THE1996/97 GRAIN TRANSPORTATION FAILURE: A HISTORY; A CRITIQUE; AND THE PERSPECTIVE IGNORED BY THE CTA

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I. Introduction

One of Charles Dickens's best known quotations, "The law is a ass,"[1] is uttered by Mr Bumble in *Oliver Twist*. Less well known, but far more biting, is Dickens's own comment in *The Old Curiosity Shop*, which he declines to put into the mouth of one of the novel's characters. "Lawyers are shy of meddling with the law on their own account," he wrote, "knowing it to be an edged tool of uncertain application, very expensive in the working, and rather remarkable for its properties of close shaving, than for its always shaving the right person." Dickens's was a court reporter for a daily newspaper early in his career, so arguably he knew whereof he spoke. One wonders, then, what he would have made of the Canadian Transportation Agency's (CTA) decision in the Canadian Wheat Board's (CWB) 1997 level of service complaint, filed in the wake of the very massive failure of the grain transportation system in the winter of 1996/97.

This paper reviews that failure and the CWB's complaint, discusses why the CTA's decision was so dramatically flawed, and presents a perspective on the breakdown that was submitted to, but completely ignored by, the Agency. The paper points out that what the CTA rejected became the basis for the recommendations made by former Supreme Court Justice, Willard Estey, in his 1999 review of grain

[1] Often slightly misquoted as "the law is an ass."

transportation, and argues that without those recommendations being implemented, the threat of future failures remains.

II. The Background

The winter of 1996/97, in the prairies and B.C., was a severe one by any standards. The CTA's decision quoted extensively from the report of Environment Canada's Gordon Anderson who called it "the winter of the century, with cold temperatures and record snow in Manitoba … cold temperatures across Saskatchewan and Alberta, and record rain and snow in southern British Columbia." November handed "[m]ost prairie locations … twice the normal snowfall," while December saw "cold temperatures with numerous blizzards on the Prairies" and "over a 150 avalanches" in the mountains with "snow in some slides over 20 metres deep." The coast had "heavy rains" in March "while the mountains received precipitation 300 to 700 percent of normal." To cap things off, "the 'blizzard of the century' hit southern Manitoba" in April, "paralyz[ing] Winnipeg for two days." Geotechnical engineer, Dr. Kenneth Savigny, corroborated the information on snow slides which he said "were widespread in the southern half of British Columbia during the late winter and early spring of 1997, primarily due to … heavy and locally record-setting snowpack that lasted well into the spring" (Canadian Transportation Agency, 1998, 18, 19; henceforth cited as CTA).

The decision also cited, with approval, a report by a senior grain industry official to an industry meeting on 13 February of 1997. From mid-December on, said the report, "weather related problems began to affect the system's ability to deliver cars to port," and continuing storms through January made "rail movement through the mountains … impossible." The report noted that the impact of such disruptions can last for weeks as the system backs up. "Mr. Measner, Executive Director of Marketing for the CWB," the decision noted, "was in agreement with [this] presentation" (CTA, 22, 23).

The evidence of Mr Anderson and Dr. Savigny, the CTA said, "amply demonstrate that the winter of 1996-19967 was a severe winter which seriously impacted rail operations," and declared itself

"satisfied that the overall capacity of [the] rail system was severely impaired" and as result "all traffic demands could not be satisfied."

Everyone knew, therefore, that grain movement had been delayed. The question the CTA faced was: who was responsible for the failure?

III. The CWB Complaint

On 14 April 1997, the CWB filed its complaint "pursuant to sections 113 to 116 of the *Canada Transportation Act*" seeking:

> an order requiring the Canadian Pacific Railway Company [CP] and Canadian National Railway Company [CN] to fulfill their service obligations for receiving, carrying and delivering grain traffic from western Canada to West Coast ports, Thunder Bay, eastern Canadian ports and to the United States during the winter of 1996-1997 (CTA, 4).

The CWB grievance, then, related to three separate traffic flows: the "regulated corridors" to Thunder Bay and Vancouver; the "winter rail program" under which grain moved to eastern ports when the Seaway was closed; and grain movement to the U.S. With respect to the regulated corridors, the CWB claimed, first, that unloads of grain at Vancouver "fell short of … established unload guidelines in respect of shipments to Vancouver for the period beginning December 2, 1996 until March 30, 1997" and at Thunder Bay, during "the period December 2, 1996 to January 5, 1997," and secondly, that grain was not provided "with a treatment consistent with that provided to other commodities during the period of complaint" (CTA, 5, 6).

The "guidelines" referred to were established by a body known as the Car Allocation Policy Group (CAPG). "Car allocation," which in the western grain industry refers to the entire process of logistics management, has been tightly regulated since WWII, and from roughly 1980 to 1995, the regulatory function was shared between the CWB and a government body that was consecutively called the Grain Transportation Authority (from 1980 to '84), the Grain

Transportation Agency (GTA) (1984 to '95) and the Western Grain Transportation Office (WGTO) (August 1995 to July '96). This heavy regulatory control stood in place of the normal commercial contracts that exist between shippers and carriers, and, as most players in the grain industry came to realise by the mid-1990s, was a major factor in the many problems and failures that had plagued the industry for most of the previous half century (Canada Grains Council, 1973; Earl, 2000).

The WGTO was established as a transitional body on the understanding that the GTA's regulatory role was to be taken over by the grain industry – the establishment of CAPG being the first step in that transition. This body was expected to exist only up to the year 2000, with "shippers and railway [sic] … moving progressively towards direct commercial relationships and shipper/carrier accountabilities" (CTA, 10).[2] A major part of CAPG's function was to collate sales and rail capacity information and, on the basis of this information, project grain movement for the upcoming four month period. This information was published in its "Four Month Plan," which was updated monthly and contained the unload guidelines that were not met. Over the 17 week period from 2 Dec. 1996 to 30 Mar. 1997, the Four Month Plan had called for a total of 34,185 unloads by CP at Vancouver grain terminals, whereas the actual unloads achieved were 22,829 – 67% of what was allegedly required (CTA, 15).

The CTA analysed the three traffic flows separately, and examined the matter of inconsistent treatment only with respect to the movement of grain to Vancouver.

IV. The Process

The filing was immediately followed by a spate of legal wrangling and negotiation among the parties. CP challenged the CTA's jurisdiction over certain aspects of the complaint, and both railways sought removal of the CWB's solicitors on a conflict of interest charge. It was almost a year, therefore, before the Agency's hearing

[2] Quoted by the CTA from CAPG's terms of reference.

commenced in Saskatoon, Saskatchewan, on 30 March 1998. Then, on 17 April 1998, just over two weeks into the hearing, CN reached an out-of-court settlement with the CWB, leaving CP as the sole defendant. The Saskatoon hearings lasted until 28 May 1998, and then reconvened in Ottawa on 4 and 5 June for final arguments. The final decision was published on 30 September 1998, nearly 18 months after the complaint was first lodged with the Agency.

The CTA decision lists a total of eight lawyers who appeared during the hearing, four for the CWB, three for CN, two for CP and one for the government of Saskatchewan. The other witnesses numbered 32. As Dickens observed, the law is "very expensive in the working."

V. The Decision

The movement through the regulated corridors to Vancouver and Thunder Bay received the greatest amount of attention by the Agency, occupying over 18 of the decision's 40 pages, compared with approximately four pages each for the winter rail and U.S movements. For the latter two, the CWB's complaint was dismissed.

The complaint regarding the movement to Thunder Bay was likewise dismissed, in part because the complaint period was only five weeks" – an interval that the Agency described as a "snapshot" that was not "sufficiently broad to warrant a finding of breach of level of service obligation especially at a time when the evidence clearly demonstrates that severe weather conditions restricted railway operations" (CTA, 23). Moreover, the Agency noted, movement to Thunder Bay over a slightly longer time frame flanking the complaint period considerably ameliorated the effect of the shortfall.

This left only the Vancouver movement to be considered, and here the Agency's approach was perplexing indeed.

No one disputed that the unload guidelines were not met, nor that inclement weather was a factor. As the CTA panel put it:

> The Agency is satisfied that the overall capacity of CP's rail system was severely impaired as a result of … weather–related disruptions. As a consequence, all traffic demands could not be accommodated [nor] was it possible for CP to fully meet the unload guidelines (CTA, 23).

What can only be described as puzzling – and markedly so – is that, the CTA, after devoting many pages to analysing the CAPG targets, and "accept[ing] the unload levels … as constituting a reasonable determination of the level of service to be provided by CP" (CTA, 14) promptly ignored them, thus rejecting the CWB's first allegation, but without acknowledging that it did so. In its analysis of the Vancouver movement, therefore, the Agency considered only the CWB's second charge, *viz.* that grain had been treated unfairly in comparison with other commodities. Here it began with two statements made by the CWB's expert witness on rail operations. The first statement, quoted indirectly from his report, was that "no single analysis offers incontrovertible evidence of a bias against grain, but that taken together, the weight of the data leads to a conclusion that grain was considered by CP as a commodity that could be delayed without significant consequences to CP" (CTA, 24). This conclusion, as we will see, was quite accurate and actually pointed to the core of the real problems that led to the breakdown. The Agency, however, as is explained in section VII below, declined to consider why there were no "significant consequences" to CP to delay grain, nor what the implications of that conclusion should have been to its findings.

His second statement was quoted directly from his report: "If no priorization occurs when capacity to be allocated is reduced, each train type should maintain a relative percent of the total trains operated" (CTA, 24). Taking this statement as its starting point, the Agency conducted its own analysis of CP trains dispatched to Vancouver from North Bend, B.C., calculating the relative percentages of trainloads allocated to grain, coal, potash and sulphur. The analysis was performed week by week for a period of 34 weeks, commencing on 2 September 1996 and ending 27 April 1997. The period was broken into six parts of slightly differing length: the 13 weeks preceding the complaint period; four parts of 2, 4, 4 and 7

weeks respectively falling within the complaint period; and one part of 4 weeks following the complaint period. The results of this analysis are summarised in Table 1

TABLE 1				
TRAINS DEPARTING NORTH BEND BRITISH COLUMBIA, DESTINED TO VANCOUVER				
Grain	**Coal**	**Potash**	**Sulphur**	**Total**
Pre-complaint period (2 Sept. – 1 Dec. 1996; 13 weeks)				
246	414	78	56	794
31.0%	52.1%	9.8%	7.1%	100.0%
Complaint period (2 Dec. 1996 – 30 Mar. 1997; 17 weeks)				
245	475	106	74	900
27.2%	52.8%	11.8%	8.2%	100.0%
Post-complaint period (31 Mar. – 27 Apr. 1997; 4 weeks)				
82	152	33	21	288
28.5%	52.8%	11.5%	7.3%	100.0%

Source: Adapted from Table 3 in CTA, 25-27.

The more detailed breakdown of these numbers by week showed that grain's share actually dipped to approximately 24% in the period from 16 Dec. to 12 Jan. This drop in share was taken by the Agency as the basis for its final decision. "It is **clear**," it wrote, "that grain experienced a disproportionately low level of train service during the weeks 21 to 28" (CTA, 27, emphasis added). Accordingly, the decision said, "[t]he Agency finds the difference in treatment for grain to be unreasonable, in the circumstances" and "is of the view that this difference constituted a breach of CP's statutory duty" insofar as the company "failed to furnish adequate and suitable accommodation for the delivering of CWB grain to Vancouver" (CTA, 28, 29). In short, said the law, it was CP that was responsible for the delay – or using Dickens's metaphor, was the "right person" to be shaved.

VI. A Critique

One of the fundamental principles of transportation economics is that transportation is a derived demand, and the thing from which it is

derived is the demand for the products that are to be moved. In the case at hand, the actual demand for transportation of the four bulk commodities in Table 1 would have been derived from the sales made by the CWB and the private grain companies, and by the companies dealing in coal, potash and sulphur.

To support the CTA's contention that it was "**clear** that grain experienced a disproportionately low level of train service," therefore, would have required, at a minimum, a tabulation of the sales made by the CWB and other grain dealers, and by coal, potash and sulphur companies, and a determination as to whether the ratio of movement to sales for grain was lower than it was for the others. Further analysis might also have been necessary to determine the extent to which the companies deferred or cancelled sales, and whether such requirements fell more heavily on the CWB than they did on other shippers. Absent such an analysis, the position of grain vis a vis other commodities was anything but "clear."

The contention that was accepted by the Agency – that "when capacity to be allocated is reduced, each train type should maintain a relative percent of the total trains operated" – has no foundation in either transportation theory or practice of which the author of this paper is aware. Arguably, therefore, the CTA analysis failed to support its finding, and did not determine whether or not CP actually discriminated against grain shippers. The answer to that question will likely never be known. The law, therefore, certainly shaved close; whether it shaved the right person is another matter entirely, and one that was presented to the Agency but ignored in its decision.

VII. The Perspective Ignored

At least two of the witnesses before the hearings had a very different view of why the grain transportation system had failed so spectacularly. Although no one – not even the CWB – denied that weather had played a major role, it was increasingly accepted within the grain industry that the fundamental reason for failures like that of 1996/97 – which, be it understood, was only the most recent, if among the more spectacular, in a very long line – was the system's

reliance on regulation rather than commercial disciplines to move the right grain into position. While there had been scattered references to the negative effect of the regulation of logistics over the years (Canada Grains Council, 1973; Earl, 1983), it was not until the mid-1990s, after the grain transportation subsidies under the Western Grain Transportation Act (WGTA) had ended, and the elevator system, by sheer economic necessity, had begun its massive and long-delayed consolidation,[3] that there was widespread recognition that the logistics system had to become more commercial in nature. This became the central focus of the grain industry's Senior Executive Officer (SEO) Group that had been established at that time and had created CAPG with the terms of reference cited above, to move the industry "towards direct commercial relationships and shipper/carrier accountabilities."

It was precisely because of the lack of commercial disciplines and accountability that, as the CWB expert had said, grain movement "could be delayed without significant consequences to CP." However, the railways were not the only party which lacked the necessary incentives to fulfill its obligations. Bill Cooper, a Saskatchewan farmer and one of the two witnesses to present this alternate view to the Agency, pointed out how the CWB's price pooling system "discourages just in time delivery" of grain. "Why should I start my truck when it is minus 35 degrees?" he said. "The price is the same when it is plus 22 in June" (CTA transcript, 936). What both witnesses' comments point to is that without contractual obligations, with penalties and rewards, being imposed on the participants in the supply chain, neither farmers, country elevator managers, railways nor terminal elevators could be held accountable for failing to perform, and accordingly, the entire system was prone to breakdowns.

The Western Canadian Wheat Growers Association (WCWG) was the second witness to bring the real issues to the fore. The Association was in some ways uniquely positioned to place this

[3] The number of primary elevators shrank from 1578 in 1990 to 336 by the end of 2007 (Canadian Grain Commission).

argument before the Agency. To begin with, unlike the WGEA members, it did not have to be concerned about putting day to day operating relationships with the CWB in jeopardy by opposing it in its legal case. Secondly, although it was a farm organisation, it had within it people who were well versed in the problems that beset the transportation and handling system. WCWG President, Larry Maguire, for example, was a producer member of the SEO Group, and the author of this paper, who had spent almost a decade with the GTA, was the Association's policy advisor at that time. Farmers, moreover, are very familiar with country elevator operations and the way they, and the grain companies, interface with the transportation system. The WCWG therefore had both the relevant expertise and the freedom to present this case in a way that no other grain industry participant had.

The WCWG made two submissions to the Agency over the course of the proceedings. The first, dated 2 June 1997, and adumbrating the later WGEA position, stated that the CWB application started "from a false premise" that the 1996/97 breakdown could be attributed to any one party, or that any one party's responsibility could "be separately identified and quantified." The underlying problem, said the Association, was that "contracts, [with] clear and measurable performance obligations … do not exist" and thus "it is almost impossible to determine whether or not any organization has failed to perform." Instead, "the system operates through a 'command and control' system" in which neither "country handlers, carriers, terminal elevators … has sufficient information to carry out its task effectively" but are "required to respond to confusing signals, rather than having meaningful operational objectives against which performance can be measured." (All quotes from the WCWB submissions are from Western Canadian Wheat Growers, 1997.)

On 13 July, the WCWGs followed up with a second submission which examined each stage of the supply chain, from delivery by the farmer to loading to vessel at Vancouver, and described in detail "exactly how the system lacks accountability, how the lack of accountability affects system performance, and accordingly how and why it is so prone to failure."

For example, at the interface between the country elevator and the railways, the submission said, "the wrong grain is often loaded and placed enroute" because, "the elevator company … does not … have the primary responsibility for dealing with the carriers to get the right grain from origin to destination." Rather, the company's sole responsibility is "filling orders as they are received from the CWB." As a result, "if the wrong grain is shipped forward, the impact on sales is not the company's problem," nor could they solve it "since they do not know precisely what grain has to be at destination, nor when it has to be there."

Moreover, the submission continued, what is ordered each week is not necessarily what is shipped. Cars are not always spotted when they are supposed to be, thus creating a "consistent 'shortfall' of cars spotted against orders placed" and so "both the railways and the primary elevator operators … often have more orders to satisfy than cars to fill." While elevator managers are supposed to load cars in the same sequence that shipping orders are received, they do not always do so. Thus "[o]ut of order loading is not uncommon" and is "often done deliberately to clear unwanted stocks, or to ship non-Board[4] grains ahead of Board grains." The result was that "getting the right grain loaded and enroute … is often done ineffectively or incorrectly." And it was "the regulated and centralized system," said the submission, with its lack of clear contractual obligations and commercial disciplines, that allowed such violations to occur. Accordingly, "[w]hen the correct number of cars, loaded with the correct grain, are not placed enroute at the time required for grain to arrive to meet sales," it is impossible to say who is responsible: Is it "the CWB that placed the orders? The railways, who may not have placed cars immediately for every shipping order? … Or the elevator managers who may have loaded out of order or loaded the wrong grain?"

[4] Wheat and barley for domestic human consumption, and for export, are marketed by the CWB and are referred to as "Board grains." All others are marketed commercially and are referred to as "non-Board."

The Association compared this situation with non-Board grains where,

> companies know precisely what grain has been sold and when it must be at destination. They control the collection of the required … grain … into the primary elevators. … [They] know exactly what is required at destination [and] what is in the pipeline, and make day to day decisions to ensure [that it arrives] at the required time. Full accountability is created by the sales contract. If it is met, the company is rewarded, and if it is not, the company is in breach of contract with corresponding penalties. None of these disciplines is present in Board grains.

The submission examined each link in the supply chain in a similar way, showing how the regulated system blurred the lines of accountability, and made it impossible for the participants "to develop precise plans between shipper and carrier, specifying origins, destinations, and time frames" because individually they lacked the required information and responsibility. "The CWB can't do it, because it does not own or control the elevators. The carriers can't do it, because they must deal with two parties (shipper and CWB) instead of one (the shipper)." When the things go awry, and wrong grain arrived at terminals, there is "[n]othing which spells out performance standards" for the supply chain participants, and it is therefore impossible to know which of them failed to perform.

The Western Grain Elevator Association (WGEA) hinted very vaguely at the problem in their submission as well, but failed to articulate it with any degree of detail or force. The breakdown, it said, was "not the result of any one singular participant," but that "[w]eather, the difficulty of forecasting and an extremely bureaucratic system … all played a part" (CTA transcript, 1008).

One is tempted to interpret the Agency's stunning disregard of CAPG's unload guidelines as an indication that the WCWG submission caused it to reflect on the gap between the Four Month Plan and the operational reality, but there is not a scintilla of evidence in the decision that that was the case.

However, given the highly uncertain accountabilities that all these submissions pointed towards, an "uncertain application" of the law, as Dickens observed, is not surprising.

VIII. The Estey Inquiry

Three months before the commencement of the Saskatoon hearings, the federal government had appointed retired Supreme Court Justice, Willard Estey, to conduct "a comprehensive forward-looking review of the handling and transportation system for prairie grain" (Estey, 1). His final report came out three months after the CTA decision, so the two inquiries were therefore proceeding simultaneously. Their conclusions, however, could not have been more different.

Unlike the CTA, Estey saw that the real problem lay with the regulated system. In fact, he was even more specific, identifying "the proper role of the [Canadian Wheat] Board" as "the bedrock issue" facing his inquiry (Estey, 46). On this point, Estey had two positions placed before him. "The Board favours a consolidation of authority over the entire industry" with itself as "an expert body" acting as "'quarterback' for the entire physical system, from marketing and sales all the way back to the granary." On the other hand: "Most grain companies … and both railways, view the Board as properly confined to sales and marketing of Board grains, leaving inland transportation to a commercial, contract-based system." "The farmer/producer associations are divided on the question." However, he wrote, "most of the stakeholders believe the difficulties can be surmounted by introducing commercial and administrative reorganization to the field, incentives for efficiency, and pressure of penalties for breach of contract" (Estey, 2, 3, 11).

This laid the basis for what proved to be his two most controversial recommendations, *viz*., #13 which in part was that "the farmer as owner, or the [grain company] appointed by the farmer, be deemed the shipper of grain," and #14, again in part, "that the Board have no operational or commercial role in the handling and transporting of grain" (Estey, 54, 56).

In short, the "alternative view" that was placed before, and ignored by, the CTA, was considered by Estey not only to be the majority view within the grain industry, but also the correct view. The long-standing problems in the industry, of which the 1996/97 breakdown was only the most recent manifestation, were ultimately caused, not by weather or "breach of statutory duty," but by a system which lacked commercial arrangements specifying clear contractual obligations and penalties.

IX. In Conclusion

It was not, of course, the place of the CTA to make recommendations on grain transportation or marketing policy. However, is not clear why the entire complaint could not have been dismissed on grounds that, without commercial and contractual obligations, no reasonable metric existed on which to judge performance. Nor is it clear why the Agency adopted the position that grain deserved its pre-outage share of traffic when there is no evidence that it examined the sales information on which the relative shares ought to have been based.

The end result of the CTA exercise seemed to have been accurately predicted by Bill Cooper in his intervention. He was relatively restrained and diplomatic in the early part of his presentation, observing that "the Canadian Wheat Board complaint against the railways' level of service is far too narrow in scope and may well turn out to be a totally useless exercise." But as his argument unfolded, he became more direct. "[A]ny analysis of grain transportation … must include market policy and practices," he said, and "the launching of a level of service complaint against one segment of the industry without addressing these other issues is a waste of precious agricultural resources and will not move an extra tonne of grain" (CTA transcript, 932, 935, 945). In the end, he was proven correct. Arguably, the end result of the CTA case was that the physical failure of 1996/97 was followed by a regulatory and legal failure in 1997/98: "a useless exercise" and "a waste" of time, money and effort.

In the arcane world of grain, however, failure tends to follow on the heels of failure, and, just as, during the 1980s, the CWB "resisted the assembly of grain cars into solid trains," notwithstanding that "this was an efficient way of moving grain," and likewise "aligned itself with those that opposed a rapid rationalization of the system" (Kroeger, 2009, 98, 99), so it opposed (successfully) the implementation of Estey's key recommendations. Accordingly, the situation today remains virtually unchanged from 15 years ago.[5] And arguably, as long as the western grain industry continues to rely on a command and control system, and fails to move towards a system of commercial contracts, its logistics system will remain vulnerable, with the Damocles-like sword of the 1996/97-style failure suspended over its metaphorical head.

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[5] A former colleague in the grain industry apprised the author that, if he were to move back into the industry (from which he has been absent since 2003) it would take "a good six hours to catch up with the changes."