

**BC Ferries and WSF meeting to discuss joint procurement of ferries and LNG-fueled ferries  
Convened by the Joint Transportation Committee**

August 30, 2012, 1:00 PM, BC Ferries Headquarters, Victoria, British Columbia

Attendance:

**British Columbia:** Mike Corrigan, CEO, BC Ferries; Mark Collins, VP Engineering, BC Ferries; Bruce Paterson, Fleet Technical Director, BC Ferries; Alex Izett, Terminal Construction, BC Ferries; Kevin Richter, Assistant Deputy Minister, BC Ministry of Transport and Infrastructure;

**Washington State:** David Moseley, Chief, WSF, and George Capacci, Deputy Chief, WSF Operations and Construction; Senator Tracey Eide; Representative Jeff Morris; Beth Redfield, JTC Staff; Mary Fleckenstein, JTC Staff; Hayley Gamble, Senate Transportation Committee Staff; Alison Hellberg, House Transportation Committee Staff

SUMMARY

The two ferry systems discussed their separate **procurement** programs at some length.

BC Ferries is entering the 2<sup>nd</sup> phase of its procurement program: looking at 7-8 new ferries in the next decade to address its aging fleet. During phase 1, built the first ferries built outside of BC in BC Ferries history. BC Ferries intends to continue with international competitive procurement.

The BC Vessel Replacement Program is based on a standardized platform for intermediate class of vessels, accommodating a varying range of sizes. This model allows shipyards to rebuild capacity, skilled labor supply, and economies of scale for all inputs.

Transport Canada/U.S. Coast Guard different regulatory regimes create issues between the two systems.

At last procurement, didn't get any proposals from US shipyards; could take advantage of NAFTA and lack of duties. BC Ferries expressed an interest in Vigor participating in future competitive vessel procurements.

Washington State Ferries vessel replacement program: need to replace 9 vessels in next 20 years.

The next round of WSF procurement is scheduled to begin 2026. It is likely that the current 144-car design will be the base, but would probably be modified to reflect LNG, US Coast Guard changes, other new technologies.

Heard common interest in standardized vessel platform and a predictable construction program. Also heard that BC is open to working with US shipyards, but they would need to participate in the competitive process.

Both systems view **liquefied natural gas** as an important fuel cost savings strategy.

BC Ferries:

- Single fuel propulsion system
- Tight deadlines. Retrofits must be done at same time as mid-life update to pencil out.
- Will be looking to Quebec to observe operational experience. STQ Ferries (Quebec ferry system) has a 3 new LNG vessels planned, with one of these under contract.
- Transport Canada (Canadian counterpart to US Coast Guard) has been OK with the technical aspects of the LNG proposal, still has concerns about training and certification.

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WSF:

- Currently working on the safety and security plan, have 5 proposals currently evaluating.
- Issuing an RFP for design and rebuild for the Issaquah's propulsion system.
- USCG has conceptually approved LNG retrofit. Has not yet approved a new build with tanks below decks.

Heard a common interest in regulatory alignment between Coast Guard and Transport Canada, innovations to reduce the cost of LNG retrofits, incentives to shipyards to innovate.

Background

BC Ferries has 3 lines of business: Major routes serving Mainland to Vancouver Island traffic, Gulf Islands services (smaller vessels), and Northern service (more like Alaska Inland Passage service).

BC Ferries has 35 vessels (no standby in Summer, spare capacity in Winter), 47 terminals, operates 25 routes, 184,000 sailings, carrying 20 million passengers and 7.8 million vehicles. In comparison, WSF has 23 vessels (including the Rhododendron), 20 terminals, operates 10 routes, 163,000 sailings, carries 22.3 million passengers and 10 million vehicles.

As a quasi-private entity, BC Ferries must satisfy its contract with the Province. The Coastal Ferry Act established performance requirements, established a vision that the user should pay, allowed profitable routes to reinvest profits, provided a set public subsidy to support the non-profitable routes, created an independent regulator/Commissioner who sets a system-wide price cap and must approve capital expenditures that will be recovered by fare revenue.

Fare increases have gotten to the point the Transportation Ministry has asked the Commission to examine service reductions. The Province will lead the public consultation.

Procurement Programs

The two ferry systems discussed their separate procurement programs at some length.

BC Ferries is entering the 2<sup>nd</sup> phase of its procurement program: looking at 7-8 new ferries in the next decade to address its aging fleet. During phase 1, they contracted for the first ferries built outside of BC in their effort to get the best bang for their buck. A German shipyard was the successful bidder.

Life cycle target is 40 to 50 years.

BC used the contract for the German-made vessels as the base for the Island Sky (built by Washington Marine Group, a BC shipyard). Island Sky carries 125 vehicles, budget came in at \$54 million. (Compare to 2<sup>nd</sup> 144-car ferry budgeted at \$130 million).

Importance of a partnership with shipyards: Canada is spending billions on a national shipbuilding program, this is helping to revitalize Canadian shipyards. BC Ferries works with smaller shipyards on environmental, financial,

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and worker safety requirements. All concerned want to keep a local repair capability. With predictable work, local yards may be able to tackle a series of smaller vessels. Shipyards don't invest their own funds upfront to modernize; instead they typically build the costs into the contracts.

The BC Vessel Replacement Program is based on a standardized platform for intermediate class of vessels, accommodating a varying range of sizes. This model allows shipyards to rebuild capacity, trained tradesmen, economies of scale for all inputs.

Transport Canada/U.S. Coast Guard different regulatory regimes create issues between the two systems. TC follows international classing systems; Safety of Life at Sea (SOLAS)-based. USCG does not require SOLAS. Accepts international classing requirements, but with many amendments. Acceptance of class rules would create more cross-border opportunities. (The requirement for SOLAS would drive additional costs for WSF.)

At their last procurement, BC Ferries didn't get any proposals from US shipyards; could take advantage of NAFTA and lack of duties. BC Ferries expressed an interest in Vigor participating in future competitive vessel procurements.

WSF vessel replacement program: need to replace 9 vessels in next 20 years. Recently have constructed 3 64-car vessels with Todd/Vigor and proceeding with 2 144-car vessels (the "Olympic Class") with Vigor. Need another Olympic Class vessel to complete replacement of all three Evergreen State vessels.

The next round of procurement is scheduled to begin 2026. It is likely that the current 144-car design will be the base, but would probably be modified to reflect LNG, US Coast Guard changes, other new technologies. WSF doesn't want to replicate the 7-year design process leading to the Olympic class.

Other opportunities:

- WSF had the scheduled dry dock on the MV Puyallup done at Vancouver Shipyard, because no shipyard able to lift the vessel was available in the U.S. BC Ferries has hammered out a process for BC vessels to have preservation work done in US, have not actually done this yet.
- Heard common interest in standardized vessel platform and a predictable construction program. Also heard that BC is open to working with US shipyards but would need to participate in their competitive process.

Liquefied Natural Gas

Both systems view natural gas as an important fuel cost savings strategy.

BCF was approached by natural gas producers, which see targeting transportation as a growth industry. With increasing availability of shale gas, the industry needs to develop markets. Main supplier is Fortis, a regulated utility (passes on cost of gas, distribution costs regulated). Some dispute about whether Fortis would pass on price shocks or not. WSF believes there will be cost increases for LNG due to increased regulation associated with hydraulic fracturing ("fracking").

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Working with Rolls Royce to explore a test case of retrofitting the Queen Capilano (QCAP). Rolls proposes a single fuel propulsion system. Meeting BCF timelines is important. QCAP is due for a mid-life update, would need to do the retrofit at the same time or would incur certain one-off costs two times. Cost for retrofit estimated at \$12 million (Can), increases to \$19M if not with mid-life update. Vendor needs lead time of 12-14 months, then installation would take 4 months. Wartsilla also included in some discussions, similar timeline issues presented.

A fair amount of discussion about single fuel vs. dual-fuel propulsion system: WSF wants dual-fuel for redundancy purposes and to mitigate potential fuel cost increases for natural gas (regulatory). BCF views that as too costly, would have to continue to maintain two propulsion systems. Other relief vessels could fill in. Have always used a single fuel: diesel.

Transport Canada has been OK with the technical aspects of the LNG proposal, still has concerns about training and certification.

With the deferral of the QCAP retrofit, would lose the operating experience to incorporate into a new build with LNG. Will have to look at the experience in Quebec (current procurement for a new LNG-powered vessel). Retrofits of QCAP, Spirit class and new builds with LNG would all come on line at the same time.

BC: Retrofits would have tanks on top to avoid ripping up the hull. New builds would have tanks below decks.

WSF: Currently working on the safety and security plan, have 5 proposals currently evaluating. Also issuing an RFP for design and rebuild for the Issaquahs' propulsion system. Will find out if there is a consortium to work on retrofits.

USCG has conceptually approved LNG retrofit. Has concerns about new build with tanks below decks.

**Rep. Morris Concluding Remarks**

- Look at consistent fueling infrastructure approach in AK, BC, WA.
- Need a wider discussion, BNSF looking at this, Tote also looking at this.
- More info sharing on used vessels
- Great idea to send preservation and maintenance work across the borders.
- Push for innovation and up-front re-tooling at shipyards.
- Joint designs for upland infrastructure
- Regulatory agencies should be encouraged to talk to one another.