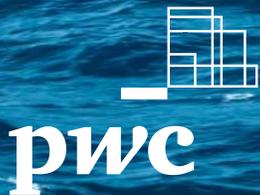


BC Ferries PT5 Price Cap Rebasing - Overview

Prepared for the Office of the British Columbia Ferries Commissioner
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Contents

Section	Page
Notice to Reader	3
Introduction	4
Scope of PwC's Work	5
Study Objectives	6
Overview of Price Cap Methodology	7
PT4 Price Cap Compliance Indices	8
PT5 Price Cap Reset	9
PT4/PT5 Price Cap Compliance Summary & Conclusion	11

Notice to Reader

This report has been prepared for the Office of the British Columbia Ferries Commissioner (the “Commission”) for the purpose of its price cap review for Performance Term 5 of British Columbia Ferry Services Inc. (“BC Ferries”). Any use that a third party makes of this report or reliance thereon, or any decision made based on it, is the responsibility of such third party. PricewaterhouseCoopers LLP (“PwC”) accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on the report.

The development of this report is based on data and information provided by the Commission and BC Ferries related to the assessment. PwC relied upon the completeness, accuracy, and fair presentation of all information obtained from these sources and provides no assurance as to the accuracy or reasonableness of this information. Treatment of the data has not included verification and/or audit of the financial or traffic volume data provided by BC Ferries as part of this work. The material contained in this report reflects PwC’s best efforts to accurately represent our observations in light of the information available at the time of report preparation. Our work does not constitute an audit opinion issued pursuant to CPA Canada or any other statutory reporting standards.

The overall definition and scope of the work performed and its adequacy in addressing the needs of the Commission are the responsibility of the Commission. The ultimate decision to accept this report rests with the Commission.

PwC reserves the right at its discretion to withdraw or make revisions to this report should PwC be made aware of facts existing at the date of the report that were not known to PwC when it prepared the report. The findings are given as of the date hereof and PwC is under no obligation to advise any person of any change or matter brought to its attention after such date, which would affect the findings, and PwC reserves the right to change or withdraw the report.

Introduction

In April 2003, the Province of British Columbia (the “Province”) established the B.C. Ferry Authority (the “Authority”), a corporation created pursuant to the *Coastal Ferry Act*, that holds the single issued voting share of BC Ferries, its operating subsidiary. BC Ferries was established in 2003 as a company incorporated in British Columbia under the provincial *Business Corporations Act*.

BC Ferries provides coastal ferry services on the west coast of British Columbia. With 35 vessels travelling between 47 terminals, on 25 routes, BC Ferries is one of the largest ferry operators in the world, both in terms of fleet size and passengers carried.

A Coastal Ferry Services Contract (“CFSC”) existing between the Province and BC Ferries defines service levels on each regulated route.

The Commission is a provincial regulatory agency operating under the *Coastal Ferry Act* with responsibilities for making regulatory decisions affecting ferry operators in the Province, including BC Ferries. The Commission undertakes this work in the public interest in accordance with several principles, including to balance the interests of ferry users, taxpayers and the financial sustainability of ferry operators.

The Commission sets price caps across the system every four years. Within this framework, BC Ferries can decide on fares for individual routes. The Commission has asked PwC to confirm proper application of the approved Price Cap Methodology to Performance Term 5 (“PT5”) beginning on April 1, 2020.

Scope of PwC's Work

The scope of PwC's work included:

- Review of background materials including previous price cap decisions by the Commission
- Discussion with the Commissioners to confirm the objectives of the review
- Review of commentary by InterVistas on the PT5 price cap reset, and correspondence between BC Ferries and the BC Ferry Commission regarding allowable adjustments to the opening PT5 balance:
 - February 24, 2020 Letter to the Commissioner from Alana Gallagher, VP Finance and Chief Financial Officer Re: Reset of Performance Term 5 Price Cap outlining options for the Commission to consider in the rebasing of the opening PT5 balance
 - February 25, 2020 Response Letter from the Commission
 - July 24, 2020 InterVISTAS Opinion Letter re PT5 Price Cap Compliance that concluded that BC Ferries was in compliance with the Commissioner's direction.
- Review of BC Ferries Excel price cap workbooks for PT4 and PT5
- A model walkthrough with BC Ferries staff
- Written questions to BC Ferries staff
- Discussion of findings with the Commissioners

As explained in the Notice to Reader, we have not audited the price cap workbooks. In this assignment PwC asked written and oral clarification questions on the workbooks. We received full cooperation from BC Ferries who were able to answer all of our questions to our satisfaction. A requested reconciliation of actual fiscal 2020 revenues in the workbooks to the audited financial statements is presented.

Study Objectives

The Commission asked PwC to confirm proper application of the approved Price Cap Methodology to PT5 beginning on April 1, 2020, with specific regard to:

- An adjustment for the treatment of the Province's subsidy for fares for Seniors (the "Seniors Discount") introduced on April 1, 2018 for the 2019 and 2020 fiscal years;
- An adjustment for foregone revenue as a result of the Fare Initiative introduced in fiscal 2019 that resulted in a 15% reduction of passenger fares on the Minor and Northern Routes as well as on Major Route 3, and a fare freeze on the Major Routes 1, 2 and 30; and
- Confirming the price cap position at the closing of Performance Term 4 ("PT4").

The price cap resetting for PT5 involved recognition of these specific initiatives that began on April 1, 2018 and which had an impact on fares and the ending PT4 price cap balances. In its February 25, 2020 Response Letter, the Commission accepted the recognition of the price cap underage from PT4 to be carried forward to PT5. The Commission did not accept recognition of foregone revenue from BC Ferries and Provincial contributions towards the Fare Initiative program in the Price Cap Compliance Index, as these were taken into account when determining the price cap for PT5.

Overview of Price Cap Methodology

The BC Ferries price cap system is based on the Paasche Price Index, a price index used to measure the change in the prices and quantities of a basket of goods and services relative to a specified base period price. Developed by German economist Hermann Paasche, the Paasche Price Index is commonly referred to as the “current weighted index”.

The index commonly uses a base year of 100, with periods of higher price levels shown by an index greater than 100 and periods of lower price levels by indexes lower than 100. The index can be expressed in the formula below. The numerator of the index is the total revenue from regulated services at the observation period using the observation period price and quantities, while the denominator is the total revenue from regulated services using base period prices and observation period quantities.

$$\text{Paasche Price Index} = \frac{\text{Sum of [Price at Observation Period x Observation Quantity]}}{\text{Sum of [Price at Base Period x Observation Quantity]}}$$

Source: Corporate Finance Institute 2020

PT4 Price Cap and Compliance Indices

In the case of BC Ferries, the Price Cap Index measures the maximum allowable revenue in weighted average fares from the beginning of a performance term based on a basket of 10 traffic types. The Price Cap Compliance Index is based on actual fare revenues. The Price Cap Compliance Index may not exceed the Price Cap Index over any four consecutive quarters. A price cap compliance test is applied in each quarter. This test is required at a system-wide level and changes in fares on specific routes and route groups can vary from the index.

BC Ferries use a price cap workbook for management of the price cap on a route group and system-wide basis, and for quarterly reporting to the Commission. The price cap set by the Commission for PT4 was 1.9% per year. As a result the Price Cap Index set at 100 at the beginning of PT4 increased to 107.82 by the end of the performance term.

PT4 Price Cap Compliance Summary					
	F2017 Q1*	F2017 Q4	F2018 Q4	F2019 Q4	F2020 Q4
Price Cap Index	100.00	101.90	103.84	105.81	107.82
Allowable Price Cap Revenue (\$m)	602.4	631.0	669.7	687.9	690.1

* Note: These are values from the beginning of Q1 F2017 (i.e. the start of PT4)

Source: BC Ferries PT4 Price Cap Compliance Workbook 2020

PT5 Price Cap Rebase

The ending balance of the Allowable Price Cap Revenue in PT4 was \$690.1 million. In rebasing for the beginning of PT5, this figure was adjusted for Seniors' revenue (calculated as if BC Ferries had received the full Adult fare for BC Seniors travelling on the BC Ferries system) and the removal of the Fare Initiative funding from the tariff base. These changes have a net impact of a \$35 million reduction to the price cap base, resulting in a rebased Allowable Price Cap Revenue of **\$655.1 million** for PT5. This is further detailed below.

	\$ million
PT4 Ending Balance Allowable Price Cap Revenue	690.1
Seniors' Funding: An estimate of the incremental \$10.2m in actual funding netted against theoretical revenue of \$19.8m calculated as if BC Seniors travelled on BC Ferries had paid the full adult fare	9.6
Fare Initiative Funding: Removal of \$44.6m from the tariff base	(44.6)
PT5 Rebased Allowable Price Cap Revenue	655.1

PT5 Price Cap Rebased (Cont'd)

The actual Fare Revenue collected in F2020 (ending March 31, 2020) totalled \$649.5 million, which was \$5.6 million below the rebased Allowable Price Cap Revenue of \$655.1 million. The Fare Revenue is used in the Price Cap Compliance Index calculation table reported to the Commission and reconciles to BC Ferries audited financial statements as shown in the table below:

F2020	\$ millions
Tariff Revenue reported in audited financials as at March 31, 2020	613.2
Social Programs Revenue	15.2
Seniors Revenue	19.8
GST Adjustment	1.3
Total Fare Revenue collected at the end of PT4 for purposes of the price cap reporting	649.5

The Social Programs Revenue represents student discounts and other social program subsidies, programs that did not require adjustment during the performance term or as part of the reset adjustments. The Seniors Revenue is accounted for separately. These revenue sources are based on actual counts and are treated as tariffs subject to indexation for price cap purposes. The GST Adjustment is related to GST on reservations that is netted out of Tariff Revenue for accounting purposes.

PT4/PT5 Price Cap Compliance Summary

In summary, the PT5 Price Cap Index of 100 is based on rebased Allowable Price Cap Revenue of \$655.1 million. PwC has analysed workbooks used by BC Ferries to reset the Price Cap Index to 100 at the start of PT5. We have been able to confirm the adjustments made to the ending balances of PT4 that relate to the treatment of the Seniors Discount and the Fare Initiative have been properly reflected in the price cap calculations for PT5 and are consistent with the direction of the Commission.

	Ending Balance PT4	Starting Balance PT5
Price Cap Index	107.82	100.00
Unadjusted Allowable Price Cap Revenue (\$m)	690.1	
PT5 Rebased Allowable Price Cap Revenue (\$m)		655.1

Actual fare revenue at the end of PT4 was \$649.5 million, resulting in \$5.6 million in additional price cap room that is carried forward to PT5. PwC views that the proposed methodology for the PT5 Price Cap Index reset that includes an underage of \$5.6 million is reasonable and is consistent with the direction of the Commission.