

Trans Mountain’s Capacity 400,000 Barrels a Day When No Heavy Oil Shipped

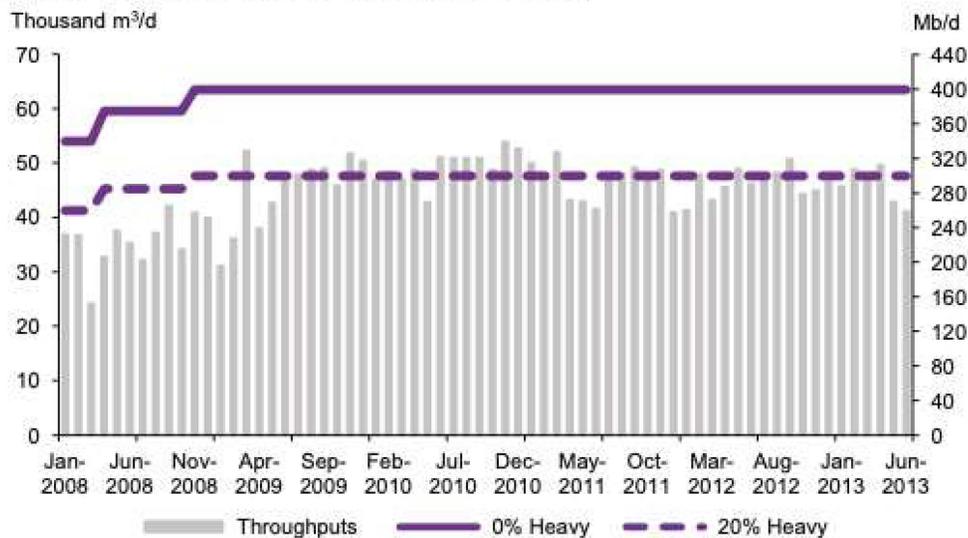
Submission by interveners Robyn Allan and Marc Eliesen on capacity issues discussed at the Oral Workshop, along with ITS 2010 filing, as requested.

According to documents Trans Mountain filed with the National Energy Board (NEB), and reports the NEB has released, the capacity on Trans Mountain is 400,000 barrels a day if no heavy oil is shipped.

The NEB’s Canadian Pipeline Transportation System states, “When heavy crude oil is shipped, it reduces the capacity of the pipeline. Figure A1.4 shows two capacities for the Trans Mountain pipeline; one assumes no shipments of heavy crude oil and the other assumes 20 percent heavy crude oil. Trans Mountain’s current capacity, assuming 20 percent heavy crude oil, is 47 600 m3/d (300 Mb/d).”¹

FIGURE A1.4

Trans Mountain Pipeline Throughput vs. Capacity



Source: NEB Canadian Pipeline Transportation System, page 17.

The NEB published an updated Canadian Pipeline Transportation System Report in April 2016, confirming that the capacity of Trans Mountain is a function of the amount of heavy oil shipped. “Trans Mountain’s capacity varies depending on the proportion of heavy and light crude oil transported.”

¹ NEB, [Canadian Pipeline Transportation System](#), Energy Market Assessment 2014, page 16.

In order to understand whether there had been a change in the capacity expectation—since Trans Mountain had informed the Board in its Incentive Toll Settlement filing for 2010 that if there were a change, it would notify the regulator—Robyn Allan wrote to the NEB.

Ms. Allan was advised by NEB staff on October 3, 2016 that the capacity of the pipeline was 400,000 barrels a day and that, “The difference between the two most recent Transportation Reports regarding capacity of Trans Mountain is simply that we did not state the **400 Mb/d capacity of Trans Mountain, which is its capacity if zero heavy crude is shipped**. We decided to just post the 300 Mb/d capacity which assumes 20% heavy crude throughput, in the most recent report. This capacity appears as a dashed line in the 2014 report chart.”² (emphasis added).

Therefore the relevant metric for evaluating the potential capacity on Trans Mountain for any given month is the proportion of heavy oil shipped. To estimate capacity available to capacity utilized, the data in the Incentive Toll Settlement 2010 Trans Mountain was relied upon,³ since it is the only detailed schedule of the relationship between proportion of heavy oil and capacity that, to our knowledge, is available.

In January, February and March of 2019, heavy crude shipped along Trans Mountain was 6,000 barrels a day as indicated in Table 1 below. This represents 2 percent at 300,000 barrels per day. When the proportion of heavy crude shipped is 2 percent, Trans Mountain’s 2010 ITS Schedule 26 A data indicates that capacity is approximately 386,000 barrels a day at 95 percent design capacity while ITS Schedule 26 B, puts the capacity at approximately 382,000 barrels a day.

Table 1

**Throughput Trans Mountain
January – March 2019
Thousands of Barrels Per Day**

2019	Refined	Burnaby Light	Washington State Light	Washington State Heavy	Westridge Dock Light	Westridge Dock Heavy	Total Shipped
January	38	63	208	0	6	6	321
February	31	63	214	0	13	6	327
March	25	63	182	6	13	0	289

Source: NEB Pipeline Profiles⁴

Given that Suncor and Imperial have advised the Panel that they need access to additional pipeline capacity to ship refined product because of its cost relative to rail or truck, and Suncor has advised the Panel that the nomination process is impeding the company’s ability to secure adequate capacity without paying higher tolls in the aftermarket, the

² [Affidavit of Robyn Allan](#), Trans Mountain Pipeline ULC Project, Application for Trans Mountain Expansion Project (OH-001-2014), November 17, 2017, NEB filing A5X1T4, page 35.

³ NEB, Trans Mountain Pipeline ULC, Methodology for Calculation of [2010 Incentive Toll Settlement](#), A1S1D0, ITS Shedule 26 and 27, April 11, 2010.

⁴ Pipeline Profiles, [Trans Mountain](#).

question that must be asked is whether the potential capacity on Trans Mountain is being utilized.

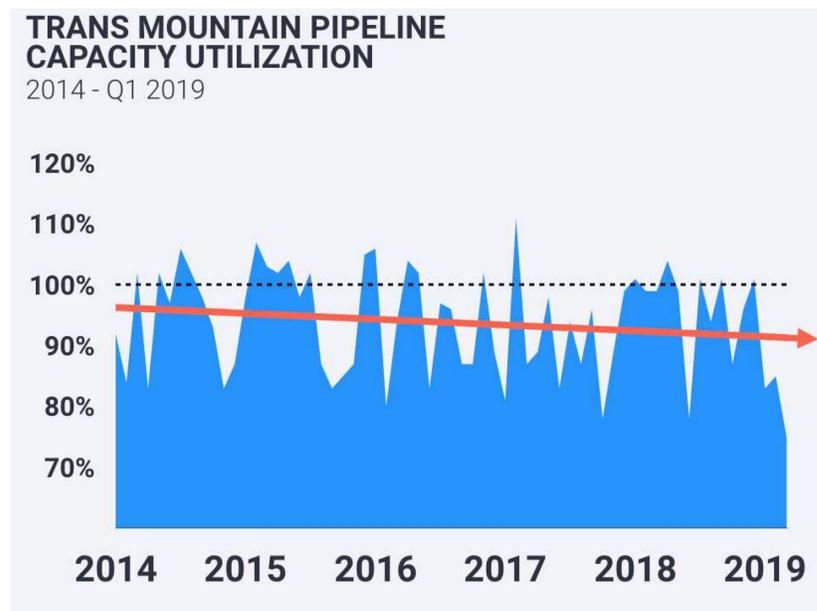
We have understood for some time that the verification process the NEB approved in 2015 institutionalized barriers to access to Trans Mountain at posted toll rates for refined product and light crude delivered to the Parkland refinery. Essentially, the verification process combined with the priority designation to the dock has resulted in greater access to capacity for Washington State refineries and long-term take or pay dock shippers than companies who rely on Trans Mountain to serve the BC market.

This is why it was deemed it useful to inform the Panel that capacity on Trans Mountain is a function of the proportion of heavy oil shipped and when no heavy oil is shipped capacity is 400,000 barrels a day.

Since there is relatively little demand for heavy oil to be shipped along Trans Mountain, and the proportion of heavy shipped rarely reaches 20 percent, it seemed that focussing a discussion of Trans Mountain's capacity on 300,000 barrels a day was misleading. The more appropriate focus is on the capacity as a function of the heavy oil shipped.

This is why detailed analysis relying on Trans Mountain's schedule in ITS 2010 that provides a source for the capacity as a function of heavy shipped was relied upon and compared against the actual volumes by type crude as provided in the Pipeline Profiles was undertaken. The analysis estimated capacity as a function of heavy crude shipped to estimate available capacity against utilized capacity.

The results of that analysis are provided in the Graph below, also submitted in the presentation at the Oral Workshop.



Source Trans Mountain ITS 2010 and Pipeline Profiles

The analysis reveals that the relationship between potential capacity and utilized capacity is deteriorating. The red trend line is a result of a mathematical calculation undertaken by the graphing program.

Since the most significant change regarding Trans Mountain's capacity utilization since 2015 is the introduction of a revised verification and nomination process it seemed prudent to examine the impact the process might have on not only restricting the transport of product to the BC marketplace, but also the role it might play in creating a situation where capacity is available but goes unused.

As shippers have become increasingly aware of the potential financial benefits from trading capacity rather than using it, it appears that the negative impact is not only on refined product shippers who have increasing difficulty securing capacity, but that potential capacity itself is becoming increasingly underutilized.

If the cost to transport refined product to BC is marginally higher because Suncor and Imperial must substitute rail for pipeline transport, but a revision to the nomination process would enable underutilized capacity to be utilized then it is the nomination process that must be addressed to assist the market to function more efficiently.

Even if there were not underutilized capacity, preferential treatment afforded through a flawed nomination process to Washington State refineries, and extensive opportunity for aftermarket windfall gains by traders with guaranteed dock access, at the expense of Alberta refiners and the BC refined product market, is not in the public interest.