



BRITISH COLUMBIA
FERRY COMMISSION

ORDER
NUMBER: 06-06

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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 a Replacement Vessel (#2) for the Northern Routes
and Associated Terminal Facilities
Proposed by British Columbia Ferry Services Inc ("BC Ferries")

BEFORE: Martin Crilly, Commissioner

D E C L A R A T I O N

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 July 14, 2006 BC Ferries applied for such a declaration respecting \$199.7 million in capital expenditures for a replacement vessel (#2) and \$33.4 million for terminal facilities for northern routes;
- C. BC Ferries has stated that the vessel to be acquired, as one of three vessels required to provide the core level of northern services agreed to be supported by the province, is expected to operate primarily on route #10 (Port Hardy to Prince Rupert) commencing in 2009;
- D. BC Ferries has further stated that, after comparing the lifetime costs for a new vessel with the only used vessel considered adequate for the route, the cost advantage for the new-build vessel is significant;
- E. BC Ferries has also stated that the terminal facilities for the ports on the northern routes will need to be reconfigured at a cost of \$33.4 million to meet the varying requirements of the vessels expected to serve the routes;
- 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:
 - there is a need to acquire a vessel that will meet the core service requirements of route #10, currently provided at lower service levels by another vessel, the Queen of Prince Rupert, which is due to be retired in 2009;
 - it is prudent and timely to acquire another vessel as expeditiously as possible;
 - the proposed "new-build" vessel will meet the core service requirements on route #10 and is expected to have a lower life-cycle cost than the acquisition of a second used vessel;

- BC Ferries structured the procurement process to be credible and create competition among domestic and international bidders and selected the best bid based on technical and financial criteria;

H. the commissioner needs further information and assurance regarding justification for the amendments to the Statement of Requirements for the vessel resulting in significant costs for terminal facilities to meet the vessel design;

NOW THEREFORE the commissioner declares as follows:

- the acquisition of the proposed replacement vessel (#2) for deployment on the Northern route group is reasonably required;
- of the total estimated capital expenditures of up to \$233 million for both vessel and terminal facilities, the amount of \$199.7 million needed to provide the new vessel is reasonably required;
- capital amounts may have to be reviewed if extraordinary changes in costs beyond BC Ferries' control occur before construction contracts are signed, such as exchange rates and world steel prices;
- if federal duty is not charged, the limit on the capital cost is changed accordingly;
- when information is provided, satisfactory to the commissioner, on justifying the cost of changes to terminal facilities, the commissioner will be prepared to declare the terminal facilities reasonably required at a cost of \$33.4 million.

DATED in Comox, in the Province of British Columbia, this 14th day of August 2006.

BY ORDER



Martin Crilly
BC Ferries Commissioner



Review and Reasons for Order 06-06
following an Application by BC Ferries
For a Declaration under Sec. 55 of the Coastal Ferry Act
That a Capital Deployment for a Replacement Vessel (#2)
And Associated Terminal Facilities
Are Reasonably Required

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Martin Crilly
Commissioner
BC Ferry Commission
August 14, 2006

1 Background

On July 14, 2006 BC Ferries applied to the commissioner requesting a declaration under Section 55 of the Coastal Ferry Act that an expenditure of up to \$233 million for a new vessel for the Northern routes and associated terminal facility changes was “reasonably required”.

Legal Context

Under the Coastal Ferry Act the BC Ferry Commissioner is empowered to regulate the core ferry services provided by ferry operators. The commissioner determines the price cap (weighted average tariff) 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 prior approval 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”.

In December 2004 the commissioner provided BC Ferries with Revised Guidelines for Section 55 which set out the requirements that ferry operators would be required to meet in submitting applications under this section.

Scope of Review

This review relies on documents and representations of BC Ferries management and staff. It does not constitute a review of the financial viability of the new vessel and terminal facilities for the Northern routes or the affordability of a new vessel and terminal facilities to BC Ferries with or without increases in price caps. Nor does the review 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).

2 Summary of Application

BC Ferries provided its application to the commissioner on July 14, 2006 and included opinions from outside technical experts. At a meeting on August 2, 2006 between BC Ferries staff and the commissioner and a representative from Glostén Associates Inc., a consulting firm of naval architects and marine engineers hired by the commissioner for the purpose of this review, BC Ferries supplied further drawings and cost estimates relating to the terminal facility changes. Glostén Associates Inc. were asked to give their

opinion as to whether the new vessel acquisition and related terminal facility capital expenditures were reasonably required and whether BC Ferries had responded adequately in its application to the commissioner's Section 55 Revised Guidelines.

In preparing this review the commissioner has carefully considered the opinions of the consultants in reaching his own conclusions regarding the application and has included the consultants' opinions in this review, where appropriate.

Need for Vessel Acquisition

Under the Coastal Ferry Services Contract (the "Contract") with the province of British Columbia BC Ferries provides ferry services on three northern routes and receives service fees from the province at rates designated in the Contract.

BC Ferries was required, under the Contract, to develop a Northern Strategy to improve customer service and efficiencies in serving the routes. This process was completed in late 2005 and BC Ferries negotiated with the province the services to be provided and the level of provincial support through service fees.

Three vessels serving the Northern routes were due to be retired over the period from 2009 to 2011 due to age and expected non-compliance with Transport Canada requirements. One of the vessels—the Queen of the North serving route 10 (Port Hardy to Prince Rupert)—sank on March 22, 2006 and BC Ferries was obliged to use the Queen of Prince Rupert, a smaller and slower vessel, after that date to provide a lower level of service on the route than that required under the Contract. To meet these circumstances BC Ferries advanced the schedule for the replacement of the vessels, including a search of the market for used vessels.

After an extensive search BC Ferries was able to locate a used vessel (the MV Sonia) that, with some modifications, could meet the core service requirements on route 10 and 11, together with the Queen of Prince Rupert, (which mainly serves route 11) commencing in 2007. It is expected that the used vessel will replace the Queen of Prince Rupert after 2009. Negotiations to acquire this vessel are ongoing.

BC Ferries have considered two options for a replacement for the Queen of the North: the acquisition of a used vessel and contracting with a shipyard to build a new vessel.

Option 1: Purchase used vessel

After an extensive search for a vessel to replace the Queen of the North BC Ferries were able to identify few vessels to meet the core service levels, regulatory requirements and service compatibility on the Northern routes. One vessel that was examined and judged eligible to meet the requirements was a larger used vessel identified by a ship broker but with uncertainty concerning its sale status. When all costs of putting this vessel into service were considered, including modifications to the vessel and to the terminal facilities, its cost is estimated at \$204 million, including \$33.4 million for terminal capital expenditure. The operating costs for this vessel are estimated to be much higher than for a

new vessel and the larger capacity of the used vessel would be of no advantage in light of the low rate of traffic growth on route 10.

Option 2: Construct a new vessel

BC Ferries undertook a procurement process similar to that employed for the Super C acquisition. Following a Request for Proposals (RFP) process which included a Statement of Requirements (SOR) to which qualified bids were received from three shipyards, a short list of two shipyards was established and negotiations carried out with both shipyards. Evaluation criteria for the bids were established, one preferred shipyard selected and a fixed price contract negotiated. The process was confirmed by independent technical experts and the three shipyards ranked in the same order by internal and external evaluations.

A detailed business case was drawn up based on the contract price, expected exchange rates, BC Ferries costs, federal duty and GST. After contingencies were included in the cost for the vessel and terminal facilities the total cost was estimated at \$233 million. The lifetime operating costs for this vessel are calculated to be significantly lower than for the used vessel, resulting in a 40-year NPV that is more than \$35 million below that for a used vessel.

Current Status

BC Ferries is waiting for a response to the application to the commissioner, after which BC Ferries Board will be asked to approve the shipyard contract and the terminal capital expenditure.

3 Comments of the Commissioner

The commissioner has been assisted in this review by the firm of Glosten Associates Inc., a consulting firm of naval architects and marine engineers. This firm reviewed the documents provided by BC Ferries, including the responses to the commissioner's Section 55 guidelines and were present at a meeting on August 2, 2006 at which BC Ferries provided more information about the application, including the scope and cost of specific terminal facility changes.

The consultants report that the information provided by the company on the procurement process for the new vessel and the competitive bid procedure was satisfactory. The consultants' review confirms that:

- The case for retiring the Queen of Prince Rupert is compelling;
- Project governance and procurement for the new vessel were well documented;
- The submission adequately describes how the new-build and [the used vessel] can deliver the service levels required by the Northern Strategy and can meet the relatively low levels of growth in demand for service on route 10;
- The operational characteristics of the design for the new vessel meet the guideline requirements. Some concern is expressed about the need for "weight

control during construction and throughout the vessel's life" in order to meet operational speeds and fuel consumption targets. The question of loading/unloading times was not addressed by BC Ferries but on a relatively lengthy route is not considered critical, especially as the design for the vessel includes bow and stern doors;

- The capital cost of the new-build vessel is well documented. Cost escalation clauses and BC Ferries internal costs are included and timing "milestones for the vessel acquisition have been proposed";
- The application provides much information on the possibility and costs of acquiring a specific used vessel, but in the consultant's opinion the decision to build a new vessel is correct and shows an advantage of not less than \$20 million on the basis of the net present value of lifetime operating costs.

The consultant is less satisfied with the proposal to undertake major terminal modifications at a cost of \$33.4 million and comments that:

- The case for making terminal improvements at seven northern ports has not been well supported and the need for the terminal changes appears to be in conflict with one of the major requirements of the specifications given to the shipyards, which was to comply "with the existing ramp and wing wall arrangements while minimizing the need to relocate fenders and dolphins";
- The successful shipyard is proposing a significant shift in mooring arrangements to comply with the flat transom model of design. It is possible that changing the vessel design may be less expensive than changing the facility.

On the handling of risk the consultants comment that:

- The risks associated with the design, which has some innovative features, delays in construction and failure to meet specifications, are partially mitigated by the inclusion of penalty clauses (liquidated damages) but this may be insufficient to cover the costs associated with all risks;
- BC Ferries rely on punitive measures to try to ensure compliance with the vessel specifications rather than active management or performance incentives. It is suggested that the liquidated damages of up to 7.5% of the contract price and rights of rescission could be supplemented with more active monitoring of progress and milestones.
- The remaining major risk and its mitigation is the possibility that the innovative design for hull optimization may be insufficient to allow the vessel to meet the speed, power and fuel consumption targets.

The commissioner is generally satisfied that BC Ferries has followed a process that will maintain a low level of risk in the vessel acquisition portion of the application but has questions and concerns regarding the terminal modification costs.

4 Outstanding Issues

The commissioner is satisfied that the vessel acquisition portion of the application at an estimated cost of \$199.7 million is “reasonably required”. The only outstanding issue regarding the vessel acquisition is the question of how the terminal modifications were treated in the comparison of the two shipyards bids.

The outstanding issues relating to the terminal capital expenditure are:

- Why were the terminal compliance requirements relaxed to allow the shipyard(s) to put forward a flat transom design model, apparently requiring \$33.4 million in terminal facility capital expenditure?
- What is the justification for the terminal modifications and were alternative designs considered?
- Did all qualified bids (three shipyards) propose “flat transom” designs requiring the more expensive terminal changes and, if not, were the shipyard proposals compared on an equivalent basis?
- Has a schedule for accomplishment been prepared, including key milestones?

When BC Ferries provides adequate responses to the above questions the commissioner is prepared to declare the terminal capital expenditures “reasonably required”.