



**Bull, Houser  
& Tupper** LLP

**TRANS MOUNTAIN (JET FUEL)  
TOLLS & ACCELERATED DEPRECIATION**      **EXHIBIT C2-4**

3000 Royal Centre . PO Box 11130  
1055 West Georgia Street  
Vancouver . BC . Canada . V6E 3R3  
Phone 604.687.6575 Fax 604.641.4949  
www.bht.com

Reply Attention of:	David Bursey
Direct Phone:	604.641.4969
Direct Fax:	604.646.2563
E-mail:	DWB@bht.com
Our File:	97-2685
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BC Utilities Commission  
6<sup>th</sup> Floor – 900 Howe Street  
Vancouver, BC V6Z 2V3

**Attention:** Erica M. Hamilton

Dear Sirs/Mesdames:

**Re: Trans Mountain (Jet Fuel) Inc. (“TMJ”) Application for Approval of Tolls and Accelerated Depreciation under section 7 of the *Pipeline Act***  
**Project: 3698466/Order P-2-07**

Attached is the evidence of Vancouver Airport Fuel Facilities Corporation.

Yours truly,

Bull, Houser & Tupper LLP



David Bursey

cc. Trans Mountain (Jet Fuel) Inc.  
Chevron Canada Limited

DWB/1569079

**Trans Mountain (Jet Fuel) Inc. (“TMJ”)**  
**Application for Approval of Tolls and Accelerated Depreciation**  
**under section 7 of the *Pipeline Act***  
**Project: 3698466 / Order P-2-07**

**VANCOUVER AIRPORT FUEL FACILITIES CORPORATION**

**Written Evidence**

**5 October 2007**

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## 1. OVERVIEW

The Vancouver Airport Fuel Facility Corporation (“VAFFC”) is filing this evidence to give its perspectives on the filing by Trans Mountain Jet Fuel Inc. (“TMJ”). VAFFC represents the airlines who purchase fuel that is shipped on the TMJ Pipeline. The airlines are the downstream market for the TMJ system.

VAFFC’s evidence outlines:

- VAFFC’s facilities and operations;
- its assessment of the current and long-term requirements, and its related long-term planning to meet the requirements; and
- its relationship with TMJ and the TMJ Pipeline the context of VAFFC’s planning.

VAFFC is providing what information it reasonably can to assist the Commission in its review of the TMJ application, but much of VAFFC’s current planning is preliminary in nature. As a result, certain aspects of VAFFC’s plans are commercially-sensitive and VAFFC must be cautious not to disclose such information.

For the reasons explained in this evidence, VAFFC submits the Commission should dismiss this Application as premature, with leave to TMJ to reapply when the future of the pipeline and the other options available to VAFFC are better understood.

## 2. DESCRIPTION OF VAFFC

VAFFC is a not-for-profit corporation that is owned and operated for the benefit of a consortium of commercial airlines to share common fuel facilities at Vancouver International Airport (“YVR”). Similar fuel facility corporations operate at other major airports across Canada – i.e. Calgary, Edmonton, Winnipeg, Ottawa, Toronto, Montreal and Halifax. The shared fuel delivery system avoids duplication of facilities at the airports and efficiently coordinates fuel delivery for the airlines, thereby minimizing costs.

The members of VAFFC include almost all of the domestic and international airlines that operate at YVR. A list of the current members is attached as Appendix A.

VAFFC's fuel facilities at YVR include a fuel tank farm for storage and a pipeline system to receive fuel into the storage tanks and to transfer fuel into aircraft. The VAFFC fuel facilities are the sole fuel delivery system serving the YVR's main terminal so VAFFC provides fuel delivery service to all airlines using the main terminal. VAFFC also provides fuel delivery service to many of the smaller airlines who operate from YVR's south terminal.

Each airline purchases fuel separately for its own use and arranges delivery of its fuel to the VAFFC system. The airlines own the fuel inventory within the VAFFC system according to their deliveries into the system. The airlines then use the jointly-owned fuel VAFFC facilities to handle the fuel at YVR. VAFFC manages the delivery, storage and distribution into aircraft of each airline's jet fuel purchases and deals with the associated regulatory matters on behalf of the airlines.

The co-operative ownership structure avoids unnecessary duplication of fuel infrastructure which makes it cost-efficient. The cost of operating the system is shared among the member airlines. Non-member airlines receive fuel delivery service from VAFFC on a fee-for-service basis.

VAFFC's facilities at YVR are interconnected to the TMJ Pipeline at the downstream outlet from TMJ's tank farm at YVR. VAFFC is not a shipper on the TMJ Pipeline; individual airlines are.

### **3. CURRENT FUEL DELIVERY SYSTEM TO YVR**

Currently, aviation fuel is supplied to YVR primarily by TMJ's Pipeline, supplemented by truck deliveries.

#### **3.1 TMJ's Aviation Fuel Pipeline**

Approximately 70% to 80% of the fuel required at YVR is delivered via TMJ's Pipeline. The fuel shipped on the TMJ Pipeline originates from the Chevron refinery in Burnaby or marine imports from other refineries.

Fuel barges and tankers from off-shore refineries travel through the Port of Vancouver to TMJ's Westridge Terminal on Burrard Inlet. The fuel is offloaded into TMJ's storage tanks at Westridge. Those tanks were originally constructed to store propane. Subsequently, the tanks were adapted to store other petroleum products including aviation fuel. From the Westridge Terminal, the fuel is shipped through the TMJ Pipeline back to YVR.

### **3.2 Truck Deliveries**

The balance of the aviation fuel required at YVR is delivered by truck. Individual airlines make these arrangements as required. Up to 30 tanker trucks a day supply fuel to YVR from refinery and storage facilities located near Cherry Point in Washington State.

### **3.3 Fuel Storage at YVR**

Total tank storage capacity at YVR is approximately 20 million litres (TMJ with 7.2 million litres and VAFFC with 12.8 million litres). However, the full storage capacity is never reached since several of the tanks are always in use either receiving or delivering fuel. The working assumption used by VAFFC for planning purposes is that the VAFFC tanks operate at 75% capacity and the TMJ tanks at 50% capacity. Therefore, VAFFC estimates that the two storage facilities have a total practical storage capacity of approximately 13.2 million litres (TMJ with 3.6 million litres and VAFFC with 9.6 million litres).

## **4. FORECAST FUEL DEMAND**

From 1992 to 2006, passenger traffic at YVR increased from 9.9 to 16.9 million passengers/year (71%) and cargo traffic increased from 144,000 to 222,900 tonnes (55%). Passenger traffic and fuel consumption have shown a strong correlation in the past so VAFFC studies the passenger growth forecasts to assess the future fuel consumption pattern.

In 2007, the Vancouver International Airport Authority ("VIAA") forecasts that YVR will serve 17.5 million passengers and handle 227,000 tonnes of cargo.<sup>1</sup> The growth trend is expected to continue beyond 2007. Based on VIAA's passenger traffic forecast, VAFFC expects the fuel consumption will increase correspondingly. A chart outlining the forecast supply and demand for aviation fuel based on passenger growth is attached as Appendix B.

If the growth trend continues as currently expected, the combined delivery capacity of the TMJ Pipeline and the current daily number of tanker trucks will be insufficient meet the demand by 2010. The following analysis elaborates.

The critical component of the fuel delivery system is the ability to meet the peak daily demand. The months of July and August are traditionally the peak demand months at YVR. During the summer months of 1996, the TMJ system was operating at peak capacity but could not meet

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<sup>1</sup> YVR website, statistics publication July 2007.

the aviation fuel demand at YVR. Several airlines had to supplement fuel sources by trucking fuel.

Again in 1998, YVR's peak demand exceeded the TMJ pipeline maximum capacity. Shortly afterwards, TMJ upgraded certain pumping units on its pipeline, which in turn increased the sustainable capacity.

The current "sustainable daily supply" at YVR is 5.25 million litres/day, with 4.5 million litres supplied by the TMJ Pipeline and 0.75 million litres supplied by tanker truck (approximately 25 trucks/day). That delivery capacity combined with the combined "practical" storage capacity at the TMJ and VAFFC tank farms at YVR of 13.2 million litres provides for 2 to 2.9 days of stored fuel at YVR on average throughout the year. At peak traffic times (July and August), the storage capacity is about 1.5 days, which is insufficient. VAFFC believes a 4-day storage capacity at YVR is required for the current delivery system.

Average fuel consumption in 2006 was 3.7 million litres/day. However, average fuel consumption at YVR for the peak month in 2006 was 4.4 million litres/day, with peak day consumption close to 5 million litres/day. If the TMJ Pipeline were the sole means of fuel delivery, it would already be reaching the limit of its peak capacity during peak demand periods. The additional fuel delivered by truck allows the peak demand to be met without reaching the limit of the TMJ Pipeline capacity.

Looking into the future, VAFFC has concerns about the viability of continuing the use of tanker trucks as a permanent solution to supplement the expected shortfall in fuel delivery capacity. Tanker truck delivery is economically less efficient than pipeline delivery, less reliable and more prone to human error. It is also less preferable from a societal perspective, since it increases highway traffic, places additional wear and tear on the highway system infrastructure and increases atmospheric emissions relative to pipeline or marine modes of transport. However, phasing out the truck delivery is not viable until a better solution is developed.

A further limiting factor relates to the supply options that airlines can access through the TMJ Pipeline. Chevron produces a limited supply of aviation fuel, and it is not expected to increase its level of production in the future. Westridge Terminal offers limited opportunity to import fuel from offshore so long as storage is available at the Westridge Terminal. The Westridge Terminal is not part of the TMJ Pipeline.

## **5. PLANNING FOR FUTURE GROWTH**

Reliable delivery of aviation fuel is essential to airline and YVR operations. The fuel delivery infrastructure must also be efficient and economic to ensure the financial viability of the airlines and the competitiveness of YVR.

Fuel costs are typically the largest cost component of airline operations. The airlines and VAFFC must continually look forward to plan the fuel delivery infrastructure to match future growth. VAFFC's long-term planning is also co-ordinated with VIAA's Master Plan since the fuel delivery system is an essential part of YVR's broader infrastructure and operation.

The existing fuel delivery infrastructure is inadequate to meet future fuel demands which are increasing with the rapid growth of airline traffic at YVR. Access to competitive sources of fuel supply, particularly offshore, is increasingly important to the airlines. The aviation fuel market has become truly international. Since YVR is situated on tide water, marine transport offers a broad range of access to fuel supply sources and figures prominently in the long-term planning of fuel delivery to YVR.

The existing fuel delivery infrastructure to YVR was built during a time when aviation fuel was refined locally and the market was less complex than today. To be viable in the future, the infrastructure must adapt to the increasing and changing demands. Accordingly, VAFFC has been reviewing all modes of transport – pipeline, truck, train and marine – to determine the best fuel delivery options for the long-term.

### **5.1 Fuel Delivery Options**

VAFFC regularly assesses its fuel supply options as part of its on-going planning. In 2001, VAFFC began its current investigation of the alternatives for supply of fuel to the airport and to develop a list of possible alternatives for further review. VAFFC met with YVR on a regular basis to discuss its concerns regarding fuel supply and its progress in identifying the possible alternatives. VAFFC has also met with TMJ several times since 2003 to advise TMJ that VAFFC is considering alternatives and to request information on the future expansion potential of the TMJ Pipeline.

The main alternatives VAFFC is currently investigating for supply of fuel to the airport are:

- increasing TML Pipeline capacity by replacing or “twinning” the existing pipeline;



- delivering aviation fuel directly to Sea Island by ocean tankers or barge; or
- delivering aviation fuel to an offloading terminal and fuel tank facility on the north shore of the main arm of the Fraser River for delivery by a connecting pipeline system to the airport.

Since each of these options involve a significant investment in fuel delivery infrastructure, VAFFC is considering all reasonable options to ensure that the airlines invest in the optimal solution for the long-term. At this time, however, the investigation and planning are still in the preliminary stages and VAFFC has not determined a final option. Much work is necessary before any one of the options can be developed into a project that can proceed.

Significant regulatory approvals are required for either of the alternatives to the TMJ Pipeline to proceed. Further, TMJ has advised VAFFC that it will oppose any alternative. TMJ's opposition may frustrate either of these options which would eliminate any basis for their current application. If TMJ really believes its pipeline has reached the end of its economic life, it has no reason for it to oppose alternative sources of supply.

Even if one of the alternatives to the TMJ Pipeline were to proceed, the TMJ Pipeline would have a role in the future, for example:

- the tank farm site at YVR could be integrated into future development to optimize the storage opportunity at YVR;
- Chevron will continue to produce jet fuel in the future and will need the means to serve its customer airlines; and
- the timing and the extent of the transition to the new delivery system is uncertain. Airlines who see value in TMJ delivery option may wish to use the TMJ pipeline into the future.

## **5.2 Discussions with TMJ**

VAFFC represents the airlines' interests in TMJ regulatory proceedings. VAFFC attends the periodic shipper meetings that TMJ convenes and participates in BCUC proceedings involving the TMJ Pipeline.

In recent years, it has been apparent to VAFFC that TMJ's level of interest in this pipeline operation has been decreasing. TMJ has held few shipper meetings and has filed its recent toll applications (2003 to 2006) long after the tolling year has commenced. VAFFC has expressed its concern to TMJ and the BCUC about the late filings and how interim toll adjustments are difficult for the airlines to manage after business has been transacted in the market. Nonetheless, TMJ's pattern of filing its toll applications later has continued.

As early as March 2002, TMJ advised VAFFC and the TMJ shippers that it was interested in withdrawing from the TMJ Pipeline operation and selling the pipeline. TMJ has also indicated to VAFFC that it would consider abandoning the pipeline operation if no suitable arrangements could be made. VAFFC took these advisory notices from TMJ into account in its long-term planning and assessment of options.

VAFFC met several times with TMJ representatives over the last few years to review the options to deliver fuel to YVR and to consider TMJ's role in the future delivery of fuel to YVR. In those discussions, VAFFC reviewed the range of options it was considering and asked for information on TMJ Pipeline expansion scenarios to assess the viability and competitiveness of the TMJ Pipeline as an option. VAFFC has also had discussions with TMJ regarding the sale of the TMJ Pipeline.

In May 2006, TMJ presented a brief (one page) outline of a long-term tolling proposal to shippers. VAFFC and the shippers responded with initial comments at the meeting. Shortly afterwards, VAFFC sent TMJ a memo to express its interest in exploring the concept. The memo set out the airlines' interests to assist TMJ in developing the details of the concept for consideration. TMJ did not respond further, until this current application to accelerate the depreciation rate underlying the tolls.

In its discussions with TMJ on the future of the TMJ Pipeline, VAFFC has expressed its interests in finding a long-term solution. VAFFC has also explained that a TMJ solution must be competitive with other infrastructure options. To date, TMJ has not proposed a reasonable solution. TMJ has, however, threatened to oppose any option that VAFFC pursues that is an alternative to the TMJ pipeline.

## **6. CONCLUDING COMMENTS**

The airline industry is competitive and constantly under significant cost pressure. A safe, reliable and cost-effective fuel delivery infrastructure is essential to the operation of the airlines and YVR. VAFFC has responded to the clear messages from TMJ about its desire to withdraw from this pipeline operation by taking TMJ seriously. VAFFC has been exploring all its options to find the best solution for the long-term.

VAFFC has developed other options for consideration, but those options are still in the preliminary stages of planning and subject to significant uncertainty. VAFFC will continue to move forward expeditiously, and will consider all reasonable options that meet the airlines' interests.

If the Commission grants TMJ's application, then TMJ will have no motivation to find a commercial solution that is reasonable for the airlines and Chevron which will make the abandonment of the pipeline almost inevitable. This is not necessarily in the public interest. TMJ has demonstrated its lack of interest in this operation for years and now seeks to be protected from all financial risk. The situation calls for TMJ to look for innovative ways to create value and to assist in finding a solution rather than simply asking the Commission to protect it from a competitive risk that TMJ helped create.

For these reasons, the Commission should dismiss this Application as premature, with leave to TMJ to reapply when the future of the pipeline and the other options available to VAFFC are better understood.

**Appendix A**  
**VAFFC Members**

Air Canada  
Air China International Corporation  
Air North Charter & Training Ltd.  
Air Transat A.T. Inc.  
Alaska Airlines, Inc.  
America West Airlines, Inc.  
American Airlines, Inc.  
British Airways PLC  
CargoJet Canada Ltd.  
Cathay Pacific Airways Limited  
China Airlines Ltd.  
Continental Airlines Inc.  
Delta Air Lines, Inc.  
Deutsche Lufthansa AG  
Eva Air Corporation  
Globespan  
Harmony Airways Inc.  
Japan Airlines Company Limited  
Jazz Air Limited Partnership  
KLM (Koninklijke Luchtvaart Maatschappij n.v. )  
Korean Air  
Northwest Airlines, Inc.  
Oasis Airlines  
Philippine Airlines, Inc.  
Singapore Airlines Limited  
Skyservice Airlines Inc.  
United Air Lines, Inc.  
Westjet  
Zoom Airlines Inc.

**Appendix B**

**Forecast Aviation Fuel Demand Based on Passenger Growth**

	YVR Historic and Predicted PAX		VAFFC Annual Fuel Usage Based on Predicted PAX Growth		Annual Fuel Supply Capacity	Monthly Fuel Supply Capacity	Max Monthly Fuel Demand
	PAX	% Change	Fuel Volume [L]	Fuel % Change	Fuel Volume [L]	Fuel Volume [L]	Fuel Volume [L]
1990	9,912,429	0.00%	811,943,000	0.00%	1,733,750,000	147,250,000	82,087,437
1991	9,387,681	-5.29%	810,814,000	-0.14%	1,733,750,000	147,250,000	81,973,295
1992	9,935,285	5.83%	843,246,540	4.00%	1,733,750,000	147,250,000	85,252,225
1993	10,235,015	3.02%	824,298,179	-2.25%	1,733,750,000	147,250,000	83,336,546
1994	10,830,796	5.82%	910,444,349	10.45%	1,916,250,000	162,750,000	92,045,924
1995	12,006,973	10.86%	1,034,245,208	13.60%	1,916,250,000	162,750,000	104,562,191
1996	14,037,174	16.91%	1,227,819,295	18.72%	1,916,250,000	162,750,000	124,132,531
1997	14,818,564	5.57%	1,240,852,261	1.06%	1,916,250,000	162,750,000	125,450,164
1998	15,508,109	4.65%	1,310,879,194	5.64%	1,916,250,000	162,750,000	132,529,887
1999	15,806,499	1.92%	1,376,599,000	5.01%	1,916,250,000	162,750,000	139,174,159
2000	16,032,531	1.43%	1,412,322,000	2.60%	1,916,250,000	162,750,000	142,785,754
2001	15,476,762	-3.47%	1,337,837,171	-5.27%	1,916,250,000	162,750,000	135,255,338
2002	14,877,536	-3.87%	1,298,755,242	-2.92%	1,916,250,000	162,750,000	131,304,155
2003	14,321,504	-3.74%	1,221,993,273	-5.91%	1,916,250,000	162,750,000	123,543,520
2004	15,725,694	9.80%	1,374,738,874	12.50%	1,916,250,000	162,750,000	138,986,100
2005	16,400,000	4.29%	1,252,212,300	-8.91%	1,916,250,000	162,750,000	126,598,664
2006	16,900,000	3.05%	1,343,563,065	7.30%	1,916,250,000	162,750,000	136,057,744
2007	17,660,500	4.50%	1,333,969,069	-0.71%	1,916,250,000	162,750,000	140,018,671
2008	18,543,525	5.00%	1,400,667,522	5.00%	1,916,250,000	162,750,000	146,930,023
2009	19,656,137	6.00%	1,484,707,574	6.00%	1,916,250,000	162,750,000	155,745,824
2010	20,835,505	6.00%	1,573,790,028	6.00%	1,916,250,000	162,750,000	165,090,574
2011	21,877,280	5.00%	1,652,479,530	5.00%	1,916,250,000	162,750,000	173,345,103
2012	22,861,758	4.50%	1,726,841,108	4.50%	1,916,250,000	162,750,000	181,145,632
2013	23,776,228	4.00%	1,795,914,753	4.00%	1,916,250,000	162,750,000	188,391,458
2014	24,727,277	4.00%	1,867,751,343	4.00%	1,916,250,000	162,750,000	195,927,116
2015	25,592,732	3.50%	1,933,122,640	3.50%	1,916,250,000	162,750,000	202,784,565
2016	26,488,477	3.50%	2,000,781,932	3.50%	1,916,250,000	162,750,000	209,882,025
2017	27,283,132	3.00%	2,060,805,390	3.00%	1,916,250,000	162,750,000	216,178,485
2018	28,101,625	3.00%	2,122,629,552	3.00%	1,916,250,000	162,750,000	222,663,840
2019	28,944,674	3.00%	2,186,308,439	3.00%	1,916,250,000	162,750,000	229,343,755
2020	29,813,014	3.00%	2,251,897,692	3.00%	1,916,250,000	162,750,000	236,224,068
2021	30,707,405	3.00%	2,319,454,622	3.00%	1,916,250,000	162,750,000	243,310,790
2022	31,628,627	3.00%	2,389,038,261	3.00%	1,916,250,000	162,750,000	250,610,114
2023	32,577,486	3.00%	2,460,709,409	3.00%	1,916,250,000	162,750,000	258,128,417
2024	33,554,810	3.00%	2,534,530,691	3.00%	1,916,250,000	162,750,000	265,872,270
2025	34,561,455	3.00%	2,610,566,612	3.00%	1,916,250,000	162,750,000	273,848,438
2026	35,598,298	3.00%	2,688,883,610	3.00%	1,916,250,000	162,750,000	282,063,891
2027	36,666,247	3.00%	2,769,550,119	3.00%	1,916,250,000	162,750,000	290,525,807