



BRITISH COLUMBIA  
FERRY COMMISSION

ORDER  
NUMBER: 04-01

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**IN THE MATTER OF**  
**Statutes of British Columbia Bill 18 - 2003**  
**The Coastal Ferry Act Section 55**

And

A Capital Expenditure for up to Three Vessels  
Proposed by British Columbia Ferry Services Inc ("BC Ferries")

**BEFORE:** Martin Crilly, Commissioner

**DECLARATION**

**WHEREAS:**

- A. under section 55 of the Act BC Ferries may apply to the commissioner for a declaration as to whether the capital assets proposed to be deployed on, or the capital expenditures proposed to be incurred in connection with a designated ferry route, are reasonably required;
- B. on May 11, 2004, BC Ferries applied for such a declaration respecting \$542 million in capital expenditures for up to three vessels for the major route group;
- C. BC Ferries has asked to have these expenditures included in the regular price cap review preceding the performance term starting April 1, 2008;
- D. BC Ferries has stated that the vessels to be acquired would replace three existing V-class vessels—the Queen of Esquimalt, the Queen of Saanich and the Queen of Vancouver—which are at or near the end of their economic lives;
- E. BC Ferries has indicated that 2.5% of the shipyard price of new-build vessels is directly attributable to the provision of on-board ancillary retail-type services;
- F. the commissioner has reviewed the supporting statements and materials supplied by BC Ferries as summarized in the attached Review, and has obtained independent analyses and opinions from qualified persons;
- G. the commissioner is satisfied that:
  - shortcomings are apparent in the three V-class vessels respecting their capacity, performance and compliance with future safety regulations;
  - it is prudent and timely to address these shortcomings;
  - to upgrade these vessels would raise serious challenges and risks, and is not the preferred course of action;
  - acquiring three other, superior vessels is the most appropriate procurement option; and

- BC Ferries has undertaken a competitive bid process, verified by independent technical experts, to determine capital cost estimates for the three vessels;

H. the commissioner is further satisfied that BC Ferries has:

- carefully weighed and considered a number of factors in developing a vessel replacement strategy designed to meet its contractual obligations for the major route group, and for Route 3 which could see a related re-allocation of vessels;
- followed a process that will mitigate, though by no means eliminate, the risks involved in such a large capital project;
- applied several best practices in the governance of the capital project;
- put in place safeguards against late delivery of the new vessels; and
- structured the procurement process to be credible and create competition among high quality international bidders;

**NOW THEREFORE** the Commissioner declares as follows:

- acquisition of up to three vessels for deployment on the major route group is reasonably required;
- of the total estimated capital expenditures of up to \$542 million for both core and ancillary services, that portion needed to provide the core contracted levels of marine transportation service is reasonably required;
- in particular, the commissioner has not ruled on an allocation of total capital expenditures between core service and ancillary service; accordingly this declaration is not to be construed to mean that the entire \$542 million will be included in the cost base for core services in the price cap review;
- if only two new vessels are acquired the limit on the total capital cost is \$368 million plus an amount (allowance to be determined) for the capital costs of acquiring and converting a used vessel for service;
- capital amounts may have to be reviewed if extraordinary changes in variables beyond BC Ferries control occur before construction contracts are signed, such as exchange rates and world steel prices;
- if no federal duty is charged the limit on the capital cost is reduced accordingly.

**DATED** in Comox, in the Province of British Columbia, this tenth day of June 2004.

BY ORDER



Martin Crilly

British Columbia Ferries Commissioner



# **Review of an Application by BC Ferries for a Declaration that a Capital Deployment for Three Vessels is Reasonably Required**

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**Martin Crilly**  
**BC Ferries Commissioner**

**June 10, 2004**

# 1 Background

On May 11, 2004 BC Ferries applied to the commissioner requesting a declaration under Section 55 of the Coastal Ferry Act that the proposed replacement of three V-class vessels at a capital cost of up to \$542 million was “reasonably required” and would be included in the calculation of the price cap established for the next performance term.

Prior to this application the commissioner had provided BC Ferries with Guidelines for Section 55 which set out the requirements that ferry operators would be required to meet in submitting applications under this section.

## *Legal context*

Under the Coastal Ferry Act the BC Ferries Commissioner is empowered to regulate the core ferry services provided by ferry operators. The commissioner determines the price cap applicable to ferry routes (in route groups) for four-year performance terms. In calculating the price caps the commissioner includes those capital expenses that are determined to be reasonable in relation to a route group, including capital expenses that have received approval under Section 55.

The Act section 41 (3)(c), referring to principles applicable in price cap review, states that the commissioner must...

“determine whether it was reasonable, in the commissioner's opinion, acting reasonably, for the ferry operator to have incurred capital expenses in relation to a designated ferry route included in the route group, and take into account only those capital expenses that

“(i) are determined under this paragraph to be reasonable, or

“(ii) had been approved under section 55”

Section 55 states:

“Before deploying capital assets on, or incurring capital expenditures in connection with, a designated ferry route or terminal, the ferry operator may apply to the commissioner and the commissioner must, within one month after the application, declare whether the capital assets proposed to be deployed on, or the capital expenditures proposed to be incurred in connection with, the designated ferry route or terminal are reasonably required.”

It is worth pointing out that section 55 of the Act does not call for the commissioner to inform the applicant of the level and timing of price cap increases that the capital expenditure would justify. Nor does it call for the commissioner to rule on what portion of the capital expenses are to be allowed into the price cap for monopoly-provided services (i.e. the core, marine transportation services provided by BC Ferries).

BC Ferries' core marine transport service is supplied under monopoly conditions, at minimum service levels specified in the Coastal Ferry Services Contract with the Province, and under price cap regulation by the commissioner. On the other hand, ancillary services are offered by the company under a competitive environment, where the company has commercial freedom in what it offers and what it charges.

In the commissioner's view, the law intends that capital deployed for the purpose of the core service should not subsidize the provision of ancillary services.

*Scope of Review*

This review and the formal declaration it supports rely on documents and representations of BC Ferries management and staff. The review does not constitute a review of the financial viability of the replacement of the three vessels or its affordability to BC Ferries with or without increases in price caps. Nor does it involve a detailed assessment of technical specifications or ship design. It is also outside the scope of the Commission's work to perform due diligence on the procurement process (e.g. by reviewing contract bid documents).

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## 2 Summary of Application

BC Ferries supplied a number of documents with its application. Opinions from outside technical experts were appended to the submission, which contained reasons for upgrading or replacing three V-class vessels, including building new vessels.

The commissioner provided all the documents received from BC Ferries to two consulting firms—PricewaterhouseCoopers LLP and MMK Consulting Inc—hired by the commissioner for the purpose of this review. The two firms were asked to give their opinions independently as to whether the vessel replacements and capital costs were reasonably required and whether BC Ferries had responded adequately in their application to the Commission’s Section 55 Guidelines.

In preparing this review the commissioner has carefully considered the opinions of the two consulting firms in reaching his own conclusions regarding the application, and has included their opinions in his declaration, where appropriate.

### **Problems with existing V-class vessels**

#### Safety

The three vessels - the Queen of Vancouver, the Queen of Saanich and the Queen of Esquimalt - are more than 40 years old and have been operating under exemptions, granted by Transport Canada, to standard safety regulations. These regulations are being revised following the enactment of the Canada Shipping Act (2001) and the ferries will be required to meet the revised regulations by 2009.

#### Capacity

The three vessels have less capacity than C-class and Spirit-class ferries. BC Ferries are required under the Coastal Ferry Services Contract with the Province of British Columbia to provide a specified number of trips under the service requirements of the contract. The three vessels provide a significant proportion of the required annual trips on routes 1 and 2. Overload situations are a frequent occurrence, especially in the peak summer months when almost all sailings are in an “overload” situation.

### **Vessel Options**

#### Upgrade

The option of upgrading the existing vessels to the required standards was considered but rejected by BC Ferries for the following reasons:

- the upgrade is estimated to cost \$72 million for each vessel;
- the life extension resulting from the upgrade is undetermined; and
- the upgrade would result in a reduction in capacity for the vessels.

A reduction in capacity, estimated at 80 vehicles per vessel, would exacerbate the overload situation and raise concerns about BC Ferries ability to meet the service requirements.

BC Ferries provided the estimate for the upgrade, based on similar work carried out on other vessels. An outside technical expert confirmed the estimate and declined to state how long a life extension would be attained because of the unknown onset of hull fatigue in vessels of similar age.

#### Replacement

The application documents the options to replace the three vessels. Consideration was given to the purchase of used ferries, acquisition of new vessels and a combination of used and new vessels.

The search for used vessels produced only one possible vessel, out of approximately 100 on the market. This one vessel is still under evaluation at the time of this review. Difficulties with used vessels include: the inability to move them freely among routes (termed “interoperability” by BC Ferries); problems in adapting them to the terminal facilities used by BC Ferries; problems in meeting Transport Canada’s safety requirements in upgrades; the possibility of discovering additional problems during upgrade; and the uncertain term of their future service lives.

BC Ferries has considered the option of acquiring new vessels for at least two of the three V-class ferries. In developing specifications for the new vessels BC Ferries reports that it considered:

- the increase in capacity required to alleviate the problems related to the growth of traffic and congestion on the major routes;
- interoperability with other routes;
- its generally favourable experience with vessels with double-ended propulsion (C-class);
- passenger satisfaction;
- cost-effectiveness; and
- sufficient speed to maintain its schedule.

The specifications derived from the list of requirements combined the best characteristics of the C-class and the Spirit-class vessels in terms of efficiency and customer satisfaction. The desired ferries will carry up to 100 more vehicles than the V-class (40 more than the C-class) and have significantly higher passenger capacity.

At the time of this review BC Ferries have carried out the following steps in the procurement process:

- requested shipyards both in Canada and internationally to participate in the Request for PreQualification;
- identified five shipyards in compliance with the requirements; and
- issued a Request for Proposals to the top three shipyards.

The process was confirmed by independent technical experts and the three shipyards responded to the Request for Proposals with firm estimates.

## 3 Comments of the Commissioner

### Comments on Process followed by BC Ferries

The process used to identify the problems of the three V-class vessels, the need for replacement, the specifications for the replacements and the identification and evaluation of the shipyards bidding on the work has been confirmed as satisfactory by the consultants to the commissioner. They report that BC Ferries “have employed a number of best practices in the governance of the project and in the procurement process”.

The consultants examined BC Ferries responses to the commissioner’s Section 55 guidelines and report that the explanations and information provided by the company are satisfactory, subject to the responses to the questions relating to core and ancillary capital costs, discussed below.

On the question of buying and upgrading a used vessel to meet Transport Canada standards the commissioner’s consultants agree that, depending on the discount rates and risk premiums used for present value calculations, the lifecycle costs may be slightly lower than buying a new vessel. The higher risks of this option more than offset the apparent lower lifetime cost.

The replacement of the V-class ferries with the proposed Super-C class represents a significant improvement in passenger accommodation, to match the standard of the Spirit-class ferries. In the commissioner’s opinion the increased expense due to this improvement is justified and does not represent an unnecessary cost.

### Handling of Risk by BC Ferries

As the application recognizes, there are significant risks in undertaking this major capital project. The major risks and their mitigation include:

- cost inflation, especially due to increases in material costs;
- adverse changes in exchange rates, although these should be covered by forward contracts;
- design risk, to be borne by the shipyard;
- delay in delivery, covered by penalty clauses;
- technical problems, to be minimized by the use of existing (“commercial, off-the-shelf”) technology.

The commissioner is satisfied that BC Ferries has followed a process that will minimize, but by no means eliminate, the risk involved in such a large capital project.



## 4 Outstanding Issues

Because BC Ferries is currently at the pre-contracting stage, some matters remain outstanding at this date.

### **Number of vessels**

The application is for the acquisition of up to three vessels. BC Ferries intend to acquire at least two new vessels and may take up an option by October 2004 to acquire a third. In the event the third vessel is not acquired the capital cost limit would be \$368 million.

### **Used vessel**

The application covers the options of (a) three new vessels or (b) two new and one used vessel. The evaluation of the used vessel is not yet finished.

While option (b) appears to have a lower life-cycle cost, given the uncertain nature of the costs of upgrading the used vessel, this option is higher-risk than buying new ones. The commissioner's consultants do not recommend this option even though the cost could be slightly lower.

### **Federal duty**

As all three of the qualifying shipyards are foreign-based, the Government of Canada is expected to levy a duty of 25% on the value of vessels imported into Canada. The amount of this duty, together with Goods and Services Tax (GST) on the duty, will be \$97 million, based on the estimates. This amount is included in the overall estimate of \$542 million and will be recovered from ferry users through the calculation of price caps for future performance terms. If a decision is made not to charge this duty then the capital cost limit for this declaration will be reduced to \$445 million.

### **Core and ancillary costs**

As mentioned in the introduction to this review, the Coastal Ferry Act distinguishes between "core ferry services", which BC Ferries must provide under the Coastal Ferry Services Contract and "ancillary services", which are any services not directly related to the transportation of vehicles and passengers (e.g. catering and retail services on board the vessels).

BC Ferries has provided an estimate of the capital costs it regards as directly attributable to the on-board ancillary services, being 2.5% of the shipyard price. The company has not included a capital cost component representing the allocation of ship-board space to ancillary services.

The commissioner's advisors have offered various methodologies for attributing capital cost—including on board space occupied—to ancillary services. BC Ferries has not asked for a ruling on this in its section 55 application and the commissioner has not made one. The company is, however, free to seek such a ruling on this matter if it requires one.