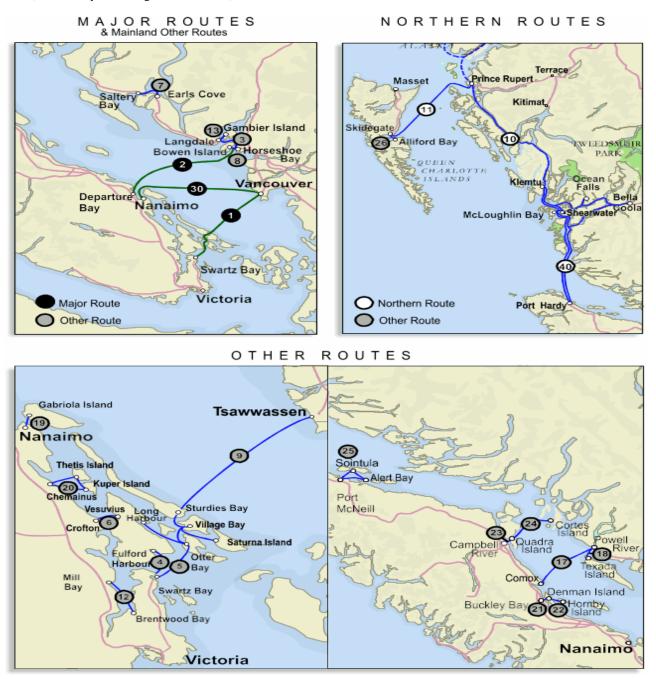
Medium-Term Outlook

- Debt is projected to increase by another \$75 million in 2005-2006, as efforts to renew BC Ferries' aging fleet and infrastructure base continue to intensify.
  - The money will be raised through the bank line.
- Interest charges should rise notably on the new debt and the full-year impact of last year's issue, but the DSCR as calculated by DBRS is expected to remain solid, in the 2.5 to 3.0 times range.
- Longer-term projections put total debt at roughly \$900 million by 2007-2008 and at a peak of about \$1.2 billion four years later, which is factored into BC Ferries' rating.
- Barring an economic downturn and assuming the Commissioner provides BC Ferries with adequate flexibility to cover fuel cost increase, the DSCR should remain in excess of two times over the foreseeable future.



#### **APPENDIX I – FERRY ROUTES**

BC Ferries operates a network of 25 routes linking Vancouver Island, the Gulf Islands, the Queen Charlotte Islands, and the mainland (collectively, the "Regulated Routes").



As part of its mandate, BC Ferries must also administer ferry service delivery on nine other routes contracted out to independent operators (the "Unregulated Routes"). The following comprise the Unregulated Routes:

- Dodge Cove/Prince Rupert
- Lasqueti/French Creek
- Kyuquot/Tahsis/Gold River
- Bamfield/Barkley Sound/Port Alberni
- Ahousat/Hot Springs Cove/Tofino
- Alert Bay/Sointula/Port McNeill
- Prince Rupert/Tuck Inlet
- Hartley Bay/Prince Rupert & other ports
- Rivers Inlet/Campbell River

#### **Regulated Ferry Routes**

(All nominal figures in millions)	Route group	Passengers 2004/2005	Vehicles 2004/2005	Share of total revenue 2004/2005	Profit/(loss) 2004/2005*
1-Tsawwassen/Swartz Bay	major	6.26	2.29	30.1%	\$26.75
2-Horseshoe Bay/Nanaimo	major	3.60	1.47	17.8%	\$16.50
3-Horseshoe Bay/Langdale	minor	2.68	1.24	6.7%	\$4.66
4-Swartz Bay/Salt Spring	minor	0.67	0.35	2.1%	\$0.97
5-Swartz Bay/Outer Gulf Islands	minor	0.51	0.28	3.5%	\$1.17
6-Crofton/Salt Spring	minor	0.52	0.27	1.0%	(\$0.61)
7-Saltery Bay/Earls Cove	minor	0.37	0.20	3.2%	\$3.35
8-Horseshoe Bay/Bowen Island	minor	1.25	0.56	2.4%	(\$0.18)
9-Tsawwassen/Gulf Island	minor	0.50	0.18	3.5%	\$1.42
10-Bear Cove/Prince Rupert	northern	0.06	0.02	3.4%	(\$3.90)
11-Prince Rupert/Skidegate	northern	0.05	0.02	2.8%	\$1.69
12-Brentwood Bay/Mill Bay	minor	0.15	0.08	0.5%	\$0.39
13-Langdale/Gambier/Keats	minor	0.05	0.00	0.2%	\$0.36
17-Comox/Powell River	minor	0.38	0.17	2.9%	(\$2.91)
18-Powell River/Texada	minor	0.19	0.10	1.0%	(\$0.41)
19-Nanaimo Harbour/Gabriola	minor	0.92	0.43	1.3%	\$1.23
20-Chemainus/Thetis/Kuper	minor	0.26	0.09	0.8%	(\$0.57)
21-Buckley Bay/Denman	minor	0.55	0.29	1.0%	\$0.34
22-Denman/Hornby	minor	0.26	0.13	0.8%	(\$0.43)
23-Campbell River/Quadra	minor	0.93	0.46	1.4%	(\$0.29)
24-Quadra/Cortes	minor	0.11	0.06	0.8%	\$0.65
25-Port McNeill/Alert Bay/Sointula	minor	0.26	0.10	1.0%	(\$2.05)
26-Skidegate/Alliford Bay	minor	0.13	0.07	0.8%	\$0.98
30-Tsawwassen/Nanaimo	major	1.36	0.81	10.3%	(\$9.65)
40-Discovery Coast	northern	0.01	0.00	0.7%	\$0.39
Total	-	22.03	9.66	100.0%	\$39.14

#### APPENDIX II – OPERATING FRAMEWORK

Given the high-profile and essentiality of the services to the Province's economy and residents, BC Ferries' role and operating framework has been tightly defined by the Province through: (1) the Act; (2) the Coastal Ferry Services Contract (the "Service Contract"); and (3) the Master Terminal Lease Agreement and related lease agreements for the ferry terminals. The documents establish the regulatory framework for ferry operators and define the terms and conditions under which BC Ferries directly operates its 25 ferry routes (the Regulated Routes) and oversees service delivery on nine others (the Unregulated Routes).

DBRS has reviewed the documents and concluded that BC Ferries' operating framework is considerably more constraining than that of other comparable industries such as public transit and airports, and more like the operating framework of electric utilities. In particular, the absence of direct control over pricing and service levels is seen as a notable impediment, making BC Ferries' financial position heavily dependent on the regulatory system. On the positive side, the independence of the regulator should help to greatly reduce the political interference that has historically plagued the performance of BC Ferries. The fact that part of the Commissioner's mandate is to ensure that the framework does not undermine the financial integrity of ferry operators also provides comfort, although the key processes in place to review price caps and service levels give considerable discretion to the regulator. Also a positive consideration is BC Ferries' ability to require the Province to purchase excess vessels in the event of a route discontinuance, which places the operator in a strong bargaining position when renegotiating subsidies for money-losing routes. It also greatly limits the capital at risk on each route. Below is an overview of the most relevant elements for BC Ferries.

#### **Regulatory Framework**

Although the Province maintains legislative control over ferry services, it is the Commissioner who oversees the application of the Act. The Commissioner has exclusive jurisdiction in all of the key economic matters defining BC Ferries' operating environment. Its role primarily entails ensuring that the price caps and minimum service requirements imposed by the Province are met and do not undermine the financial sustainability of ferry operators. A decision of the Commissioner cannot be appealed, except on a question of law. Note that ancillary operations such as concessions, parking, and reservations are not regulated under the Act or the Service Contract. These accounted for about 15% of total revenue in 2004-2005.

#### **Core Service Levels**

Minimum service requirements are imposed by the Province under the Service Contract, which limits the operator's ability to react to unforeseen traffic changes through adjustments in service levels. For the first five-year Performance Term of the Service Contract (2003-2004 to 2007-2008), the Core Service Levels generally correspond to the level of service that was provided in 2002-2003 on each route, less an allowance of 30 days (of which no more than 20 can be consecutive) for short-term, temporary disruptions of a specific nature (e.g. breakdown, maintenance, labour dispute, or bad weather).

- No service reduction is permitted during the first two years of the Service Contract. Afterward, service on the Regulated Routes can be reduced only if the reduction is either: (1) authorized by the Commissioner; (2) agreed by the Province and BC Ferries as part of a Service Fee or Performance Term review; (3) requested by the Province following the declaration of a state of emergency; or (4) the result of a lockout lawfully initiated by BC Ferries.
- Route discontinuance is also subject to the Commissioner's approval, which is granted only if the ferry operator can make a suitable economic case for the discontinuance and the Commissioner is satisfied that higher tariffs would not be sufficient to make the route financially viable. No application for route discontinuance will be accepted in the first three years of the Service Contract, or between the 12th and the sixth month preceding the beginning of a new Term. Note, however, that the Performance Acknowledgement Agreement between BC Ferries, the Province, and the Trustee provides for the elimination of any requirement under the Service Contract to provide ferry services to or from a terminal if the related terminal lease is terminated.

#### **Price Caps**

BC Ferries is subject to caps on the average tariff that can be charged on pre-determined route groups. As such, the Company may set tolls for each route, but must ensure that the average toll for each group does not exceed set levels. For the first five-year Performance Term of the Service Contract, the price caps are increased on November 1 of each year by 2.8% for major routes and 4.4% for all other routes.

- Under the Act, price caps are required to be reviewed by the Commissioner at least six months before the beginning of a new Performance Term in order to ensure they enable ferry operators to recover operating, financing, and capital costs, and to receive an adequate, risk-adjusted pre-tax return on equity.
- BC Ferries may apply to the Commissioner for a price cap increase under extraordinary situations such as the deployment of new capital assets, extraordinary changes in traffic levels or non-controllable input prices, or regulatory changes significantly adding to

operating costs. Note that labour cost increases other than those resulting from regulatory changes do not qualify as extraordinary situations.

#### **Provincial Service Fee**

For the first five years of the Service Contract, the Province will be providing subsidies for 22 of the 25 routes operated by BC Ferries, which account for roughly one-fourth of total revenue (excluding subsidies). Capped at \$91.9 million per year for the first Performance Term, the transportation portion of the Service Fee is designed to make each route group financially viable, factoring in efficiency gains expected to be realized going forward. In addition, BC Ferries receives funding from the Province for social program discounts (i.e. seniors, students, disabled people) and for the Unregulated Routes.

#### **Ferry Terminal Leases**

In return for the transfer of ownership interest in all ferry terminals from the former government-owned BC Ferries to the Province at the time of the corporate restructuring, the new BC Ferries received recognition of prepayment of rent under all 43 terminal leases concluded with the Province. BC Ferries must nonetheless maintain, manage, and develop the terminals at its own costs. The contracts grant to BC Ferries exclusive access and use of ferry terminal properties (land, structures, and water lot) for a period of 60 years, which provides BC Ferries with a strong competitive advantage over potential competitors.

The contracts allow for early termination in the event that all routes to/from a terminal are discontinued. BC Ferries is then entitled to a refund equal to the net book value of the leasehold improvements to the facilities if the discontinuance is not due to a default of BC Ferries' obligations under the lease or the Service Contract, which protects BC Ferries against unforeseen changes in operating conditions. If there is an event of default under the lease agreements, no refund is provided. The leases are renewable for an additional period of 20 years at a total cost of \$20 if the Service Contract is renewed.

#### **Vessel Disposition**

The Service Contract grants the Province the exclusive first right and option to purchase vessels at their net book value from BC Ferries if the ferry operator defaults under the Service Contract or upon a voluntary disposal. More importantly, BC Ferries has the right to require the Province to purchase, at net book value, vessels operating on a Designated Route that is being discontinued, provided that all reasonable efforts were used to re-deploy the vessel and other minor conditions are met. This places BC Ferries in a strong bargaining position when negotiating Service Fees with the Province and notably reduces financial risks to investors.

#### **Unregulated Routes**

BC Ferries' role with regards to the routes serviced by independent contractors essentially entails notifying the Province when a contract comes to an end, negotiating a new contract or soliciting proposals from new contractors,





and enforcing the minimum service requirements. At the end of the Service Contract's first five-year Performance Term, Unregulated Routes will be reviewed to determine whether some of them should become Regulated and directly serviced by BC Ferries. Although such a change would add to the responsibilities of BC Ferries, it is unlikely to materially weaken its operating position given the small scale of the unregulated operations and the fact that the route(s) would fall under the oversight of the Commissioner, whose priority is to ensure the financial sustainability of each ferry operator.

#### **Contract Maturity, Review, and Renewal**

The Coastal Ferry Services Contract has a term of 60 years, commencing on April 1, 2003. However, the terms of the agreement are to be reviewed in five years and at the end of every four-year period thereafter (Performance Terms), providing opportunities to fine-tune service levels and government support. If the parties are unable to agree on the Core Service Level in relation to a Designated Route for the next Performance Term, then the service level shall remain the same. If there is no agreement in regards to the Service Fee to be paid for a route, the Province may nonetheless set the amount unilaterally. In such a case, however, BC Ferries could apply to the Commissioner to reduce or discontinue service, which provides strong incentives to the Province to maintain adequate support.

The Service Contract can be renewed for another 60-year period if all parties agree. Otherwise, the Province may elect to either purchase all outstanding shares of BC Ferries at market value, assuming that contracts are renewed for a period of 20 years, or solicit proposals from other operators to service any of the routes. In the latter case, BC Ferries is partially protected, as it can elect to require the Province to repurchase the vessel(s) formerly used on the route(s) no longer serviced by BC Ferries and extend the current agreement for another 20 years for the non-tendered routes. Given that any new terminal facilities or improvements to existing facilities would be amortized and recovered through the pricing mechanism over the shorter of the useful life and the remaining term of the terminal leases, there would be no further compensation upon return of the facilities to the Province at the expiry of the leases.

# **British Columbia Ferry Services Inc.**

Consolidated Balance Sheet (\$ thousands)	For the year ended	March 31			
Assets	2005	2004	2003	2002	2001
Cash & cash equivalents	41,524	17,939	14,557	17,520	8,220
Debt service reserve fund (1)	15,054	-	-	-	-
Receivables & prepaid expenses	11,242	11,574	34,926	16,242	18,641
Inventories	21,699	23,570	19,305	18,248	16,849
Total Current Assets	89,519	53,083	68,788	52,010	43,710
Capital assets	630,291	551,474	567,968	624,224	655,938
Deferred fuel costs (2)	8,000	-	-	-	-
Other	35,572	25,230	-	-	-
Total Assets	763,382	629,787	636,756	676,234	699,648
Liabilities					
Payables & accrued liabilities	101,174	73,599	100,343	80,556	79,131
Advanced ticket sales	13,756	13,003	11,941	10,029	10,774
Current portion of long-term obligations	657	2,415	2,665	2,926	2,688
Total current liabilities	115,587	89,017	114,949	93,511	92,593
Deferred employee obligations	16,849	15,644	18,629	17,906	16,704
Long-term debt	499,581	427,701	-	15,704	18,616
Capital leases	164	-	-	-	-
Total Liabilities	632,181	532,362	133,578	127,121	127,913
Share capital	75,478	75,478	6,851	6,851	6,851
Contributed surplus	-	-	536,957	554,170	554,170
Retained earnings	55,723	21,947	(40,630)	(11,908)	10,714
Total equity	131,201	97,425	503,178	549,113	571,735
Total Liabilities & Equity	763,382	629,787	636,756	676,234	699,648

Note: Changes from 2003 and 2004 reflect all transactions implemented on April 1 and 2, 2003, related to BC Ferries' corporate restructuring.

(1) Under the Trust Indenture, BC Ferries is required to maintain in a segregated account funds equal to at least six months of debt service requirements in respect of outstanding bonds and credit facility obligations.

(2) The Commissioner has established set fuel prices for each fiscal year until March 31, 2008. Differences between the set prices and actual prices are recorded in the account, and are expected to be recovered through future tariff adjustments approved by the Commissioner.

# British Columbia Ferry Services Inc.

<b>Consolidated Statement of Operations</b>	For the year ende	ed March 31			
Revenue (\$ thousands)	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001
Tolls	345,851	323,023	315,618	305,710	292,806
Ferry service fee (1)	106,971	105,806	74,243	71,706	72,519
Concessions	67,776	63,206	61,762	60,374	68,689
Federal subsidy	24,343	23,975	23,377	22,953	22,438
Other income	19,514	17,721	14,866	12,329	1,895
Total Revenue	564,455	533,731	489,866	473,072	458,347
Expenses (\$ thousands)					
Operations, maintenance, & administration	376,092	361,146	351,877	336,799	319,303
Fuel (DBRS-adjusted) (2)	57,200	49,900	45,882	48,047	53,453
Cost of retail goods	26,513	23,298	22,046	22,479	21,915
Amortization	47,666	47,355	44,050	46,056	50,029
Total Operating Expenses	507,471	481,699	463,855	453,381	444,700
Surplus from operations	56,984	52,032	26,011	19,691	13,647
Interest expenses	24,480	22,672	1,364	1,757	1,583
FX gain (loss) and asset writedowns	690	1,375	262	556	1,350
DBRS-Adjusted Recurring Surplus (Deficit)	31,814	27,985	24,385	17,378	10,714
Non-recurring items	-	-	(53,107)	(40,000)	-
Fuel cost deferrals (2)	8,000			-	
Surplus (Deficit) as Reported	39,814	27,985	(28,722)	(22,622)	10,714

(1) Starting in 2003-2004, the motor fuel tax subsidy was replaced by a fee for service set under the Coastal Ferry Services Contract.

(2) BC Ferries is allowed to defer the cost impact of the difference between fuel prices assumed by the Commissioner in setting

price caps and actual fuel prices. Deferred fuel costs (if any) are expected to be recovered through future tariff adjustments

authorized by the Commissioner. For earning calculation purposes, however, DBRS uses actual fuel costs.

<b>Consolidated Statement of Cash Flows</b>	For the year ende	d March 31			
(\$ thousands)	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001
DBRS-adjusted recurring surplus (deficit)	31,814	27,985	24,385	17,378	10,714
Amortization	47,666	47,355	44,050	46,056	50,029
Other non-cash charges	1,248	3,227	20,905	1,911	3,348
Op. cash flow before change in working capital	80,728	78,567	89,340	65,345	64,091
Change in working capital	21,323	(9,092)	(15,508)	1,448	1,130
Operating cash flow	102,051	69,475	73,832	66,793	65,221
Net capital expenditures (1)	(122,153)	(41,653)	(58,114)	(54,805)	(55,418)
Free cash flow	(20,102)	27,822	15,718	11,988	9,803
(1) Net of proceeds from sales of assets.					

#### **Operating Statistics**

Operating Statistics	For the year ended March 31				
	2004-2005	<u>2003-2004</u>	<u>2002-2003</u>	2001-2002	2000-2001
Toll revenue per passenger (\$)	15.70	15.12	14.60	14.39	13.70
Concession revenue per passenger (\$)	3.08	2.96	2.86	2.84	3.21
Debt service coverage ratio (times)*	4.3	4.4	51.4	37.4	40.2
Passengers carried (in thousands)	22,027	21,367	21,624	21,246	21,369
- Year-over-year passenger traffic change	3.1%	-1.2%	1.8%	-0.6%	0.3%
Vehicles carried (AEQ**)	9,665	9,350	9,403	9,150	9,049
- Year-over-year vehicle traffic change	3.4%	-0.6%	2.8%	1.1%	1.4%
Full-time equivalent employees	3,315	3,261	3,345	3,380	3,339
Number of vessels	35	37	38	40	40

\* EBITDA as calculated by DBRS/interest charges. \*\* Automobile equivalents.

# APPENDIX E CALCULATION OF NECESSARY PRICE CAP INCREASES

BC Ferries calculated the necessary price cap increases based on the increased fuel surcharges required to move the Deferral Account balance to close to zero by March 31, 2008. An explanation of how BC Ferries calculated the required fuel surcharges is set out below. The calculation below relates to Route Group 1; however, the same calculation has also been performed for Route Groups 2 through 6 collectively.

1. Based on the Purvin & Gertz, Inc. Edmonton Par and Vancouver Rack price forecast, determine the total revenue from additional surcharges required to be earned on the routes comprising Route Group 1 over the relevant period (the calculations assume a February 1, 2006 implementation date for the surcharges) to reduce the balance of the Deferral Account for Route Group 1 to zero by March 1, 2008 ("Total Required Revenue").

2. Calculate the forecasted revenue yield for individual traffic types on Route Group 1 during the relevant period, assuming no increased fuel surcharge, by dividing the Total Required Revenue by the forecasted traffic for Route Group 1 ("Yield By Traffic Type").

3. Tabulate the various Yields By Traffic Type for Route Group 1 ("Total Yield"). The difference between the Total Required Revenue and the Total Yield for Route Group 1 represents the amount of revenue that must be generated in increased fuel surcharges over the relevant period to reduce the Route Group 1 Deferral Account to zero by March 31, 2008 ("Revenue Shortfall").

4. Convert the Revenue Shortfall to a percentage by dividing the Revenue Shortfall by the Total Yield and multiplying the result by 100. The percentage represents the amount of the increased fuel surcharge required for Route Group 1, and also represents the price cap increase required to permit it.

5. To calculate the specific fuel surcharges by traffic type within Route Group 1, the Yield By Traffic Type is multiplied by the percentage. Note that the calculation includes seniors and students, who do not pay the surcharge, since BC Ferries recovers these charges from the province. The surcharges are determined to the nearest \$.05, and, to the nearest \$.01 per foot for commercial traffic.

6. Within the parameters of the extraordinary price caps, minor adjustments to the fuel surcharges can be made where required.

# **APPENDIX F PROPOSED ADDITIONAL FUEL SURCHARGES**

In addition to the fuel surcharges set out in this Appendix, fuel surcharges will also be implemented with respect to the other existing fares, such as the fares for motorcycle traffic etc., on an equivalent basis.

		PASSENGERS	PASSENGER VEHICLE UNDERHEIGHT	PASSENGER VEHICLE OVERHEIGHT/SIZE	COMMERCIAL VEHICLE PER FOOT	BUS PER FOOT				
,		Fuel Surcharge	Fuel Surcharge	Fuel Surcharge	Fuel Surcharge	Fuel Surcharge				
	ROUTE DESCRIPTION	(child or adult)	(cars/pickup trucks)	(recreational vehicles)	Vehicles over 5500 kg/GVW	Licensed to carry 16 or more passengers				
	Tsawwassen - Swartz Bay	\$0.25	\$0.80	\$1.90	\$0.09	\$0.05				
	Horseshoe Bay - Departure Bay	\$0.25	\$0.80	\$1.90	\$0.09	\$0.05				
	Tsawwassen - Duke Point	\$0.25	\$0.80	\$1.90	\$0.09	\$0.05				
*	Horseshoe Bay - Langdale	\$0.40	\$1.50	\$3.00	\$0.20	\$0.20				
*	Swartz Bay - Fulford Harbour	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Swartz Bay - Gulf Islands	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Vesuvius Bay - Crofton	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Saltery Bay - Earl's Cove	\$0.40	\$1.50	\$3.00	\$0.20	\$0.20				
*	Horseshoe Bay - Snug Cove	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
	Tsawwassen to Gulf Islands	\$0.35	\$1.35	\$3.00	\$0.15	\$0.10				
	Gulf Islands to Tsawwassen	\$0.35	\$1.35	\$3.00	\$0.15	\$0.10				
	Tsawwassen to Gulf Islands Thru-Fare	\$0.35	\$1.35	\$3.00	\$0.15	\$0.10				
	Gulf Islands to Tsawwassen Thru- Fare	\$0.35	\$1.35	\$3.00	\$0.15	\$0.10				
	Inter-Southern Gulf Islands	\$0.15	\$0.40	\$0.80	\$0.05	\$0.05				
	Comox - Powell River	\$0.40	\$1.50	\$3.00	\$0.15	\$0.10				
*	Texada Island - Powell River	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Gabriola Island - Nanaimo	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Thetis Island - Kuper Island - Chemainus	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Denman Island - Buckley Bay	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Hornby Island - Denman Island	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Quadra Island - Campbell River	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Cortes Island - Quadra Island	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Alert Bay - Sointula - Port McNeill	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
*	Skidegate - Alliford Bay	\$0.30	\$0.80	\$1.60	\$0.10	\$0.10				
	Bear Cove - Prince Rupert	\$5.25	\$11.00	\$30.00	\$1.25	\$1.00				
	Prince Rupert - Skidegate	\$1.25	\$4.75	\$12.50	\$0.60	\$0.50				
-	Port Hardy-Bella Coola	\$6.50	\$13.00	\$18.00	\$1.25	\$1.00				
	Port Hardy-Mid Coast	\$2.50	\$6.25	\$10.00	\$0.65	\$0.50				
	Bella Coola-Mid Coast	\$2.50	\$6.25	\$10.00	\$0.65	\$0.50				
	Inter-Mid Coast	\$1.25	\$3.00	\$6.00	\$0.60	\$0.50				
	Mill Bay - Brentwood Bay	\$0.15	\$0.50	\$1.00	\$0.05	\$0.05				
*Sur	Surcharge covers return trip									

Fuel Surcharge Passenger includes all passenger fare categories. Passenger vehicle includes all motorcycle categories. Commercial vehicle surcharge is per foot and applies to all widths.

EXEMPTIONS: Children under 5 years of age Bicycles Stowage Canoe/Kayak