PUBLIC VERSION
CONFIDENTIAL MATERIAL HAS BEEN REDACTED

BEFORE THE
SURFACE TRANSPORTATION BOARD

CARGILL, INCORPORATED	)	
Complainant,	)	
v.	)	Docket No. 42120
BNSF RAILWAY COMPANY	)	
Defendant.	)	

OPENING STATEMENT
OF
CARGILL, INCORPORATED

CARGILL, INCORPORATED

By: John H. LeSeur
Peter A. Pfohl
Daniel M. Jaffe
Stephanie M. Archuleta
Slover & Loftus LLP
1224 Seventeenth Street, N.W.
Washington, D.C. 20036
(202) 347-7170

Attorneys for Complainant

OF COUNSEL:

Slover & Loftus LLP
1224 Seventeenth Street, N.W.
Washington D.C. 20036

Dated: August 25, 2011

TABLE OF CONTENTS

BEFORE THE
SURFACE TRANSPORTATION BOARD

CARGILL, INCORPORATED Complainant, v. BNSF RAILWAY COMPANY Defendant.	)	Docket No. 42120

OPENING STATEMENT
OF
CARGILL, INCORPORATED

Complainant Cargill, Incorporated ("Cargill") files this Opening Statement. This Statement contains two verified statements, one tendered by George Schember, Cargill's Vice President of Transportation and Logistics ("Schember V.S.") and one tendered jointly by Thomas D. Crowley, President of L.E. Peabody & Associates, Inc. and Robert D. Mulholland, a Vice President of L.E. Peabody & Associates, Inc. ("Crowley/Mulholland V.S."), along with Counsel's Argument.

PREFACE AND SUMMARY

Cargill is one of the nation's largest shippers of agricultural ("Ag") products.[1] Cargill ships a substantial portion of these products over the lines of the

[1] Ag products encompass Standard Transportation Commodity Codes 01 (Farm Products) and 20 (Food or Kindred Products).

Defendant BNSF Railway Company ("BNSF").

For many years, Cargill has been very concerned that the mileage-based fuel surcharges BNSF has been collecting on Cargill's Ag and non-Ag Other Freight ("OF") traffic[2] exceed BNSF's incremental fuel cost increases. Stated another way, Cargill has been very concerned that BNSF is using its fuel surcharge on its Ag and OF products as a profit center. Cargill brought its concerns to BNSF's attention and attempted to negotiate a fair commercial resolution. These discussions did not lead to a negotiated resolution.

Cargill proceeded to file its Complaint with the Board in the instant case ("*Cargill*") on April 18, 2010, alleging, *inter alia,* that BNSF's application of its mileage-based fuel surcharges on Cargill's Ag and OF traffic constituted an unreasonable practice because BNSF was collecting fuel surcharges that exceeded BNSF's actual incremental fuel cost increases on all BNSF AG and OF traffic subject to these surcharges, thus turning a cost recovery mechanism into an unlawful profit center.

The challenged fuel surcharges are set forth in Item 3375, Section B of BNSF Rules Book 6100-A ("Assailed Tariff Item" or "ATI").[3] In this Opening

---

[2] OF traffic consists of traffic, other than Ag traffic, subject to the challenged fuel surcharge.

[3] For movements occurring after January 1, 2011, the term Assailed Tariff Item also includes Item 3376, Section B in BNSF Rules Book 6100-A, which is the rebased version of Item 3375, Section B. Copies of the applicable BNSF tariff items constituting the Assailed Tariff Item are included in the accompanying electronic

Statement, Cargill presents detailed evidence confirming that BNSF is using the ATI as an unreasonable and unlawful profit center. Specifically, Cargill's opening evidence demonstrates that:

- The ATI sets the fuel surcharges for two BNSF mileage-based fuel surcharge programs: the program applicable to its Ag traffic and the program applicable to its OF traffic.

- Between 2006 and 2010, BNSF collected fuel surcharge revenues under the ATI that exceeded BNSF's actual incremental fuel cost increases on its Ag traffic by $440.4 million and on its OF traffic by $120.5 million. The combined overcharge is $560.9 million.

- This massive overcharge has occurred because the formula BNSF is using to calculate the fuel surcharges in the ATI is fundamentally flawed. These flaws include the use of the wrong "step functions" and the failure to properly utilize Highway Diesel Fuel ("HDF") price inputs.

- The ATI provides that for every four cent increase in HDF above a stated threshold HDF price ($1.25 per gallon between 2006 and 2010), a fuel surcharge of one cent per loaded car-mile applies, *i.e.*, a 1:4 step function. The correct step function for Ag traffic is a one cent increase per loaded car-mile for every 5.18 cent increase in HDF, *i.e.*, a 1:5.18 step function. The correct step function for OF traffic is a one cent increase per loaded car-mile for every 4.57 cent increase in HDF, *i.e.*, a 1:4.57 step function.

- {

  }

---

workpaper ("e-workpaper") file folders labeled "BNSF 6100-A, Item 3375" and "BNSF 6100-A, Item 3376."

- The ATI also is flawed because it uses the wrong HDF threshold price ($1.25 per gallon between 2006 and 2010) and incorrectly assesses a one cent per loaded car-mile fuel surcharge at the HDF threshold price level. The correct HDF threshold price is $1.298 per gallon and the correct starting point for the application of the first one cent per loaded car-mile fuel surcharge is the mid-point of the first step increment, *e.g.*, $1.324 HDF for Ag traffic: $1.298 + ($0.0518/2) = $1.324.

- BNSF's collections of fuel surcharges under the ATI on Cargill's regulated traffic between April 19, 2008 and December 31, 2010 exceeded the incremental fuel cost increases BNSF should have collected using reasonably calibrated fuel surcharges (*i.e.*, ones using the correct step function, the correct strike price, and the correct fuel surcharge start point) by approximately $29 million.

BACKGROUND

Cargill is an international provider of food, agricultural and risk management products and services. V.S. Schember at 1. Founded in 1865 as a single grain elevator, today Cargill employs over 131,000 people in 66 countries. *Id.* The company's headquarters are located in Wayzata, Minnesota.

Cargill is one of BNSF's largest shippers of agricultural commodities. Each year, Cargill tenders, and BNSF transports, thousands of Ag product shipments subject to the Assailed Tariff Item. *Id.* at 1. These shipments include common carrier shipments subject to the STB's regulatory jurisdiction, as well as shipments exempt from STB regulation.

Cargill also tenders, and BNSF transports, small volumes of OF traffic subject to the ATI. As with its Ag products shipments, Cargill's OF shipments subject to the ATI consist of both regulated and unregulated shipments. Between 2006 and 2010, Cargill paid over { } in fuel surcharges under the ATI.[4]

Like many shippers, Cargill has had longstanding concerns that BNSF and other rail carriers were using fuel surcharges as profit centers. These concerns were aptly summarized by the United States Department of Agriculture and the United States Department of Transportation in a recent joint study entitled, *Study of Rural Transportation Issues* (Apr. 2010):

> "There is considerable evidence that railroad fuel surcharges recovered more than the additional cost of fuel, artificially boosting railroad profits." *Id.* at ix.
>
> "Rail rates have increased rapidly since 2004 resulting in a surge of railroad profitability. The increase reflects not only increased rail costs, but aggressive pricing and over-recovery of fuel costs." *Id.* at 272.
>
> "Fuel surcharges are designed to allow railroad firms to recover the costs caused by abnormally high fuel prices; normal fuel costs have always been included in the rail rate determination. Fuel surcharges, however, have become profit centers for railroads." *Id.* at 520.

[4] *See* e-workpapers "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx," worksheet "Summary 0610 2mo," and "Fuel And Miles Summary w added calcs v1305 strike Other.xlsx," worksheet "Summary 0610 2mo."

Cargill first brought its concerns to the Board's attention in the *Fuel Surcharges* proceeding.[5] In that case, the Board found that rail carriers engaged in an unreasonable practice when they used their fuel surcharges as profit centers. Cargill supported the Board's finding in *Fuel Surcharges*, but over time became concerned that BNSF's mileage-based fuel surcharges on its Ag and OF traffic were not complying with this Board's directives.

In 2006, BNSF instituted two mileage-based fuel surcharges: one for its local and Rule 11 coal unit train ("Coal UT") traffic and one for its local and Rule 11 Ag traffic. The applicable mileage-based surcharges were published in separate tariff items, each of which became effective on January 1, 2006. The Ag tariff fuel surcharge was set forth in the ATI.[6] It contained a threshold, or strike price, of $1.25 per HDF gallon[7] and provided that for every four cent increase in the HDF price above the strike price, the fuel surcharge would increase by one cent per loaded car-mile. *Id.*

---

[5] *Rail Fuel Surcharges*, STB Ex Parte No. 661 ("*Fuel Surcharges*") (STB served Mar. 14, 2006) ("*Fuel Surcharges I*"); (STB served Aug. 3, 2006) ("*Fuel Surcharges II*"); (STB served Jan. 26, 2007) ("*Fuel Surcharges III*").

[6] *See* BNSF Rules Book 6100-A, Item 3375, Section B (included in e-workpaper folder "BNSF 6100-A, Item 3375").

[7] BNSF's source for the price of HDF used in its fuel surcharge programs is set forth in the U.S. Department of Energy's EIA Retail, On-Highway Diesel Price Report.

The Coal UT surcharge was set forth in Item 3381 of BNSF Rules Book 6100-A.[8] Like the ATI, the Coal UT surcharge contained a strike price of $1.25 per HDF gallon, but contained a different step function. The Coal UT surcharge provided that for every six cent increase above the $1.25 per gallon HDF strike price, the fuel surcharge would increase by one cent per loaded car-mile. *Id.*

During the *Fuel Surcharges* case, BNSF explained how it developed its mileage-based fuel surcharges. BNSF responded as follows:

- BNSF's freight rates were set with an "embedded" cost of fuel set using a diesel fuel price of "0.73 per gallon." BNSF Comments (filed Oct. 2, 2006) at 2, 16.

- BNSF needed to impose a fuel surcharge to recover only "increases in the [fuel] cost that were not embedded in the transportation rate offered to the customer" and that "BNSF's goal is to collect fuel surcharges no higher than the additional cost of fuel." *Id.* at 2, 4.

- BNSF's mileage-based fuel surcharge tables were designed to recover incremental fuel cost increases above the $0.73 base fuel price factoring in "fuel consumption" for each BNSF "business unit." Public Hearing (May 11, 2006), testimony of Tom Hund (Tr. at 260) and Hund oral testimony PowerPoint slides. As BNSF subsequently explained on its website: "[t]he fuel intensity that is used to build each table reflects our best estimate of the average fuel consumption for that traffic type." BNSF Fuel Surcharge Information, Frequently Asked Questions (at http://www.bnsf.com/customers/fuel-surcharge/#subtabs-5).

[8] *See* BNSF Rules Book 6100-A, Item 3381 (included in e-workpaper folder "BNSF 6100-A, Item 3381").

- BNSF's mileage-based fuel surcharges were calculated using changes in HDF prices, rather than using changes in the prices BNSF actually paid for diesel fuel, because of the asserted "high correlation" between changes in HDF prices and changes in the prices BNSF paid for diesel fuel, and because the former was publicly available. Public Hearing (May 11, 2006), testimony of Tom Hund (Tr. at 257, 268).

- The mileage-based fuel surcharge tables had a base, or strike price, of $1.25 per HDF gallon because this price "is roughly equal" to BNSF's actual diesel fuel base price of $0.73 per gallon. BNSF Comments (filed Oct. 2, 2006) at 16.

Following the STB's *Fuel Surcharges* proceeding, BNSF decided to apply a mileage-based fuel surcharge to its local, Rule 11 and interline OF traffic.[9] BNSF also decided to apply the same fuel surcharge to OF traffic that it had been applying to its Ag traffic. *Id.* To accomplish this objective, BNSF modified the ATI to apply both to Ag traffic and to OF traffic. *Id.* This change was set forth in a revision to the ATI that became effective on April 25, 2007. *Id.*

Cargill began paying fuel surcharges under the ATI starting in January of 2006. Over time, Cargill's cumulative payments to BNSF under the ATI totaled $100 million and this total continued to increase substantially every day. Schember V.S. at 2. As the total fuel surcharge payments Cargill paid to BNSF under the ATI increased, so too did Cargill's concerns that BNSF was using the surcharge not just for cost recovery purposes, but as a major profit center.

[9] *See* BNSF Rules Book 6100-A, Item 3375H, Section B (included in e-workpaper folder "BNSF 6100-A, Item 3375").

In 2009, Cargill engaged in extensive discussions with BNSF laying out in detail why it believed BNSF was collecting surcharges under the ATI that substantially exceeded BNSF's incremental fuel cost increases. *Id.* These discussions were subject to a confidentiality agreement. *Id.* Suffice it to say here that BNSF did not agree with Cargill, and the parties were not able to resolve their differences through commercial negotiations. *Id.* Cargill decided to ask the Board to intervene.

On April 19, 2010, Cargill filed its Complaint with the Board alleging that BNSF's collection of fuel surcharges under the ATI constitutes an unreasonable practice. The Board proceeded to decide several motions, the parties conducted discovery, and Cargill supplemented its Complaint to include rebased ATI fuel surcharges. The parties also agreed to a procedural schedule to govern the liability phase of this case,[10] which the Board approved. The schedule calls for Cargill to file its opening evidence and argument on August 25, 2011.

Cargill's opening statement demonstrates that BNSF's collection of fuel surcharges under the ATI constitutes an unreasonable practice. This evidence shows BNSF unlawfully collected $560.9 million in profits under the ATI on its Ag and OF traffic during the last five full calendar years (2006 to 2010); that this massive over-recovery is a direct result of multiple flaws in the formula BNSF uses to assess fuel surcharges on its Ag and OF traffic; and that BNSF overcharged Cargill as a direct

[10] In its decision served on April 8, 2011, the Board divided this case into two phases: a merits phase and a damages phase.

result of these unreasonable fuel surcharge practices by $29 million for the time period between April 19, 2008 and December 31, 2010, with additional overcharges continuing to accrue thereafter.

ARGUMENT

I.
GOVERNING LEGAL STANDARDS

49 U.S.C. § 10702(2) provides that "[a] rail carrier providing transportation or service subject to the jurisdiction of the Board under this part shall establish reasonable . . . rules and practices on matters relating to that transportation or service." *Id.* In determining whether a particular rail practice is reasonable, "[t]he question is not whether [the practice] can be described as 'rational' from the railroads' perspective, but instead whether the practice and the tariff based on it is reasonable when viewed from the public perspective." *Consolidated Rail Corp. v. ICC*, 646 F.2d 642, 647 (D.C. Cir. 1981). The Board has applied the Section 10702(2) standards in three cases involving rail fuel surcharges: *Fuel Surcharges*, *Dairyland*,[11] and the instant case.

A. ***Fuel Surcharges***

In *Fuel Surcharges*, the Board rejected claims made by BNSF and other carriers that the Board could not regulate rail carrier fuel surcharge practices. The

[11] *Dairyland Power Coop. v. Union Pac. R.R.*, STB Docket No. 42105 ("*Dairyland*").

Board held that the purpose of fuel surcharges was to recoup "the actual increase in fuel costs for handling the particular traffic to which the surcharge is applied" and, as the Board explained, if a carrier was using a fuel surcharge as "a broader revenue enhancement measure," it was engaged in a "misleading and ultimately unreasonable practice." *Fuel Surcharges III* at 6-7. The Board concluded that it could exercise its regulatory authority over rail practices to stop these deceptive carrier actions because its "authority to proscribe unreasonable practices embraces misrepresentations or misleading conduct by the carriers." *Id.* at 7.

The STB also rejected the carriers' contentions that the Board could only regulate fuel surcharges in a rate reasonableness case. The Board explained that when it found that a rate was unreasonable, it prescribed the maximum amount that a carrier could charge for the involved service. *See Fuel Surcharges II* at 3-4; *Fuel Surcharges III* at 7. However, when exercising its authority over fuel surcharge practices, the Board was not setting a maximum rate a carrier could charge "through some combination of base rates and surcharges." *Fuel Surcharges III* at 7. Instead, the Board was directing how this combination could, and could not, be made. *Id.* ("[i]f the railroads wish to raise their rates they may do so, subject to the rate reasonableness requirement of the statute, but they may not impose those increases on their customers on the basis of a misrepresentation").

After establishing its jurisdiction over fuel surcharge practices, the Board proceeded to find in *Fuel Surcharges III* that two fuel surcharge mechanisms constituted unreasonable practices – "computing fuel surcharges as a percentage of a base rate" and "double dipping," which the Board defined as a "double recovery for the same fuel cost increase[s]" through "application of both an index [to adjust rates] that includes a fuel component and a fuel surcharge for the same movement to cover the same time period." *Id.* at 1, 10-11.

As the Board explained, the use of percent of the base rate fuel surcharges "cannot fairly be described as merely a cost recovery mechanism" because "a fuel surcharge program that increases all rates by a set percentage stands virtually no prospect of reflecting the actual increase in fuel costs for handling the particular traffic to which the surcharge is applied." *Id.* at 6. Similarly, the Board found that charging a shipper twice for the same fuel cost increases was an obvious unreasonable practice because a carrier should not be permitted to obtain a "double recovery for the same fuel cost increase." *Id.* at 10.

The Board proceeded to order rail carriers to "conform their practices to the findings contained in" its *Fuel Surcharges III* decision by April 26, 2007. *Id.* at 14. The Board did not prescribe any new fuel surcharge methods, but held that "if a carrier chooses to use a fuel surcharge program, it must be based upon attributes of a movement that directly affect the amount of fuel consumed." *Id.* at 9. Finally, the Board held that "[o]nce carriers have had an opportunity to adjust their fuel surcharge

programs, should any shipper have concerns that any particular revised fuel surcharge program is being administered in a manner that constitutes an unreasonable practice, it may file a complaint with the Board." *Id.* at 10.

Following the STB's issuance of *Fuel Surcharges III*, then-Board Chairman Nottingham informed Congress that "[t]he Board will aggressively use the authority granted to us by statute to stop unreasonable [fuel surcharge] practices, thereby protecting shippers and advancing the public interest" and that the Board "will remain vigilant on this issue and will expeditiously review any formal complaints related to fuel surcharges." *Rail Competition and Service: Hearing Before the H. Comm. on Transp. and Infrastructure,* H.R. Rep. No. 110-70, at 23 (2007).

B. *Dairyland*

Dairyland Power Cooperative ("Dairyland") was the first shipper to take up the Board's invitation to file a fuel surcharge complaint case.[12] On March 5, 2008, Dairyland filed a complaint at the Board alleging that "[t]he fuel surcharge payments UP has collected from Dairyland . . . constitute an unreasonable practice under 49 U.S.C. §10702(2) because these payments exceed the incremental fuel cost increases UP has actually incurred in handling Dairyland's traffic." *Id.* at 4. Dairyland subsequently informed the Board that it planned to "present substantial evidence

[12] *Dairyland* (complaint filed Mar. 5, 2008).

demonstrating that UP is unlawfully utilizing its rail fuel surcharge procedures to extract substantial profits on the issue traffic."[13]

UP moved to dismiss Dairyland's complaint. In its motion, UP contended that dismissal was required because, it asserted, "Dairyland may not challenge the level of UP's fuel surcharge through an unreasonable practice claim" but instead "must file a rate complaint." *Id.* at 4. This argument was the same one the railroad industry had made and lost in *Fuel Surcharges*. UP also argued that the Board's decision in *Fuel Surcharges III* insulated any mileage-based fuel surcharges from challenge as unreasonable practices. *Id.* at 5-6.

The Board denied UP's motion. The Board ruled that Dairyland's claim that UP was utilizing its fuel surcharges to extract unreasonable profits "could in turn call into question the reasonableness of UP's fuel surcharge program, and thus we cannot find at this point that there are no reasonable grounds for further investigation." *Id.* at 5. The Board also took the opportunity to "clarify" the type of showings that a shipper would need to make in an individual complaint case to obtain relief. *Id.* at 6.

The Board observed that Dairyland had alleged that it was entitled to relief because UP was using its fuel surcharge to over-recover the actual incremental fuel cost increases UP was incurring in handling Dairyland's coal traffic. *Id.* The

---

[13] *Dairyland* (STB served July 29, 2008) at 5 (quoting Dairyland's Reply in Opposition to Union Pacific's Motion to Dismiss (Apr. 11, 2008) at 2).

Board held that if Dairyland proved this allegation, this showing, by itself, was not enough to demonstrate that UP was engaged in an unreasonable practice. *Id.* ("Dairyland may not base its case only on the *level* of the fuel surcharge as applied to itself."). Instead, the Board held that to meet its burden of proof when making certain forms of unreasonable fuel practice allegations, a shipper must show that the assailed fuel surcharge tariff is unreasonable when applied to all shippers subject to its terms. *Id.* at 5-6.

The Board cited several examples of the type of aggregate unreasonable practice showings it had in mind. As one example, the Board stated that "a complainant [shipper] might try to show that the general [fuel surcharge] formula produces fuel surcharges that do not reasonably track changes in aggregate fuel costs incurred." *Id.* at 6. The Board also stated that a shipper could "show that the general formula used to calculate fuel surcharges bears no reasonable nexus to the fuel consumption for the traffic to which the surcharge is applied." *Id.* Finally, the Board noted that its list of showings was not exclusive because "[t]here may be other features in a particular case that would bear on the reasonableness of a particular fuel surcharge." *Id.*

The Board also rejected UP's claim that mileage-based fuel surcharges could not be challenged. *Id.* ("a fuel surcharge program is not automatically reasonable merely because it is mileage-based"). Finally, the Board held that a mileage-based fuel surcharge program also could be challenged "on other grounds,

subject to the 2-year limitations period set forth in 49 U.S.C. § 11705(c) . . . [f]or example, if UP had engaged in 'double dipping'." *Id.*

C. ***Cargill***

In its Complaint, Cargill alleged that BNSF's fuel surcharges on its traffic constitute an unreasonable practice because: (i) BNSF is "extract[ing] substantial profits over and above its incremental fuel cost increases for the BNSF system traffic to which the surcharge is applied" ("Profit Center Count"); (ii) "the general formula set forth therein to calculate fuel surcharges bears no reasonable nexus to, and overstates, the fuel consumption for the BNSF system traffic to which the surcharge is applied" ("Fuel Consumption Count"); and (iii) "BNSF is double recovering the same incremental fuel cost increases" ("Double Recovery Count"). Complaint ¶¶ 6, 7, and 8.

BNSF moved to dismiss Cargill's Profit Center and Double Recovery Counts. The Board granted BNSF's motion dismissing the Double Recovery Count,[14] and Cargill does not press that count in this Opening Statement. The Board denied BNSF's motion to dismiss Cargill's Profit Center Count on grounds that the count was consistent with the Board's rulings in *Dairyland*:

> Cargill's Profit Center claim is not inconsistent with our guidance in *Dairyland*. Cargill does not allege that BNSF uses the challenged fuel surcharge to over-recover its fuel costs incurred in handling Cargill's traffic. Instead,

[14] Cargill's petition for reconsideration of this Board's ruling remains pending before the Board.

> Cargill claims that BNSF uses this fuel surcharge "to extract substantial profits over and above its incremental fuel costs for the BNSF system traffic to which the surcharge is applied." Complaint at 3 . . . . In other words, Cargill appropriately focuses on how the fuel surcharge operates in the aggregate and not solely on how it operates with respect to Cargill.
>
> Consistent with *Dairyland*, Cargill may present evidence to demonstrate that design elements in the challenged fuel surcharge allow BNSF to recover substantially in excess of the actual incremental cost of fuel incurred in providing the rail services to the entire traffic group to which the surcharge applies. Accordingly, we will deny BNSF's motion to dismiss Cargill's Profit Center claim.

Cargill (STB served Jan. 4, 2011) at 5.

* * *

Cargill's allegations that BNSF has engaged in unreasonable fuel surcharge practices conform to the Board's rulings in *Fuel Surcharges*, *Dairyland*, and in the instant case, as does its proof.

II.

BNSF'S USE OF THE ASSAILED TARIFF ITEM AS A PROFIT CENTER IS AN UNREASONABLE PRACTICE

The Board's decisions in *Fuel Surcharges*, *Dairyland*, and *Cargill* make one point crystal clear: a rail carrier engages in an unreasonable practice if it collects fuel surcharges under a fuel surcharge program that exceed the incremental fuel costs

of the traffic to which the surcharge program is applied.[15] Simply stated, the Board has ruled that carriers cannot lawfully use their fuel surcharge programs as profit centers.[16]

In this case, Cargill presents to the Board a comprehensive revenue and cost study that encompasses all traffic subject to the ATI over a five year period. This study demonstrates that BNSF is using the ATI as a profit center on its Ag traffic because in the last five full calendar years, BNSF collected surcharge revenues on this traffic that exceeded BNSF's incremental fuel cost increases by $440.4 million. The study also demonstrates that BNSF is using the ATI as a profit center on its OF traffic because in the last five full calendar years BNSF collected surcharge revenues on this traffic that exceeded BNSF's incremental cost increases by $120.5 million. Overall, the study shows that BNSF used the ATI to collect $560.9 million in profits on its Ag and OF traffic during the five year study period.

A. Cargill's Comprehensive and Detailed Traffic Study of All Traffic Subject to the ATI

In *Dairyland*, the Board ruled that to prove a carrier was unlawfully using a fuel surcharge program as a profit center, a complainant shipper had to demonstrate that the carrier was collecting fuel surcharges on all traffic subject to the program that exceeded the incremental fuel cost increases for all the traffic subject to

---

[15] *Fuel Surcharges III* at 6-7; *Dairyland* (STB served July 29, 2008) at 5-6; *Cargill* (STB served Jan. 4, 2011) at 4.

[16] *Id.*

the program. *Id.* (STB served July 29, 2008) at 6. The Board reaffirmed this ruling in *Cargill*. *Id.* (STB served Jan. 4, 2011) at 4.

The Board's rulings in *Dairyland* and *Cargill* place difficult proof burdens on shippers due to the large numbers of shipments covered by most carriers' fuel surcharge programs. This case is no different. At issue here are two fuel surcharge programs: BNSF's Ag surcharge program and its OF surcharge program. BNSF sets the fuel surcharges under each program with the same fuel surcharge, which is set forth in the ATI.

To meet its burden of proof, Cargill requested that BNSF produce traffic and revenue records for each Ag and OF movement subject to the ATI. This request covered the time period starting when the ATI went into effect – January 1, 2006 – and ending with the discovery cut-off date in this case – December 31, 2010. In response, BNSF provided Cargill with detailed traffic and revenue records for each shipment and each car subject to the ATI during this five year time period. In all, the combined universe of Ag and OF traffic comprised of a total of approximately { } cars. Crowley/Mulholland V.S. at 6.

Cargill's experts, Mr. Crowley and Mr. Mulholland, then undertook the daunting task of calculating fuel surcharge revenues and incremental fuel cost increases for each shipment, and each car in each shipment, for each study year. It is important to emphasize that Crowley/Mulholland did not make these calculations using any form of sampling procedure. Instead, to present the most comprehensive,

accurate and authoritative study possible, Crowley/Mulholland made movement-specific revenue and cost calculations for all shipments and cars covered by the ATI in all study years. Crowley/Mulholland V.S. at 6.

Crowley/Mulholland's detailed fuel surcharge study is the most comprehensive fuel surcharge study ever presented in a proceeding before the Board. Crowley/Mulholland's study demonstrates that BNSF is using the ATI as a profit center on its Ag and OF traffic because BNSF's fuel surcharge revenues for each traffic group substantially exceed BNSF's actual incremental fuel cost increases.

B. Correct Calculation of Fuel Surcharge Revenues

Using revenue data BNSF provided in discovery, Crowley/Mulholland calculated the fuel surcharge revenues BNSF collected on each Ag and OF traffic shipment subject to the AFI during each month of the study period. Specifically, they "aggregated the surcharges applied to the movements over the BNSF system as reported in the provided traffic data and adjusted the surcharges to account for short line settlements" and, for interline shipments, the surcharge revenues they utilized "reflect[] only the portion of the movements over the BNSF system." *Id.* at 6-7.

C. Correct Calculation of Incremental Fuel Costs

Crowley/Mulholland calculated the incremental fuel costs BNSF collected on each Ag and OF traffic shipment using traffic data BNSF provided in discovery, monthly fuel price data BNSF provided in discovery, and STB Uniform

Railroad Costing System ("URCS") unit cost data for each study year.[17] The costing procedures employed by Crowley/Mulholland are set forth in detail in their Verified Statement at 8-16, and are summarized below.

First, Crowley/Mulholland calculated the variable fuel costs for the month in which the study carload moved, using base year BNSF URCS unit costs for the year of the movement and an index of the BNSF fuel price for the month. For example, if a car moved in April of 2008, Crowley/Mulholland developed a fuel cost for that car using the price BNSF paid for fuel in April of 2008. Crowley/Mulholland developed BNSF's fuel prices per month using monthly fuel price data BNSF produced in discovery.

Second, Crowley/Mulholland calculated base variable fuel costs for each study carload using a BNSF locomotive fuel price of $0.73 per gallon. This price was used because it is the fuel price BNSF claims is included in all of the base rates subject to the ATI. For example, for a car that moved in calendar year 2008, Crowley/Mulholland developed a fuel cost per carload that assumed the base fuel cost included in the freight rate for that car equaled $0.73 per gallon – not the fuel cost per gallon BNSF was actually incurring in 2008.

---

[17] It is appropriate to use URCS unit costs because these are the costs the Board has approved for use its regulatory proceedings. *See Adoption of Unif. R.R. Costing Sys. as A Gen. Purpose Costing Sys. for All Regulatory Costing Purposes*, 5 I.C.C.2d 984 (1989). BNSF has also taken the position that URCS costs should be used in this case. *See* BNSF Opposition to Cargill's Motion to Compel Discovery (Apr. 11, 2011) at 6 ("for [STB] regulatory purposes . . . costs are determined by URCS") (internal quotation omitted).

Third, Crowley/Mulholland separated the traffic movements into two groups, Ag and OF, to correspond to the two BNSF fuel surcharge programs subject to the ATI. For each group, Crowley/Mulholland calculated the differential between the fuel costs BNSF incurred in each month to transport the cars at BNSF's then-current fuel price and the fuel costs incurred in each month to transport the cars at BNSF's base fuel price.

D. Profit Center Conclusions

Crowley/Mulholland calculated the differential between the fuel surcharges BNSF collected under the ATI from its Ag and OF traffic and the incremental cost increases BNSF had actually incurred in providing this transportation. They did so by taking the fuel surcharge revenues they had calculated for each car in each group on a monthly basis, and subtracting the corresponding incremental fuel cost increases they had calculated on each car in each group on a monthly basis. They then summed the monthly differentials on an annual and total basis:

TABLE 1
BNSF Surcharges and Incremental Fuel Costs Associated with Traffic Subject to the ATI
(2006-2010)

Year (1)	AG Surcharges Collected (2)	AG Incremental Fuel Costs Incurred (3)	AG Over-Recovery (Profit) (4)	Other Freight Surcharges Collected (5)	Other Freight Incremental Fuel Costs Incurred (6)	Other Freight Over-Recovery (Profit) (7)
1. 2006	${ }	${ }	$ 82,117,772	${ }	${ }	$ 6,690,396
2. 2007	${ }	${ }	$45,452,591	${ }	${ }	$4,080,273
3. 2008	${ }	${ }	$140,344,357	${ }	${ }	$42,494,125
4. 2009	${ }	${ }	$60,229,315	${ }	${ }	$17,626,973
5. 2010	${ }	${ }	$112,257,398	${ }	${ }	$49,575,873
6. Total	${ }	$ { }	$440,401,433	${ }	${ }	$ 120,467,639

Sources: e-workpapers "Fuel And Miles Summary w added calcs v1305 strike AG.xlsx", level "Ag Traffic", ranges: D718:E723, N718:N723, and "Fuel And Miles Summary w added calcs v1305 strike Other.xlsx", level "Other Traffic", ranges: D718:E723, N718:N723

As shown in Table 1 above, during the five year study period, BNSF collected fuel surcharge revenues on its Ag traffic under the ATI that exceeded its incremental cost increases by $440.4 million, BNSF collected fuel surcharge revenues on its OF traffic under the ATI that exceeded its incremental fuel cost increases by $120.5 million, and in total BNSF collected $560.9 million in fuel surcharges profits on its combined Ag and OF traffic under the ATI.

III.

BNSF'S USE OF A FUNDAMENTALLY FLAWED FUEL SURCHARGE FORMULA IS AN UNREASONABLE PRACTICE

The ATI is producing fuel surcharge revenues that vastly exceed BNSF's incremental fuel cost increases on its Ag and OF traffic because the formula is fundamentally flawed in three principal respects: (i) it uses the wrong step functions

for AG and OF traffic; (ii) it uses the wrong starting HDF strike price; and (iii) it mistakenly applies the first one cent fuel surcharge at the HDF strike price.

A. The ATI Uses the Wrong Step Function

The ATI assumes that to recover BNSF's incremental fuel cost increases above the allegedly embedded $0.73 per gallon fuel cost assumed in the strike price, BNSF must apply a one cent per loaded car-mile increase for every four cent change in the HDF price per gallon staring at the $1.25 HDF price per gallon strike price. Stated another way, the ATI contains a 1:4 step function.

1. The ATI 1:4 Step Function is Generating Massive Profits

Crowley/Mulholland tested the validity of this step function using standard linear regression analyses. Specifically, for Ag traffic subject to the ATI, they took from their cost study the dollar amounts for each study month that BNSF needed to recover to capture its incremental fuel cost increases in each of 60 study months (5 years x 12 months/year). Crowley/Mulholland V.S. at 17-18. They then determined for each month the corresponding "surcharge miles" BNSF used to assess fuel surcharges. *Id.* at 17. The use of surcharge miles is necessary because BNSF calculates fuel surcharges (in some cases) using loaded "surcharge" miles that are different than actual loaded movement miles. *Id.* at 18. Finally, they divided the incremental fuel costs for each month by the fuel surcharge miles to develop a corrected fuel surcharge per loaded car-mile for each of the 60 months. *Id.* at 18.

As a hypothetical example, if BNSF's actual incremental fuel cost increases in April of 2006 on Ag traffic subject to the ATI equaled $10 million and the loaded fuel surcharge miles on this traffic equaled 50 million loaded car miles, the fuel surcharge per loaded car-mile would equal $0.20 ($10 million/50 million loaded car-miles). Crowley/Mulholland refer to real world calculations using this example procedure as the "Correct Fuel Surcharge." *Id.* at 18.

After determining the Correct Fuel Surcharge for a month, Crowley/ Mulholland determined the corresponding HDF price for that month. Continuing the hypothetical example above, for the hypothetical April 2006 Correct Fuel Surcharge of $0.20 per loaded car-mile, the HDF price for that month equaled $2.728 per gallon.

Next, Crowley/Mulholland determined the statistical relation between the HDF price during the shipment month for each of the 60 study months for Ag traffic and the corresponding Correct Fuel Surcharge for each of the 60 study months. *Id.* at 18-20. This statistical relationship was developed using a regression where the current HDF price for a month was the independent variable and the Correct Fuel Surcharge for the same month was the dependent variable. *Id.*

The resulting regression shows that the correct step function for Ag traffic is not 1:4 but instead 1:5.18, *i.e.*, the surcharge should be a one cent increase per loaded car-mile for each 5.18 cent increase in the price of HDF. *Id.* at 19. Had this 1:5.18 step function applied, BNSF's fuel surcharge collections on its Ag traffic

during the five year study period would have very closely tracked its actual incremental fuel cost increases.

Crowley/Mulholland applied the same procedures in reviewing the applicability of a 1:4 step function on OF traffic. *Id.* at 17-21. They determined, using OF data inputs, that the correct step function for OF traffic was 1:4.57, *i.e.*, a one cent increase in the fuel surcharge per loaded car-mile for each 4.57 cent increase in the price of HDF. *Id.* at 19. Had the 1:4.57 step function applied, BNSF's fuel surcharge collections on its OF traffic during the five year study period would have very closely tracked its actual incremental fuel cost increases.

Crowley/Mulholland tested their regression results using standard statistical tests and found that application of these tests demonstrates "the regressions produce reasonable results because the R-squared (reasonableness of fit) statistic equals 90% and both coefficients are statistically significant." *Id.* at 20. They also note that R-squared factors would be much higher (0.99) if BNSF had decided to use its actual fuel prices in the ATI, as opposed to HDF prices, and those actual prices were used as the independent variable in their regression analyses. *Id.* at 20-21.[18] They conclude, "our regression results demonstrate that our analysis is as robust as

[18] Crowley/Mulholland did not use the actual fuel prices BNSF paid for fuel in their regression calculating the corrected step functions for two reasons: (i) BNSF uses the HDF prices in the ATI because they are publicly available on a monthly basis (whereas BNSF's actual fuel prices are not), and (ii) because changes in the price of HDF do not follow in lock-step with changes in the price BNSF pays for diesel fuel producing a disparity that is sufficiently great to preclude the use of actual fuel prices as the independent variable in the regressions. *Id* at 21.

could be reasonably expected given BNSF's choice of HDF price . . . in [BNSF's] surcharge formula." *Id.* at 21.

2. The 1:4 Step Function Bears No Reasonable Nexus to BNSF's Actual Fuel Consumption

BNSF's 1:4 step function bears no reasonable nexus to BNSF's actual fuel consumption. During the five year study period, BNSF's actual fuel consumption per loaded car mile ("MPG"), distributed over BNSF's fuel surcharge miles, equaled { } MPG on its Ag traffic and { } MPG on its OF traffic. *Id.* at 27.

Moreover, as Crowley/Mulholland demonstrate, constructing step functions based solely on BNSF's actual fuel consumption will lead to an over-recovery of incremental fuel cost increases because such a construction does not factor in the statistical relationship between changes in the HDF prices used in the ATI and changes in BNSF's actual fuel price changes. *Id.* at 27.

To correctly correlate BNSF's actual fuel consumption with BNSF's HDF price changes, BNSF's actual fuel consumption figures need to be adjusted upward by a factor of { }. *Id.* at 25. Application of this factor produces correlated, imputed MPG figures of { } MPG for Ag and { } for OF. These imputed MPG figures are {

}

3. {

[19] *See, e.g.*, BNSF_Cargill_HD_727, 740-41, 751, 755-61, 1152; BNSF_Cargill_31623, 254357. Hereinafter, references to documents BNSF produced in discovery will be to "HD" for documents bearing an "HD" bates stamp and "D" for all documents labeled, "BNSF_Cargill_[ ]."

[20] *See, e.g.,* D-4129, D-76051, D-169849-850, and D-303343.

[21] *See* D-174966 ({
}).

[22] *See* D-46873.

[23] *See* D-46871 ({

} *See* D-20456.

[24] *See, e.g.*, D-334284, 334289 ({

});
D-190639 ({

}); D-190639-646 ({

}).

[25] *See, e.g.*, D-67137 ({

}); D-1303 ({

}); D-20768 ({

}); D-15459 ({

}); D-111987 ({

}); D-194561 ({

}).

[26] {

}

[27] *See id.* at D-46880.

[28] {

}

}

4. The 1:4 Step Function Mistakenly Ignores BNSF's Significant Fuel Efficiency Gains

At the STB's hearings in *Fuel Surcharges*, Vice-Chairman Mulvey observed that "railroads achieve tremendous efficiency gains as they're putting in newer locomotives, replacing older, less fuel efficient ones."[29] He then asked BNSF's Chief Financial Officer, Thomas Hund, "[i]s there any way to factor in efficiency gains" in railroad fuel surcharge tables. *Id.* Mr. Hund responded that "I think over time that needs to be accounted for." *Id.*

Since BNSF published the ATI in January of 2006, BNSF has become far more fuel efficient. BNSF has touted these increased efficiencies publicly:

[29] *Id.*, Public Hearing (May 11, 3006) (Tr. at 270).

- "Over the last decade, BNSF has acquired 2,700 fuel-efficient locomotives replacing a significant portion of our fleet engines."[30]

- "BNSF has consistently invested in new locomotives, improving the efficiency of the fleet. More than half of the 5,000 road locomotives are less than 10 years old. Since 2003, BNSF has added more than 1,300 cleaner-burning fuel-efficient locomotives to its fleet."[31]

- "BNSF was the first railroad to use low-torque wheel bearings. These bearings require 40 percent less energy to pull railcars and locomotives . . . . About half of all BNSF wheels are now equipped with low torque bearings, and the rest are being equipped as they are serviced." *Id.*

- "Nearly 3,000 BNSF locomotives – more than half of the fleet – have been equipped with an [Automatic Engine Start/Stop Smart Technology] upgrade, which shuts down idling locomotives more promptly. Over the next few months, the upgrades will be fully implemented throughout the locomotive fleet." *Id.*

- "BNSF is . . . aggressively testing and implementing various brands of driver assist technology. Driver assist technologies display on a screen in the locomotive cab the best handling practice for optimum fuel savings . . . ." *Id.*

- BNSF has instituted the "Fuel MVP program [which] rewards locomotive engineers who do the best job handling locomotives efficiently. . . . Locomotive engineers can make a big difference by eliminating power braking and stretch breaking whenever possible." *Id.*

---

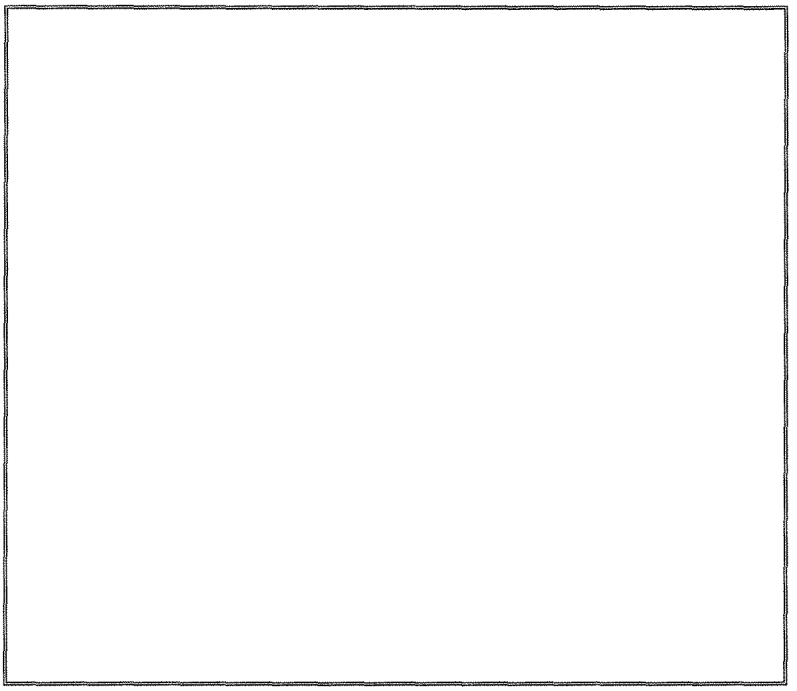
[30] BNSF Railway, California Maritime Leadership Symposium at 9 (May 12, 2011).

[31] *Railway, The Employee Magazine of Team BNSF* at 4 (July/Aug. 2008).

- "Another important fuel conservation practice is . . . lubrication of the wheels and rails. As much as half of the rolling resistance on level tangent track can be attributed to wheel/rail friction. Good lubrication can reduce this friction by 40 percent." *Id.*

BNSF's improved fuel efficiencies are also demonstrated by BNSF's

{



}

Despite its significant fuel efficiency improvements, and Mr. Hund's correct acknowledgment that "over time [increased fuel efficiency] needs to be

accounted for,"[32] BNSF has never modified the 1:4 step function, or taken any other action to modify the ATI to address its improved fuel efficiencies.

{

}

BNSF's improved fuel efficiency is captured in Cargill's restated step functions because those functions are based on BNSF's actual fuel costs in each year, starting in 2006, and the cost results capture all BNSF's true efficiency gains.

5. The Proper Way to Evaluate the ATI Is on A Program/Commodity Basis

The ATI sets the fuel surcharges BNSF assesses under three commodity-based surcharge programs: one applicable to its unit train Coal traffic; a second

---

[32] *Fuel Surcharges*, Public Hearing, May 11, 2006 (Tr. at 270).

[33] D-250122.

[34] D-352564.

applicable to its Ag traffic; and a third applicable to its OF traffic. BNSF's unit train Coal traffic is administered by its Coal business unit, its Ag traffic is administered by BNSF's Agricultural Products unit, and { }%[35] of the OF traffic is Industrial traffic administered by BNSF's Industrial Products unit.[36]

Cargill believes the Board should review the reasonableness of the three fuel surcharge programs independently because they are separate programs involving transportation of different commodities. Moreover, as Cargill's evidence demonstrates, the step functions for Ag and OF traffic are significantly different. These differences are attributable, *inter alia*, to the fact that much more Ag traffic moves in unit trains and, as a result, is far more fuel efficient.[37] Finally, this review is consistent with representations that BNSF has made both to the Board, and the SEC, that its fuel surcharge programs are set up to reflect fuel consumption on a "business unit"[38] and "commodity"[39] basis.

---

[35] *See* Crowley/Mulholland V.S. at 29.

[36] BNSF has four business units: Coal, Ag, Industrial Products, and Consumer Products. *See* Interview with the President and CEO: BNSF Railway Company (BRK-A) Matthew Rose (Wall Street Transcript, http://www.twst.com/yagoo/als609MATTHREW1.html). As Mr. Rose explains, industrial products involves transportation of industrial goods in "boxcars, tank cars and flat cars" and consumer products involves transportation of "items you find in the nation's retail stores and auto dealerships," with most consumer products shipped via intermodal service. *Id.* BNSF has a separate percent-of-price fuel surcharge program for its intermodal consumer traffic. *See* http://www.bnsf.com/customers/fuel-surcharge/#%23subtabs-1.

[37] *See* Crowley/Mulholland V.S. at 27.

[38] *See Fuel Surcharges*, Public Hearing (May 11, 2006) testimony of Tom Hund (Tr. at 260). *Accord* D-14158 ({

Cargill also believes that to determine the correct step functions the Board should look at all traffic (both regulated and unregulated) that is subject to the fuel surcharge. This too appears to be consistent with BNSF's objective of obtaining incremental fuel cost recovery from all of its traffic – both regulated and unregulated – that is subject to a program fuel surcharge.[40]

Cargill includes in its workpapers calculations of step functions for numerous other groupings of traffic (using both regulated and unregulated traffic universes).[41] Crowley/Mulholland made these calculations using the same study procedures discussed above, and all result in step functions substantially longer than 1:4. While Cargill believes its grouping and traffic universe calculations represent the most reasonable method to correct the design flaws in BNSF's 1:4 step function, Cargill also endorses each of these other step function calculations as far superior to the flawed 1:4 step function in the ATI.

}).

[39] *See, e.g.*, BNSF 2010 Annual Form 10-K at 9 ("Fuel surcharges are calculated differently depending on the type of commodity transported.").

[40] *See Rail Fuel Surcharges*, BNSF Comments (Oct. 2, 2006) at 4 ("BNSF's goal is to collect fuel surcharges no higher than the additional cost of fuel, reflecting the operational requirements of each business unit.").

[41] These workpapers also include the calculation of restated step functions for Ag and OF traffic using only the universe of regulated traffic.

6. The Reasonable Step Function is 1:5.18 for Ag Traffic and 1:4.57 for Other Freight Traffic

Cargill's evidence shows that the reasonable step function for Ag traffic is 1:5.18 for Ag traffic subject to the ATI and 1:4.57 for OF traffic subject to the ATI. Application of these step functions produces fuel surcharges that closely track BNSF's incremental fuel cost changes; comports with BNSF's actual fuel consumption (adjusted to account for BNSF's use of HDF prices); is { }; factors-in BNSF's increased fuel efficiencies; and conforms to BNSF's representations to set fuel surcharges on a program/commodity basis.

B. The ATI Uses the Wrong HDF Strike Price

The ATI included for the 2006 to 2010 study time period a base HDF price of $1.25 per gallon. BNSF has asserted that it chose the $1.25 base HDF fuel price because it is "roughly equal" to the $0.73 per gallon price BNSF claims is embedded in its base rates. *See* BNSF *Fuel Surcharges* Comments (filed Oct. 2, 2006) at 16. The Crowley/Mulholland study demonstrates that BNSF's assertion is incorrect.

Crowley/Mulholland reviewed the historical correlation between BNSF's actual fuel prices, and actual HDF prices, using three historic metrics: (i) average price of HDF in the first three quarters of 2002, a time when BNSF's actual fuel price hovered around $0.73 per gallon; (ii) the average price BNSF paid for fuel

in 2002; and (iii) the price equivalent calculated based on the observed relationship between HDF price changes, and BNSF actual fuel price changes, during the five year study period. Crowley/ Mulholland V.S. at 29-31. Crowley/Mulholland selected the lowest of the three resulting historical values as the reasonable HDF base price. *Id.* That price is $1.298 per HDF gallon. *Id.*

C. The ATI Misapplies the First Step Increment Charge

The ATI applies the first one cent per loaded car-mile charge immediately after the HDF strike price ($1.25 per HDF gallon) is reached. This is an error in and of itself (putting to one side that the $1.25 per HDF gallon is not the correct strike price) because the strike price, as constructed by BNSF, equates to the base fuel price embedded in its rates of $0.73 per gallon. Applying a fuel surcharge at the $1.25 base provides BNSF with a fuel surcharge recovery when it is incurring no incremental fuel cost increases.

As Crowley/Mulholland demonstrate, BNSF should have started applying its fuel surcharge at the correct strike price plus one-half a full step-length. *Id.* at 32. Thus, using the correct base starting strike price of $1.298 per gallon, and applying the correct one-half full step length increment, the first fuel surcharge should have applied when the HDF price equaled $1.324 HDF for Ag shipments ($1.298 + $0.0518/2) and when the HDF price equaled $1.321 HDF for OF shipments ($1.298 + $0.0457/2). *Id.* at 32.

IV.

CARGILL HAS PAID UNREASONABLE FUEL SURCHARGES AS A DIRECT RESULT OF BNSF'S UNLAWFUL SURCHARGE PRACTICES

Cargill filed its Complaint on April 19, 2010. The two year liability period extends backward from this April 19, 2010 date to April 19, 2008, and extends forward from April 19, 2010 until BNSF adopts and applies reasonable fuel surcharge practices on Cargill's Ag and OF traffic currently subject to the ATI.

During the liability period starting on April 19, 2008 and extending to the discovery cut-off date in this case, December 31, 2010, Cargill paid a total of ${ } in fuel surcharges on regulated shipments subject to ATI. Had BNSF engaged in reasonable fuel surcharge practices by employing a reasonable step function in the ATI (1:5.18 on Ag shipments and 1:4.57 on OF shipments), by employing a reasonable HDF base price ($1.297), and by employing a reasonable first step increment charge when HDF prices equaled or exceeded $1.324 (for Ag shipments) and $1.321 (for OF shipments), Cargill would have paid ${ } in fuel surcharges under the ATI on its regulated shipments.

Thus, as a direct result of BNSF's unreasonable fuel surcharge practices, Cargill paid approximately $29 million in unreasonable fuel surcharges (${ } - ${ } on its regulated shipments between April 19, 2008 and December 31, 2010, and Cargill continues to pay unreasonable fuel surcharges under the ATI.

V.

REQUESTED LIABILITY FINDINGS

Cargill respectfully requests that the Board enter an order finding that BNSF's publication and application of the ATI constitutes an unreasonable practice because: (i) the ATI uses unreasonable step functions; (ii) the ATI uses an unreasonable strike price for shipments subject to a $1.25 strike price; and (iii) the ATI unreasonably applies a fuel surcharge at the strike price.

To remedy these unreasonable practices, Cargill requests that the Board issue prescriptive relief in the form of an order directing BNSF to modify the ATI on all shipments by (i) changing the step increments on Ag shipments to one cent per loaded car-mile for each 5.18 cent increase in the price of HDF; (ii) changing the step increments on OF shipments to one cent per loaded car-mile for each 4.57 cent increase in the price of HDF; and (iii) initiating surcharge collections at the strike price plus one-half of the first step length. Cargill also requests that the Board enter an order directing BNSF to modify the ATI on all shipments subject to a $1.25 strike price by changing the strike price to $1.298 per HDF gallon.

Finally, Cargill requests that the Board enter an order finding that BNSF's unlawful fuel surcharge practices have directly resulted in Cargill being overcharged by $29,033,463 (plus interest) during the time period between April 19, 2008 and December 31, 2010. Cargill will be requesting repayment of this amount as damages in the second phase of this case, plus the additional amounts of unreasonable

surcharges Cargill continues to incur on its regulated traffic subject to the ATI after December 31, 2010.

CONCLUSION

Cargill respectfully requests the Board make the findings, and grant the relief, requested herein.

Respectfully submitted,

CARGILL, INCORPORATED

By: John H. LeSeur
Peter A. Pfohl
Daniel M. Jaffe
Stephanie M. Archuleta
Slover & Loftus LLP
1224 Seventeenth Street, N.W.
Washington, D.C. 20036
(202) 347-7170

Attorneys for Complainant

OF COUNSEL:

Slover & Loftus LLP
1224 Seventeenth Street, N.W.
Washington D.C. 20036

Dated: August 25, 2011

SCHEMBER

VERIFIED STATEMENT
OF
GEORGE SCHEMBER

My name is George Schember, and my business address is 15407 McGinty Road West, Wayzata, MN 55391. I am the Vice President of Transportation and Logistics for Cargill, Incorporated ("Cargill"). I have been asked by our counsel to provide the Board with some background information on Cargill, the events that led us to file our Complaint at the Board, and the importance of this case to our company.

Cargill

Cargill is an international producer and marketer of food, agricultural, financial and industrial products and services. Our company was founded in 1865 as a single grain elevator and has grown significantly since that time. Today, Cargill employs over 131,000 people in 66 countries. I append in my Exhibit No. __ (GS-1) a copy of Cargill's most recent summary annual report. This report provides additional background information about Cargill.

Cargill pays BNSF Railway Company ("BNSF") to transport a wide variety of agricultural and food products, including barley, corn, oats, wheat, soybeans, corn syrup and flour. Cargill also pays BNSF to transport some non-agricultural products as well. Each year, Cargill tenders thousands of individual shipments to BNSF for transport between hundreds of distinct points of origin and destination. The vast majority of these shipments are agricultural shipments, and many of those shipments move in unit trains. On all of these shipments, Cargill pays the freight charge and the applicable fuel surcharge.

Background Events

Like many shippers, Cargill has been concerned that major railroads are using their fuel surcharges to recover more than their incremental fuel cost increases. Cargill participated in the Board's *Rail Fuel Surcharge Case* (Ex Parte No. 661), and supported the Board's decisions in that case. Those decisions made clear that a rail carrier's fuel surcharges should not exceed the carrier's incremental fuel cost increases on the traffic subject to the fuel surcharge.

Cargill has been monitoring the fuel surcharges it has paid since that decision, however, and believes that BNSF's mileage-based fuel surcharge on agricultural commodities is producing revenues significantly in excess of incremental fuel cost increases, thus turning what BNSF had represented to shippers as a "cost recovery" vehicle into a significant profit center.

Cargill's concerns about this issue grew as the total amount of mileage-based surcharges we paid to BNSF crossed the $100 million threshold and continued to increase daily. Cargill attempted to resolve our concerns about this issue though good faith commercial negotiations with BNSF. In 2009, high ranking executives from Cargill met twice with BNSF to discuss Cargill's documented concerns about the fuel surcharge program. To facilitate the discussions, Cargill and BNSF agreed to keep their communications confidential. I can assure the Board, however, that Cargill was diligent in communicating its concerns and negotiated with BNSF in good faith to resolve our dispute. Unfortunately, we were not successful.

When the negotiations failed, Cargill had two options: drop the matter or bring it to the STB for resolution. Cargill thought long and hard about this choice. We did not take the decision to pursue regulatory action against BNSF lightly. After due deliberation, we decided that the issues were too important to Cargill and that it was proper to present the issues to the Board.

Importance of This Case

The STB has defined the boundaries of a reasonable fuel surcharge program, determining that a rail carrier's fuel surcharges cannot exceed the carrier's incremental fuel cost increases on the traffic subject to the fuel surcharge. The BNSF has represented to shippers that its fuel surcharge program is a cost recovery mechanism. Cargill believes that the Board should require all carriers to adhere to the law and to their own representations about the business conduct in which they engage. That is what Cargill is asking the Board to do in this case – to hold BNSF to its representations that its fuel surcharge was only for cost recovery.

This case is important to Cargill not just because it involves significant amounts of money – which it does – but also because it involves what should be a very clear and basic element of cost that we and all other shippers of agricultural commodities have with one of the most important and powerful railroads in the United States.

I ask that the Board carefully review our evidence demonstrating that BNSF has systematically over-recovered for fuel in this case. I also urge the Board to order BNSF to pay back to Cargill the monies it collected from us that exceeded the amounts BNSF actually needed for fuel cost recovery.

VERIFICATION

MINNESOTA)
)
COUNTY OF HENNEPIN)

ss:

I, George J Schaefer, verify that I have read the foregoing Statement, know the contents thereof, and that the same are true as stated to the best of my knowledge, information and belief.

George J. Schaefer

Subscribed and Sworn to before me
this 9th day of August, 2011.

Linda T Schaefer
Notary Public
My Commission expires: 1/31/2015

LINDA T SCHAEFER
NOTARY PUBLIC - MINNESOTA
MY COMMISSION EXPIRES 1/31/2015

A Commitment to Growth

Cargill

Cargill is moving forward with confidence. We are investing in our people and innovation, in facilities and technologies, and in supply chains and solutions. As we grow, we connect our knowledge and insight to help customers succeed and to help communities meet the challenges of building a better world. We are a company committed to growth.

People

Cargill works with hundreds of thousands of farmers in developing countries to help them increase their productivity because higher crop and livestock yields can lead to better incomes and livelihoods. We gain from their success as quality producers of agricultural goods.

Customers

Creating solutions that help customers succeed is at the heart of Cargill's business strategy. It's changing how we engage and serve those in agriculture, food, financial and industrial enterprises. We are committed to delivering distinctive value to our customers.

Innovation

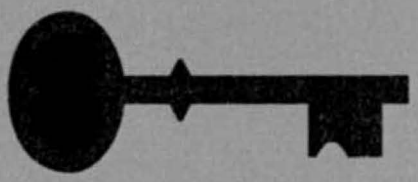
Cargill aims to be our customers' partner of choice. Innovation is essential because it drives our ability to discover and deliver value-adding solutions. We're taking a disciplined approach to innovation that draws on the creative strength of Cargill people around the world.

Expansion

Expansion is often equated with brick and mortar. But every new or enlarged Cargill facility is the outgrowth of talented Cargill people connecting inside and outside of the company to deliver the best ideas to those we serve. We opened or expanded 17 major facilities this year.

People

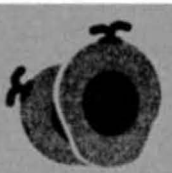
Every year, Cargill works directly with hundreds of thousands of farmers in developing countries to help them increase their farms' productivity. The higher yields often lead to better incomes and livelihoods. Our involvement includes training in sustainable agricultural practices, providing inputs, infrastructure and transport, establishing fair and transparent pricing, and increasing access to markets. We benefit from their success as reliable suppliers of quality raw materials and as customers for our animal nutrition products.



Supporting Rural Development

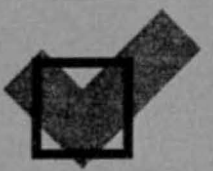
In China, Cargill is working to improve farm incomes and support the country's rural development through our Golden Key Plan. Our goal is to train 500,000 farmers in animal nutrition and agronomics by 2015 and to make it possible for talented individuals to study food and agriculture at universities and farms abroad. We also are establishing an innovation center where customers can learn more about managing supply chains and risk. By sharing our knowledge, Cargill is a better partner to rural communities.

Sustainable Palm



After Cargill's PT Hindoli oil palm plantation in Indonesia's South Sumatra province earned its Roundtable on Sustainable Palm Oil certification, we began assisting nearly 8,800 smallholder farmers to become accredited. They may become the first RSPO-certified group of smallholders in the world.

A Certified Success



Cargill's farmer training enabled two cooperatives in Côte d'Ivoire to become the first independently audited, UTZ CERTIFIED producers of sustainable cocoa – and the first to receive quality premiums. Our field schools will train 10,000 more farmers by year-end.

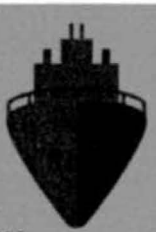
Customers

Creating solutions that help customers succeed is at the heart of Cargill's business strategy. It's changing how we engage: We start with customers' unmet needs and opportunities; then we connect throughout the company to bring forward the knowledge, capabilities and ideas that let us craft solutions together. It's also changing how we serve: We're forming single points of Cargill contact for customers in food and other channels. It's all part of our mission to develop creative solutions and deliver them effectively.

Sustainable Growth

With environmental concerns top of mind, food makers often partner with Cargill on sustainable solutions. Among them: plant-based materials for making compostable snack chip packaging, and an identity-preserved wheat grown with more efficient use of fertilizer for a new, eco-branded bread.

Connecting to Manage Risk



With the iron ore market's huge shift from fixed to floating pricing, our customer, a Mauritanian iron ore supplier, needed a global partner. We connected them to our steel customers in China and managed their price and freight exposures – ensuring risk-managed access to a fast-changing market.

Right to the Source

A leading Japanese confectionery company asked Cargill for logistical support in perfecting the quality of one of its most specialized ingredients: fine-flavor cocoa beans from Venezuela. We stepped up, even though our company has no cocoa operations there. We set up the on-the-ground mechanics needed to launch our customer's research project. Then we stayed involved throughout the project's 36-month life so we could learn alongside. Today, we're delivering Venezuelan product of consistent quality to our customer in Japan – an aromatic, flavorful and collaborative success.

Innovation

Innovation is essential to Cargill's intent to be our customers' partner of choice. Over the past decade, we tripled the company's R&D investment, with more than 1,400 technologists sitting alongside their commercial counterparts. We put in place an innovation system that guides how we develop, connect, manage and measure our innovation effectiveness companywide. It helps us codevelop significant new products and processes with key customers. When it comes to nourishing new ideas, we want to be the innovation partner that customers come to first.

ZERØ

Looking for Less

Consumers' desire for healthier choices is making Zerose™ erythritol from Cargill a favorite among food and beverage makers. This zero-calorie, natural bulk sweetener has a clean, sweet taste and no aftertaste. It is suitable for people with diabetes because it doesn't raise blood glucose or insulin levels. And it is tooth-friendly. Customers are incorporating the ingredient into chewing gums, candies, drinks, dairy, convenience foods, toothpastes and mouthwashes – a versatile showing that proves just how big "zero" can be.

Custom Ingredients

Tapping our portfolio of fibers, Cargill helped a global consumer packaged goods company enhance the digestive functionality of its premium pet foods for dogs. We developed a wheat-based prebiotic ingredient that offers intestinal health benefits to man's best friend.

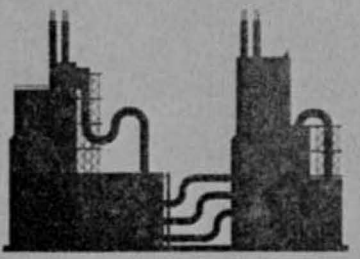
Industrial Revolution

Corn-derived lactic acid is used in making industrial products from plants. Cargill developed a fermentation technology that improves the quality, cost and environmental footprint of producing lactic acid. The innovation won the 2010 Industrial Biotechnology Award from the American Chemical Society.

Expansion

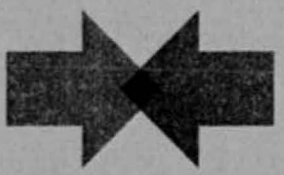
Expansion is often equated with brick and mortar, but every new and enlarged Cargill facility is actually about delivering the best ideas to those we serve. Take specialty canola oils. In anticipation of demand for heart-healthy products, we develop new hybrids, scale up seed quantities, contract with farmers, crush the seed, refine the oil and introduce innovations such as Clear Valley® omega-3 and low saturate oils. These better ideas drove the $131 million expansion of Cargill's crush plant in Clavet, Saskatchewan, the largest of its kind in the world.

Powering a Plant Renewably



When Cargill increased by 70 percent the capacity of our starches and sweeteners plant in Uberlândia, Brazil, we also installed a biomass boiler that supplies 70 percent of the facility's power and 100 percent of its steam. The boiler burns wood chips from fast-growing eucalyptus trees grown by small farmers on reforested fields–displacing 60,000 tons of fuel oil a year. The $116 million investment created 70 new jobs, bringing the team to 730 in our 25th year of growing in Uberlândia.

New Alliances



Cargill grows in good company: We formed a malt joint venture with Mexico's top beer brewer; nearly doubled our malting capacity in Argentina; opened an olive oil bottling plant with a leading Spanish cooperative; and, in a three-way venture, are constructing a sugar refinery in Louisiana.

Branching Out

Cargill is preparing to reenter base metals trading with a talented team focused initially on copper, aluminum, zinc and nickel. Applying the trading and risk management skills we've honed over many years to new, yet related, endeavors is another way our company can grow.

To Our Shareholders

For much of the last fiscal year, the world was in the pull of economic recession. A recovery emerged and, in some countries such as Brazil and China, accelerated. Yet any number of regional stresses exposed a deep unease about the underlying health of the world economy. Even today, more than a year out from the financial crisis and global economic contraction of 2008 and 2009, the outlook for economic growth is uncertain.

In this challenging environment, Cargill earned $2.6 billion in fiscal 2010, down 22 percent from a year ago. Excluding the majority investment in The Mosaic Company, Cargill's earnings rose 13.5 percent to $2.07 billion.

Revenues decreased 6 percent to $107.9 billion. Cash flow from operations equaled $4.6 billion.

The span of performance across Cargill's diverse portfolio was impressive, with 56 percent of the company's business units posting stronger results than a year ago and 20 percent delivering record earnings.

On a segment basis, earnings increased significantly in agriculture services and in food ingredients and applications. Risk management and financial turned around last year's loss to post a solid profit. Results in origination and processing were below the prior year. Industrial earnings decreased due to the decline in earnings from Mosaic.

BALANCE In times of recession, one of the important judgments a company makes is the balance between exercising fiscal care in the present and making investments in the future.

- We involved employees in a global cost-cutting campaign. Because the "how" was left to their imaginations, they delivered sustainable savings.
- The company opened 17 new and expanded facilities of significant scale in nine countries, including joint ventures. Fifteen more major projects are under construction. This represents a multiyear investment of $1.15 billion.
- The careful use of operating working capital kept debt usage low. Standard & Poor's ranked Cargill's credit quality eighth highest among 157 U.S. consumer products companies.
- We lightened the company's environmental footprint. Renewable sources now make up 11 percent of Cargill's energy demand, and freshwater usage is 6 percent more efficient than baseline – both exceeding goals. We improved energy efficiency and reduced greenhouse gas intensity, though at a below-goal pace globally. Regionally, Cargill's large U.S. locations, as voluntary members of the Chicago Climate Exchange®, reduced greenhouse gas emissions by a verified 7.8 percent from baseline, exceeding the 4.5 percent compliance milestone.
- Cargill realized the lowest frequency of work-related injuries in the 22 years we've gathered safety data globally. Despite an intense focus, we did not achieve zero fatalities. We have more work ahead, especially related to eliminating motor vehicle and security incidents.
- We sold the Seara poultry and pork business in Brazil and the oil palm plantations in Papua New Guinea. We remain committed to growing in Brazil and in animal protein and edible oils worldwide.

INNOVATION A company as diverse as Cargill has many ways to grow. Innovation is fundamental to all because it drives our ability to deliver distinctive value to customers. Over the years, we have developed many beneficial technologies, and we are working to connect them across the company. We have instituted an innovation system that aligns all of the company's technology investments with the future needs of customers. The system ensures that Cargill innovation is more than the sum of the business units' parts. It takes advantage of the tools of the Cargill Marketing Academy to discern unmet customer needs, as well as ideation processes to identify the best ideas. They become part of a portfolio of projects that are managed in a disciplined way from inception through commercialization.

Truvia™ natural sweetener is a good example of how innovation leads to growth. Introduced in 2008, it is now the third largest brand in the U.S. sugar substitute category, with more than 100 food and beverage companies partnering with us to create Truvia-sweetened products. The brand's award-winning national marketing campaign was lauded for its effectiveness in driving business results.

Sweetness also exemplifies connectivity in innovation. Cargill has the broadest portfolio of sweeteners in the industry, as well as the expertise to assist customers to achieve desired product attributes and regulatory clearances.

REFLECTION Cargill's agricultural and energy trading did not match the prior two years' extraordinary performances, due in part to choppy, range-bound markets that were often disconnected from supply-and-demand fundamentals. By the year's second half, agricultural trading was more in step with prevailing markets conditions; energy markets continued to produce fewer tradable trends.

Base-level capital spending increased, which represents a lifespan-extending investment in energy-efficient, worker- and food-safe facilities. Nonbase capital spending decreased for the second straight year, primarily due to fewer acquisitions. In late 2008, when prices dropped precipitously, many companies for sale took themselves off the market. Now they are back, at valuations that often do not allow for adequate rates of return. For this reason, we expect organic growth to be the larger driver over the medium term. When we do acquire, skillful integration will be critical. The multiyear investments Cargill is making in processes and supporting technologies – from state-of-the-art data centers to Tartan – are designed to improve every aspect of how Cargill does business. They also should give us additional tools to ensure integration effectiveness.

"In times of recession, one of the important judgments a company makes is the balance between exercising fiscal care in the present and making investments in the future."

STRATEGY The past year confirmed the relevance and value of Cargill's strategic intent. Its power has never been tethered to any one economic environment. The strategy's five tenets – to be our customer's partner of choice, collaborate across the company on their behalf, deliver the best ideas, develop our people and be accountable to each other – allowed us to guide the company out of harm's way, stay flexible and opportunistic, and invest to prosper in the future.

Fortune magazine named Cargill one of the top 25 global companies for leaders. The award recognized our commitment to developing leadership at all levels and the consistency with which we've pursued this aim year after year.

"The past year confirmed the relevance and value of Cargill's strategic intent. It allowed us to guide the company out of harm's way, stay flexible and opportunistic, and invest to prosper in the future."

CHALLENGE More uncertainty lies ahead, for the world has yet to transition from a policy-stimulated upturn to a structurally sustained recovery. Europe's debt crisis and China's monetary tightening are moving markets. Governments have made promises that their economies cannot fulfill. Regulations are changing in unpredictable ways.

It's easy to jump to the negative side of uncertainty, but we at Cargill should not. Every day, we create solutions in food, agriculture, energy and risk management – we do essential work. Our balance sheet is strong, our businesses are diverse yet connected, and our employees bring meaning and value to the Cargill® brand. All of this affords us more opportunities than challenges.

The recession slowed food demand in Western Europe and the United States, yet in the developing world, where adequate nourishment commands a larger share of individuals' incomes, demand grew at a surprisingly sturdy rate. People's need and desire for improving diets is strong. Cargill's skills in origination, agronomics, nutrition, food processing, logistics and energy, risk and supply chain management are essential to the world being able to feed itself in an economic and sustainable way.

FINANCIAL HIGHLIGHTS DOLLARS IN BILLIONS

Sales and other revenues	$ 107.9
Net earnings	$ 2.6
Cash flow from operations	$ 4.6

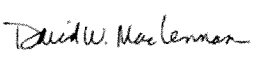
RECOGNITION Linda Zarda Cook, former Royal Dutch Shell executive director, was elected to the Cargill Board of Directors in February.

Michael Wright and David Larson depart from the Cargill board this September. As one of the board's first independent directors and, at 18 years, its longest serving member, Mike brought leadership and resolution to matters of corporate governance through his quiet wisdom and trusted expertise. Dave, in his 44 years with the company, including 11 as executive vice president and four as director, led the growth of Cargill Animal Nutrition and championed the Cargill brand and employee engagement. We thank Mike and Dave for their many contributions to the company.

IN CLOSING Cargill contributed $57.5 million in local communities in 54 countries. These resources were deployed in partnership with employee and retiree volunteers and some of the world's most respected humanitarian organizations. We are in joint pursuit of long-term solutions to nutrition and health, education and environmental challenges.

Cargill aspires to be the global leader in nourishing people. We thank our employees for the optimism and imagination they bring each day to this noble purpose. Together, we are a company committed to growth, to our customers' success and to helping communities meet the challenges of creating a better world.

Gregory R. Page
Chairman and Chief Executive Officer



David W. MacLennan
Senior Vice President, Chief Financial Officer

Aug. 10, 2010

Cargill is an international producer and marketer of food, agricultural, financial and industrial products and services. Founded in 1865, the privately held company employs 131,000 people in 66 countries. Cargill helps customers succeed through collaboration and innovation, and is committed to applying its global knowledge and experience to help meet economic, environmental and social challenges wherever it does business.

Cargill

P.O. Box 9300
Minneapolis, MN 55440
www.cargill.com

CROWLEY /
MULHOLLAND

BEFORE THE
SURFACE TRANSPORTATION BOARD

Cargill, Incorporated	)	
	)	
Complainant,	)	
	)	
v.	)	
	)	**STB Docket No. 42120**
	)	
BNSF Railway Company	)	
	)	
Defendant.	)	
	)	

Verified Statement

Of
Thomas D. Crowley
President

And
Robert D. Mulholland
Vice President

L.E. Peabody & Associates, Inc.
On Behalf Of

Cargill, Incorporated

Filed: August 25, 2011

TABLE OF CONTENTS **PAGE**

LIST OF EXHIBITS

EXHIBIT NO. (1)	EXHIBIT DESCRIPTION (2)
1	Statement of Qualifications of Thomas D. Crowley
2	Statement of Qualifications of Robert D. Mulholland
3	Statement of Combined Fuel Surcharge Overpayments by Cargill to BNSF on Regulated Ag and Other Freight Traffic due to Improperly Calibrated Step Function-April 19, 2008 Through 2010
4	Cargill Fuel Surcharge Nexus Analysis Framework and Examples Showing Fuel Cost Calculations
5	Demonstration of Regression Analyses
6	BNSF Fuel Surcharge Program and Corrected Ag and Other Freight Functions
7	Restated BNSF Mileage Based Fuel Surcharge Tables

I. INTRODUCTION

We are Thomas D. Crowley and Robert D. Mulholland, economists and President and a Vice President, respectively, of L. E. Peabody & Associates, Inc., an economic consulting firm that specializes in solving economic, transportation, marketing, financial, accounting and fuel supply problems. Mr. Crowley has spent most of his consulting career of over forty (40) years evaluating fuel supply issues and railroad operations, including railroad costs, prices, financing, capacity and equipment planning issues. His assignments in these matters were commissioned by railroads, producers, shippers of different commodities, and government departments and agencies. Mr. Mulholland has also spent most of his career of over fifteen (15) years evaluating fuel supply issues and railroad operations, including railroad costs, prices, capacity and equipment planning issues. He has conducted this work for shippers, producers, railroads, and government departments and agencies. A copy of Mr. Crowley's credentials is included as Exhibit No. 1 and a copy of Mr. Mulholland's credentials is included as Exhibit No. 2 to this Verified Statement ("VS").

We have been requested by Counsel for Cargill, Incorporated ("Cargill") to address the following question: whether BNSF Railway Company "("BNSF") is using the Assailed Tariff Item ("ATI") to extract substantial profits over and above its incremental fuel costs for the BNSF system traffic to which the ATI is applied. If we find that the answer to this question is "yes," we have been asked to determine: (1) the flaws in the ATI formula that are generating the substantial profits; (2) how the ATI should have been designed to avoid generation of these profits; and (3) the amount of surcharge revenues BNSF collected over and above the surcharges it would have collected from Cargill under reasonable fuel surcharge programs that were designed only to recover incremental fuel cost increases.

II. STUDY OVERVIEW AND SUMMARY OF RESULTS

Based on a detailed study of all 2006 through 2010 BNSF traffic subject to the ATI, we find that BNSF has collected revenues under the ATI that exceed BNSF's incremental fuel costs by $440.4 million on its Agricultural ("Ag") products traffic subject to the ATI, by $120.5 million on its Other Freight traffic subject to the ATI, or a total of $560.9 million on all traffic subject to the ATI (Ag traffic and Other Freight traffic). We further find that these over-recoveries are caused by BNSF's use of incorrect step functions to calculate the ATI fuel surcharges. We also find that BNSF's use of HDF prices in the ATI in a manner that creates a disconnect between the surcharge formula and actual BNSF fuel prices and consumption rates that must be accounted for in the surcharge formula calibration.

We have developed corrected fuel surcharge formulae that correct these design flaws in the ATI. Our corrected formulae, applied during the 2006 to 2010 time period, produce surcharge revenue collections that closely approximate BNSF's actual incremental fuel costs. The corrected formulae also properly recognize the different fuel consumption characteristics of Ag and industrial traffic and properly correlate HDF prices with corresponding actual BNSF fuel prices.

We have applied the corrected fuel surcharge formulae to determine the fuel surcharges that Cargill should have paid had the corrected formulae been applied by BNSF on Cargill's regulated traffic between April 18, 2008 and December 31, 2010 (close of discovery). We find that the difference between what Cargill paid BNSF in fuel surcharges on this traffic and the amount it should have paid under the corrected fuel surcharge formulae equals $29.0 million.[1]

Our testimony is discussed further below under the following topical headings:

[1] See Exhibit No. 3.

III. The Assailed Tariff Item

IV. Use of The Assailed Tariff Item As A Profit Center

V. Identifying and Correcting the Fundamental Design Flaws in the ATI Surcharge Formula

VI. Calculation Of Overpayments

III. THE ASSAILED TARIFF ITEM

Beginning in 2002, BNSF implemented a percentage-based fuel surcharge program under which it assessed fuel surcharges to various commodities, including Ag commodities, by applying a percentage additive to the base rate. The applicable percentage was determined based on the HDF price two-months prior to the shipment date. Under the program, BNSF applied a one-half percent fuel surcharge to the base transportation rate for every four cent increase in the published HDF price above a threshold value of $1.25 per gallon. BNSF later represented to the Board that $1.25 HDF value is purported to be a proxy for the base fuel cost level implicit in BNSF's fuel surcharge program, i.e., the "strike price" of $0.73 per gallon of locomotive diesel fuel.[2]

On January 1, 2006, BNSF implemented a mileage-based fuel surcharge ("MBFSC") program applicable to local and Rule 11 regulated Ag traffic and some local and Rule 11 Ag contract traffic. This new program was implemented via a new BNSF tariff item ("The Assailed Tariff Item"[3] or "ATI"). BNSF also instituted a second MBFSC on its unit train coal traffic on January 1, 2006. The unit train coal surcharge was set forth in Item 3381 of BNSF Rules Book 6100. Beginning in April 2007, and in response to the Surface Transportation Board's ("STB") decisions in the *Fuel Surcharges* case[4], BNSF instituted a third MBFSC program referenced on BNSF's website as "All Other Freight" ("Other Freight) traffic. The surcharges in this third

---

[2] Comments of BNSF Railway Company (Oct. 2, 2006) at 16, Ex Parte No. 661, *Rail Fuel Surcharges* ("*Fuel Surcharges*").

[3] BNSF Rules Book 6100-A, Item 3375L, Section B, along with all predecessors and successors thereto, including BNSF Rules Book 6100-A, Item 3376D, Section B, effective January 1, 2011 and all successors thereto.

[4] *Fuel Surcharges*, (STB Decisions served Mar. 14, 2006, Aug. 3, 2006, and Jan. 26, 2007)

program were also set forth in the ATI, and are identical to those that BNSF had been applying on its Ag traffic.[5]

Today, to find the applicable fuel surcharge under its three MBFSC programs using a $1.25 HDF strike price, BNSF's website contains the following directions and links:

1. Coal Unit Train - 6100, 3381, $1.25
2. Grains & Feed (Ag Products) - 6100, 3375, sec B, $1.25
3. All Other Freight - 6100, 3375, sec B, $1.25

Under the ATI as applied to Ag and Other Freight, BNSF applies a one-cent per loaded car-mile fuel surcharge for every four cent increase in the published HDF price above the same threshold value of $1.25 per gallon BNSF used in its percentage-based program[6] and followed the time period principle used in its percentage-based program, i.e., the applicable ATI loaded car-mile fuel surcharge is determined based on the HDF price two-months prior to the shipment date.

We have reviewed the ATI to determine whether BNSF has collected fuel surcharge revenues on its Ag and Other Freight traffic that exceed its incremental fuel costs on this traffic. In undertaking this review, we have also followed the Board's instructions in *Dairyland* that proof of an unreasonable fuel surcharge practice requires a "show[ing] that the general fuel surcharge formula produces fuel surcharges that do not reasonably track changes in aggregate fuel costs incurred."[7]

---

[5] BNSF Rules Book 6100-A, Item 3375 H (Effective April 25, 2007). BNSF also expanded the scope of the ATI to include interline traffic at this time.

[6] The ATI was based on a base HDF price of $1.25 throughout the entire study period, and Cargill's analysis was therefore an evaluation of the ATI in that framework. However, beginning in 2011, the revised ATI is rebased to a base HDF price of $2.50, reflecting a new strike-price. Presumably the base rates will be adjusted to reflect the new base HDF price, as the step function for the new program remains the same 1:4 ratio as that in the expired program.

[7] STB Docket No. 42105, Dairyland Power Cooperative v. Union Pacific Railroad Company, July 25, 2008 Decision, p. 6. ("*Dairyland*")

IV. USE OF THE ASSAILED TARIFF ITEM AS A PROFIT CENTER

In response to Cargill's discovery requests, BNSF provided traffic data for every shipment to which the ATI was applied from January 1, 2006 (program inception) through December 31, 2010 (close of discovery). The BNSF production encompassed the universe of shipments to which the challenged surcharge rate was applied.

The first part of our study set out to determine whether BNSF was adhering to the Board's directives in *Dairyland*, that the fuel surcharge revenues it was collecting on its Ag and Other Freight traffic under the ATI captured only BNSF's incremental fuel cost increases above the $0.73 per gallon BNSF fuel price claimed to be embedded in BNSF's freight rates. To do this, we first calculated the fuel surcharge revenues applied on each movement in each study year (2006-2010), and then calculated the incremental fuel costs for each movement in each study year (2006-2010). We then subtracted the incremental fuel costs for all movements from the total surcharges BNSF collected on these movements. Each of these steps is detailed below. We conclude that BNSF is using the ATI not just for incremental fuel cost recovery but as a significant profit center.

A. CALCULATION OF FUEL SURCHARGE REVENUES

BNSF provided traffic (i.e., waybill) data for { } movements to which BNSF applied the ATI during the 2006-2010 time period.[8] The provided data includes { } data fields for each movement.[9] We relied on the data in the provided traffic database in our development of fuel surcharges for each shipment. Specifically, we aggregated the surcharges applied to the

[8] Per BNSF's April 4, 2011 letter, the production "contains BNSF's traffic data for the years 2006 through 2010 in response to Cargill's document requests." Cargill's Request for Production No. 37 requested data for "each movement handled by BNSF as originating, terminating, overhead, or single-line carrier for all traffic to which the Assailed Tariff Item applies from January 1, 2006 to the present."

[9] See lines 1-117 of Exhibit No. 4.

movements over the BNSF system as reported in the provided traffic data and adjusted the surcharges to account for short line settlements reflected in the short line fuel surcharge settlement data provided by BNSF in discovery.[10] The surcharges reflected only the portion of the movements over the BNSF system.

We then calculated the surcharge revenues for Ag and Other Freight traffic. The results of our analyses are summarized in Table 1 below.

Table 1
BNSF Carloads Evaluated And Surcharges Collected –2006-2010

Year (1)	Ag Carloads (2)	Ag Surcharges Collected (3)	Other Freight Carloads (4)	Other Freight Surcharges Collected (5)	Total Carloads (6)	Total Surcharges Collected (7)
1. 2006	{ }	${ }	{ }	${ }	{ }	$ { }
2. 2007	{ }	${ }	{ }	${ }	{ }	$ { }
3. 2008	{ }	${ }	{ }	${ }	{ }	$ { }
4. 2009	{ }	${ }	{ }	${ }	{ }	$ { }
5. 2010	{ }	${ }	{ }	${ }	{ }	$ { }
6. Total	{ }	${ }	{ }	${ }	{ }	$ { }

Sources: Electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx", level "All traffic", range: N718:N723, and "Fuel And Miles Summary w added calcs v1305 strike Other.xlsx," level "All traffic," range N718:N723.

As summarized in Table 1 above, BNSF collected ${ } in fuel surcharges for movement over BNSF rail lines under the ATI from 2006 through 2010, with ${ } in fuel surcharge revenues for its Ag traffic and ${ } for its Other Freight traffic.

[10] See electronic work paper "FSC Payment by Road 2006-2010 - BNSF_CARGILL_DATA 004 w summary.xlsx".

B. CALCULATION OF BNSF INCREMENTAL FUEL COSTS

We relied on the data in the BNSF provided traffic database in our development of fuel-related costs for each shipment. We also used the STB Uniform Railroad Costing System ("URCS") unit cost data[11] and BNSF monthly fuel price data provided in discovery.

1. Shipment Size Data

We developed shipment size data[12] based on the number of cars that moved together according to the provided waybill data. Specifically, we collapsed the waybill data based on common data entries in the waybill date, waybill origin, waybill destination, first BNSF event time stamp, and last BNSF event time stamp data fields.[13] This collapse allowed us to determine the number of cars, total net tons, and total tare tons associated with cuts of cars that moved together along the BNSF system and classify the moves into one of three shipment types – single car ("SC"), multiple car ("MC"), or unit train ("UT")[14] – for purposes of developing fuel costs associated with the shipments. We then developed average gross trailing weight data for UT shipments based on the aggregate net and tare weight data associated with the cars in those shipments.

---

[11] STB URCS data are available through 2009. For 2010, we developed BNSF URCS unit cost data using the Board's methodology and the publicly available data from BNSF's 2010 R-1 Report and other applicable data required by URCS.

[12] See lines 160-173 of Exhibit No. 4.

[13] As we developed our shipment size analysis, it became evident that waybill number and date were not the ideal data fields to use in determining shipment size. This is because there are many instances where cars that move together from origin to destination are assigned individual waybills. However, because BNSF redacted origin, destination, and event time stamp data associated with data records for shipments involving Security Sensitive Information ("SSI") (i.e., shipments of Toxic by Inhalation Hazmat ("TIH")), unique shipments were developed based on unique combinations of waybill number and waybill date – i.e., the best available data – for these records.

[14] Cuts of 5 or fewer cars were classified as SC movements, cuts of 6 to 49 cars were classified as MC movements, and cuts of 50 or more cars were classified as UT movements per URCS Phase III costing procedures.

2. URCS Unit Cost Data

Next, we developed three sets of data inputs containing STB URCS unit cost data for unique data combinations in the waybill data, as described below.

The first set of inputs keys on movement year, car owner, car type, and shipment type. It contains URCS system average empty return ratios for these combinations of data entries that are used to develop individual movement fuel costs later in the analysis process.[15] For SC and MC shipment types, the URCS system average empty return ratios are used. For UT shipments, the empty return ratio is set to 2.0 based on standard URCS costing procedures.

The second set of inputs keys on movement year, car owner, and shipment type. It contains STB URCS system average variable fuel unit cost and switching activity data that are used to develop individual movement fuel costs later in the analysis process.[16] The inputs also contain system-wide fuel cost adjustments that are applied to each shipment according to standard URCS costing procedures.[17]

The third set of inputs keys on movement year and month. It contains BNSF fuel price index data used to develop movement specific fuel costs based on: 1) actual variable fuel costs at the time of the shipment; and 2) variable fuel costs based on BNSF's stated $0.73 per gallon

---

[15] See lines 174-179 of Exhibit No. 4.

[16] See lines 180-200 of Exhibit No. 4. This data table also contains system average locomotive, trailing weight, and tare weight data that are used as surrogates for SSI shipments where BNSF redacted relevant movement specific data.

[17] Specifically, terminal (O/D) switching costs for UT and MC shipments are adjusted downward while terminal switching costs for SC shipments are adjusted upward, interchange switching costs for UT shipments are adjusted downward while MC and SC shipments are adjusted upward, and intertrain and intratrain switching costs for UT shipments are eliminated while I&I switching costs for SC and MC shipments are adjusted upward. These adjustments account for the fact that UT operations are more efficient than MC operations, which are more efficient than SC operations.

locomotive diesel fuel strike price that BNSF claims are implicit in its base rates. These indices are used to develop individual movement fuel costs later in the analysis process.[18]

3. Expanded Movement Data

Next, we developed refined and expanded data needed to implement our fuel cost calculation methodology based on data contained in each waybill record and the data developed and described above using the ten step process described below.[19]

1) The first step in this process was to develop the movement type for each waybill record based on the provided waybill origin, BNSF origin, waybill destination, and BNSF destination data. Each record was classified as originated and terminated ("OT"), originated and delivered ("OD"), received and terminated ("RT"), or received and delivered ("RD"), and the number of BNSF terminal and interchange events was determined.[20] Where location data were redacted for SSI shipments, the Rule 11 indicator[21] was used as it was the best available surrogate data.

2) The second step was to determine the car owner based on the car initial data. Each record was classified as moving in shipper-owned ("SH") or railroad-owned ("RR") equipment.[22] Where car initial data were unavailable, the cars were assumed to be shipper-owned.

3) The third step was to determine, for SC and MC shipments, the actual average miles between inter-train/intra-train ("I&I") switching events based on the provided loaded segment mileage and train symbol data. The total loaded BNSF miles were divided by the total identified BNSF trains to make the determination.[23] Where train symbol data were redacted for SSI shipments, the URCS default value of 200 miles between switches was assumed.

4) The fourth step was to determine the actual average locomotives per train based on the provided locomotive data. The reported active locomotives were averaged for

---

[18] See lines 201-207 of Exhibit No. 4.
[19] See lines 118-139 and 141-145 of Exhibit No. 4.
[20] See lines 130-132 of Exhibit No. 4.
[21] For the SSI traffic ({ }% of total traffic), if the Rule 11 indicator showed another railroad for billing, one terminal and one interchange was included. If the Rule 11 indicator did not show a separate billing by another railroad, the move was assumed to be a local move on the BNSF.
[22] See line 133 of Exhibit No. 4.
[23] See line 134 of Exhibit No. 4.

all reported BNSF trains to make that determination.[24] Where train data were redacted for SSI shipments, the URCS system average value for the appropriate train type (unit train for UT movements, through train for SC and MC movements) was assumed.

5) The fifth step was to determine the actual average gross trailing weight per train based on the provided train tonnage data. For UT movements, the average gross trailing weight was determined by averaging the calculated gross trailing tonnage and the calculated trailing tare tonnage of the train. For SC and MC shipments, the reported gross trailing tonnage values were averaged for all reported BNSF trains to make the determination.[25] Where train data were redacted for SSI shipments, the URCS system average value for the appropriate train type (through trains) was assumed.

6) The sixth step was to determine the actual carload net ton-miles based on the provided lading weight and BNSF mileage data.[26]

7) The seventh step was to determine whether each shipment was a Cargill shipment based on the provided consignee, shipper, and customer data.[27]

8) The eighth step was to develop the rate basis mileage for the BNSF and short-line portion of each shipment based on the provided fuel surcharge and fuel surcharge rate data.[28] According to BNSF's production documentation[29], the provided fuel surcharge mileage data sometimes include mileage over other Class I carriers, but the provided fuel surcharge data only includes fuel surcharges for the portions of movements over BNSF and short-line carriers. It was therefore necessary to develop surcharge mileages for only the BNSF and short-line portion of the movements by dividing the provided fuel surcharge amounts by the provided fuel surcharge rates applied to each shipment.

9) The ninth step was to determine whether each shipment moved in the study period based on the provided waybill date data.[30]

10) The tenth step was to determine whether each shipment was regulated traffic based on the provided price authority data.[31]

---

[24] See line 135 of Exhibit No. 4.
[25] See line 136 of Exhibit No. 4.
[26] See line 137 of Exhibit No. 4.
[27] See lines 1-3 and 141 of Exhibit No. 4. BNSF provided consignee, shipper, and customer data for Cargill shipments only.
[28] See line 142 of Exhibit No. 4.
[29] See June 10, 2011 letter from Kathryn J. Gainey to Daniel M. Jaffe.
[30] See line 143 of Exhibit No. 4.
[31] See line 145 of Exhibit No. 4.

4. Fuel Cost Calculations

We developed actual movement fuel costs for the time period that the carload moved and fuel costs implicit in the base rates (i.e., strike price fuel costs) associated with each unique BNSF waybill record based on data contained in and developed from the waybill records and the developed inputs described above using the fourteen step process described below.[32]

1) The first step in this process was to develop the variable unit fuel cost per gross ton mile ("GTM") for each carload. This was done by converting the STB URCS fuel per locomotive unit mile ("LUM") unit cost to a gross tonnage basis and adding the result to the STB URCS fuel per gross ton-mile unit cost.[33] To restate the fuel per LUM unit cost on a fuel per GTM cost basis, the STB URCS fuel per LUM unit cost value was multiplied by the movement-specific locomotive count developed as described in the preceding section and that product was divided by the movement-specific trainload gross trailing tonnage developed as described in the preceding section.

2) The second step was to develop the variable unit fuel cost per switch engine minute ("SEM") for each carload. This was done by summing the STB URCS fuel per SEM unit cost values for yard and running operations.[34]

3) The third step was to develop the terminal switching make-whole[35] adjustment for each carload, if applicable. This was done based on the shipment type, year of movement, and car owner data indicated in each waybill data record.[36] All SC movements received a make-whole adjustment for terminal switching operations.

4) The fourth step was to develop the interchange switching make-whole adjustment for each carload, if applicable. This was done based on the shipment type, year of movement, and car owner data indicated in each waybill data record.[37] All SC and

---

[32] See lines 140, 146-159 of Exhibit No. 4.
[33] See line 146 of Exhibit No. 4.
[34] See line 147 of Exhibit No. 4.
[35] The make-whole adjustment is used to redistribute the efficiency savings that a railroad realizes in higher-volume shipments across all of that carrier's lower-volume shipments. The efficiency savings arise because the costs associated with switching, circuity, and way train are less for higher-volume shipments than they are for single-car shipments. Investigation of R.R. Freight Rate Structure—Coal, Ex Parte No. 270 (Sub-No. 4) (ICC served Mar. 14, 1975). The make-whole adjustment allows for the efficiency adjustments while maintaining the same URCS total variable costs across all shipments derived from the Annual Report, Form R-1 data. Stated differently, the URCS total variable costs are "made whole." Source: "Surface Transportation Board Report to Congress Regarding the Uniform Rail Costing System," dated May 27, 2010, pp. 18-19.
[36] See line 148 of Exhibit No. 4.
[37] See line 149 of Exhibit No. 4.

MC movements received a make-whole adjustment for interchange switching operations.

5) The fifth step was to develop the I&I switching make-whole adjustment for each carload, if applicable. This was done based on the shipment type, year of movement, and car owner data indicated in each waybill data record.[38] All SC and MC movements received a make-whole adjustment for I&I switching operations.

6) The sixth step was to develop the fuel cost associated with the movement of freight for each carload. This was done by multiplying the movement-specific fuel cost per GTM calculated as described above by the movement-specific net ton-miles calculated as described above.[39]

7) The seventh step was to develop the fuel cost associated with the movement of rail equipment for each carload. This was done by multiplying the movement-specific fuel cost per GTM calculated as described above by the movement-specific tare tons included in the waybill data, then multiplying that product by the one-way movement miles on the BNSF system included in the waybill data, and then by multiplying that product by the empty return ratio applicable to each specific movement.[40] For SC and MC shipments, the empty return ratio was determined based on the movement year, AAR equipment type, and car owner data included in the waybill data, and for UT shipments, the empty return ratio was set to 2.0.

8) The eighth step was to develop the fuel cost associated with terminal switching operations for each carload. This was done by multiplying the fuel cost per SEM calculated as described above by the system average switch engine minutes per terminal event for the movement year, then adding all required terminal switching make-whole cost adjustments (for SC shipments). This result was then multiplied by the number of BNSF terminal switching events for each carload, and the resulting product was then multiplied by 2.0 to account for the fact that each terminal switching event involves a spot/place and a pull activity. Finally, the resulting cost was multiplied by the applicable terminal switching cost adjustment (for MC and UT shipments) to arrive at terminal switching costs per carload.[41]

9) The ninth step was to develop the fuel cost associated with interchange switching operations for each carload. This was done by multiplying the fuel cost per SEM calculated as described above by the system average switch engine minutes per interchange event for the movement year, then adding all required interchange switching make-whole cost adjustments (for SC and MC shipments). This result was then multiplied by the number of BNSF interchange switching events for each

[38] See line 150 of Exhibit No. 4.
[39] See line 151 of Exhibit No. 4.
[40] See line 152 of Exhibit No. 4.
[41] See line 153 of Exhibit No. 4.

carload, and the resulting product was then multiplied by the empty return ratio[42] to account for the fact that interchange switching events sometimes involve a spot/place activity in one direction and a pull activity in the other direction, and sometimes involve only a spot/place or pull activity in the loaded direction.[43] The resulting cost was multiplied by the applicable interchange switching cost adjustment (for UT shipments) to arrive at interchange switching costs per carload.[44]

10) The tenth step was to develop the fuel cost associated with I&I switching operations for each carload. This was done by multiplying the fuel cost per SEM calculated as described above by the system average switch engine minutes per I&I event for the movement year, then multiplying the product by the number of BNSF I&I switching events in the loaded direction for each carload. After this value was determined, the required I&I switching make-whole cost adjustments (for SC and MC shipments) were added.[45] This result was then multiplied by the empty return ratio[46] to account for the fact that the number of I&I switching events on the empty side are dependent on the extent to which the equipment is returned to the movement origin.[47] The resulting cost was multiplied by the applicable I&I switching cost adjustment (zero for UT shipments) to arrive at I&I switching costs per carload.[48]

11) The eleventh step was to develop the total movement-year fuel cost (based on the annual average BNSF reported fuel cost implicit in the annual URCS unit cost data) associated with the movement and handling of each carload. This was done by summing the component fuel costs (freight movement fuel cost plus equipment movement fuel cost plus terminal switching fuel cost plus interchange switching fuel cost plus I&I switching fuel cost) developed in the five preceding steps.[49]

12) The twelfth step was to identify the appropriate monthly fuel price index[50] and strike price index[51] data from the Cargill-developed data tables.[52]

13) The thirteenth step was to calculate the actual fuel cost for each carload by multiplying the total movement-year fuel cost developed as described above by the

---

[42] An empty return ratio of 2.0 was used for UT shipments.
[43] This is the methodology specified in URCS costing procedures.
[44] See line 154 of Exhibit No. 4.
[45] The I&I make-whole adjustment is a per-mile value which was multiplied by the loaded BNSF miles to arrive at the make-whole adjustment for each carload to which it was applicable.
[46] An empty return ratio of 2.0 was used for UT shipments.
[47] This is the methodology specified in URCS costing procedures.
[48] See line 155 of Exhibit No. 4.
[49] See line 156 of Exhibit No. 4.
[50] Monthly fuel price reported in files provided by BNSF in discovery divided by the movement-year annual average BNSF fuel price implicit in the URCS unit cost data. See electronic work paper "BNSF Monthly Fuel Cost v5.xlsx", level "Summary".
[51] $0.73 divided by the movement-year annual average BNSF fuel price implicit in the URCS unit cost data.
[52] See lines 140 and 158 of Exhibit No. 4.

monthly fuel price index to arrive at the actual movement cost at the time of shipment.[53]

14) The fourteenth and final step was to calculate the base fuel cost (i.e., fuel cost at strike price fuel cost levels) for each carload by multiplying the total movement-year fuel cost developed as described above by the strike price index to arrive at the fuel cost implicit in the base rate.[54]

5. Incremental Costs Calculated

Using the procedures set forth above, we calculated the incremental cost increases for all Ag and Other Freight traffic subject to the Assailed Tariff Item, as summarized in Table 2 below.

Table 2
BNSF Incremental Fuel Costs –2006-2010

Year	Ag Carloads	AG Incremental Fuel Costs Incurred	Other Freight Carloads	Other Freight Incremental Fuel Costs Incurred	Total Carloads	Total Incremental Fuel Costs Incurred
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. 2006	{ }	${ }	{ }	${ }	{ }	${ }
2. 2007	{ }	${ }	{ }	${ }	{ }	${ }
3. 2008	{ }	${ }	{ }	${ }	{ }	${ }
4. 2009	{ }	${ }	{ }	${ }	{ }	${ }
5. 2010	{ }	${ }	{ }	${ }	{ }	${ }
6. Total	{ }	$ { }	{ }	${ }	{ }	${ }

Source: Electronic work paper "Fuel And Miles Summary w added calcs v1305 strike.xlsx", level "All traffic", ranges: N718:N723, E718:E723.

There is no doubt that BNSF's fuel surcharge program administered under the ATI produces fuel surcharges far in excess of the aggregate incremental fuel costs BNSF incurs to move the traffic subject to the surcharge. Table 3 below contains a summary of the surcharges collected and incremental fuel costs incurred by BNSF over the study period for both its Ag traffic and its Other Freight traffic subject to the ATI.

[53] See line 157 of Exhibit No. 4.
[54] See line 159 of Exhibit No. 4.

Table 3
BNSF Surcharges and Incremental Fuel Costs Associated with Traffic Subject to the ATI
(2006-2010)

Year (1)	AG Surcharges Collected (2)	AG Incremental Fuel Costs Incurred (3)	AG Over-Recovery (Profit) (4)	Other Freight Surcharges Collected (5)	Other Freight Incremental Fuel Costs Incurred (6)	Other Freight Over-Recovery (Profit) (7)
1. 2006	${ }	${ }	$ 82,117,772	${ }	${ }	$ 6,690,396
2. 2007	${ }	${ }	$45,452,591	${ }	${ }	$4,080,273
3. 2008	${ }	${ }	$140,344,357	${ }	${ }	$42,494,125
4. 2009	${ }	${ }	$60,229,315	${ }	${ }	$17,626,973
5. 2010	${ }	${ }	$112,257,398	${ }	${ }	$49,575,873
6. Total	${ }	$ { }	$440,401,433	${ }	${ }	$ 120,467,639

Sources: Electronic work papers "Fuel And Miles Summary w added calcs v1305 strike AG.xlsx", level "Ag Traffic", ranges: D718:E723, N718:N723, and "Fuel And Miles Summary w added calcs v1305 strike Other.xlsx", level "Other Traffic", ranges: D718:E723, N718:N723

As shown in Table 3 above, over the 5-year study period (the period for which BNSF provided traffic data), BNSF collected ${ }[55] in fuel surcharge revenues and incurred ${ }[56] in incremental fuel costs on { } shipments to which the ATI was applied. The net result was that BNSF over-recovered $560.9 million in fuel surcharge revenues, with an over-recovery of its Ag traffic equal to $440.4 million and an over-recovery on its Other Freight traffic equal to $120.5 million.

Based on our study, we conclude that BNSF collected revenues under the ATI that vastly exceed BNSF's incremental fuel cost increases.[57]

[55] ${ } on Ag traffic and ${ } on other freight traffic.
[56] ${ } on Ag traffic and ${ } on other freight traffic.
[57] Our analysis of the traffic to which the ATI applied covers both regulated and unregulated traffic. As shown in our workpaper "Fuel And Miles Summary w added calcs v1305 strike.xlsx", the overstatement applies to both regulated and unregulated traffic.

V. IDENTIFYING AND CORRECTING THE FUNDAMENTAL DESIGN FLAWS IN THE ATI SURCHARGE FORMULA

We have identified three design flaws in the surcharge formula used in the ATI that are causing the ATI to generate revenues vastly in excess of BNSF's actual incremental fuel cost increases on the Ag and Other Freight system traffic to which it is applied. They are: (1) the ATI uses the wrong step functions; (2) the ATI uses the wrong HDF strike price; and (3) the ATI uses the wrong step length application. Each of these flaws can be easily corrected, as explained below.

A. USE OF THE WRONG STEP FUNCTION

The ATI formula step function is based on a 1 cent increase in the surcharge per loaded car-mile for every 4 cent increase in the HDF price. We determined that BNSF's application of this step function is causing the massive over-recoveries in BNSF's actual incremental fuel costs on both its Ag and Other Freight traffic by undertaking the analysis described below.

1. Step Function Analysis and Regressions

First, we split the universe of traffic into two groups, i.e., Ag shipments and Other Freight shipments.

Second, as discussed above, we developed actual BNSF fuel costs and base BNSF fuel costs (i.e., costs at strike-price fuel cost levels). For purposes of correcting the ATI table step functions, we aggregated the cost data for each month in the study period. We also aggregated the surcharge miles used to apply the fuel surcharge for movements over the BNSF system. We adjusted the surcharge miles to account for short line miles reflected in the data based on short line fuel surcharge settlement data provided by BNSF in discovery.[58] The actual fuel costs, base fuel costs,

[58] See electronic work paper "FSC Payment by Road 2006-2010 - BNSF_CARGILL_DATA 004 w summary.xlsx".

and surcharge miles were all stated on the same basis and all reflected only the portion of the movements over the BNSF system.

Third, for each month in the study period, we calculated the fuel surcharge rate that would have been required to make BNSF whole using the following formula:

CFS = (AFC – BFC) / FSM

Where:
CFS = Correct Fuel Surcharge
AFC = Aggregate Actual Fuel Cost (BNSF fuel cost at the time of movement)
BFC = Aggregate Base Fuel Cost (BNSF fuel cost at the strike price level)
FSM = Aggregate Fuel Surcharge Miles (one-way, not necessarily over the actual route)

Fourth, after we made this calculation for each month in the study period,[59] we determined the statistical relationship between the CFS and the HDF price at the time of the shipment over the sixty month study period using a linear regression analysis. Specifically, we developed a regression wherein the current HDF price was the independent variable and the CFS was the dependent variable, determined the relationship between the two variables, and analyzed the validity of the relationship using standard statistical measures and tests (the validity analyses are discussed in more detail below.) Our analysis demonstrates that the BNSF fuel surcharge formula does not reasonably track changes in aggregate incremental fuel costs incurred and systematically over recovers fuel surcharges at all HDF price levels above the strike price.

Fifth, to determine the correct fuel surcharge that should have been applied to all BNSF movements to which the ATI was applied, we recalibrated the ATI fuel surcharge formula using a

[59] For the time period included in our study (April 19, 2008 to December 31, 2010), the actual fuel costs for Cargill's movements equals ${ } (Exhibit No. 3, Column (7), Line 9) and the fuel cost above the strike price equals ${ } (Exhibit No. 3, Column (11), Line 9). However, BNSF collected ${ } in FSC from Cargill (Exhibit No. 3, Column (9), Line 9) or an over-recovery of $29.0 million (${ } minus ${ }).

step function reflective of the slope of the regression we developed, based on the data shown in Exhibit No. 5. The results of the restated FSC functions are as follows:

Ag traffic:

Step = 1 / Slope = 1 / 0.1932 = 1 cent in FSC per 5.18 cents in HDF price [60]

Other Freight traffic:

Step = 1 / Slope = 1 / 0.2188 = 1 cent in FSC per 4.57 cents in HDF price [61]

A properly calibrated ATI would reflect a one-cent per loaded car-mile fuel cost increase for every 5.18 cent increase in HDF fuel price per gallon for all Ag movements, and a one-cent per loaded car-mile fuel cost increase for every 4.57 cent increase in HDF fuel price per gallon for all Other Freight movements. The restated fuel surcharge functions along with BNSF's current FSC function are shown in Exhibit Nos. 5 and 6.

As shown in Exhibit No. 5[62], the R-Squared statistics, or coefficient of determination, associated with Cargill's regression analyses for Ag and Other Freight traffic have values of 0.9029 and 0.8968 respectively.[63] The R-Squared statistic can be thought of as a measure of the ability to predict a future outcome (or value) on the basis of other related information. It is the proportion of variability in a data set that is accounted for by the statistical model. In simple terms, this means

---

[60] See Exhibit Nos. 5 and 6.

[61] See Exhibit Nos. 5 and 6.

[62] Exhibit No 5 includes the results of the regression analyses for each of the two traffic groups summarized in Exhibit No 3. In addition, Exhibit No 6 graphically demonstrates the results of the regression analyses.

[63] R-Squared values in a linear regression such as the ones we developed and such as that implicit in BNSF's fuel surcharge formula range from 0 to 1. The R-Squared value of 1.0 indicates that the regression line perfectly fits the data, or that 100 percent of the outcome is explained by the input. There is one principal reason why the R-Squared statistic in our regression analysis is less than 1.0. BNSF's fuel surcharge program is applied based on surrogate fuel price information. Specifically, the fuel surcharge applied to traffic under the program is based on the HDF price rather than the actual BNSF fuel price data. There are legitimate practical reasons for this methodology – namely that the HDF fuel prices are publicly available and ensure a level of transparency for shippers moving freight under the program. However, the surrogate price results in a mismatch between actual fuel prices and fuel prices used to establish surcharge rates. This mismatch also results in a reduction in the ability of fuel prices to predict fuel cost changes.

that 90.3% (and 89.7%) of the change in BNSF fuel cost per loaded car-mile (i.e., the restated fuel surcharge) is explained by changes in HDF fuel prices using our regression analysis.

We performed an ordinary least squares ("OLS") linear regression wherein we regressed the CFS against the current HDF price for the years 2006 through 2010. As shown below, approximately 90%[64] of the variation in CFS is correlated with the independent variable HDF under both analyses. Thus, the models are good predictors of Y (CFS), producing a regression line equal to the following:

Ag traffic analysis:

Predicted CFS = 0.1932 (HDF) – 0.2529

Other Freight traffic analysis:

Predicted CFS = 0.2188 (HDF) – 0.2917

Statistically, the regressions produce reasonable results because the R-squared (reasonableness of fit) statistic equals 90% and both coefficients are statistically significant[65].

Nearly all of the unexplained change in BNSF fuel cost per loaded car-mile is demonstrably attributable to the BNSF fuel surcharge program construct. We ran parallel regression analyses to the ones described above with one change, i. e., we substituted BNSF fuel prices for HDF prices as the independent variable. The R-squared value for this regression analysis is 0.9923 for Ag

---

[64] R square equals 0.9029 for Ag traffic and 0.8968 for other traffic.

[65] The t-statistic is used to test if a coefficient is statistically significant, e.g., a coefficient is not equal to zero (0). Specifically, we tested the null hypothesis that the coefficient is equal to zero (0), against the alternative hypothesis that the coefficient is not equal to zero (0). The test statistic is calculated by subtracting the estimated coefficient from the hypothesized null coefficient, e. g., zero (0), and dividing by the estimated coefficient's standard error. The test statistic is then compared to a Student's t distribution with (n-2) degrees of freedom to determine whether the null hypothesis can be rejected or not rejected. We compared our test statistics for each coefficient to a Student's t statistic at a 99 percent confidence level of 2.66 and found that the null hypothesis could be rejected in all cases, or, stated differently, all of the coefficients tested were significant ($p < 0.0001$) .

traffic[66] and 0.9873 for Other Freight traffic.[67] Our regression results demonstrate that our analysis is as robust as could reasonably be expected given BNSF's choice of HDF price as the surrogate independent variable in its surcharge formula.

2. Use of HDF As the Independent Variable In The Regressions

We did not use BNSF's actual fuel prices as the independent variable in our regression because the ATI uses HDF prices, not actual BNSF fuel prices, and using BNSF fuel prices would not produce the correct step function results – i.e., those that capture only incremental fuel cost increases – because the absolute change in HDF prices cannot be used as a proxy for the absolute change in BNSF fuel prices.

Implicit in the MBFSC program formula is the premise that HDF price and BNSF fuel price move in lock-step and differ by $0.52[68] per gallon at all price levels. This is a demonstrably incorrect presumption. From January 2006 through December 2010, the spread between HDF prices and BNSF fuel prices averaged ${ } per gallon and ranged from ${ } to ${ } per gallon on a monthly basis.[69]

In the Board's Ex Parte 661 Decision, it endorsed the use of the Energy Information Administration ("EIA") HDF fuel price index as a reasonable surrogate for railroad fuel prices. Specifically, the Board stated:

> Strong support has been expressed in the record for the proposal that railroads apply a single, uniform index to measure changes in fuel prices. Shippers argue that it would better ensure accuracy, transparency and accountability, and thereby enhance the credibility of fuel surcharges in the eyes of those who pay them. Moreover, there is general agreement — even among those carriers that object to Board imposition of a uniform index —

[66] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx", level "Month All", cell AZ4.
[67] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike other .xlxs", level "Month All", cell AZ4.
[68] $1.25 per gallon base HDF price minus $0.73 per gallon base BNSF fuel price, i.e., the strike price.
[69] See Electronic work paper "BNSF unit costs and fsc 2002-2010 v2.xlsx", level "HDF vs BN Fuel", range:E65:E67.

> that the EIA Index accurately reflects changes in fuel costs in the rail industry. Indeed, the EIA Index closely correlates with other fuel cost indices, including the indices currently used by most carriers. Moreover, the AAR has developed an index for carriers that is virtually identical to the EIA Index.
>
> Because the EIA Index has been the subject of notice and comment and has withstood scrutiny on this record as discussed above, we conclude that it is a reasonable index to apply to measure changes in fuel costs for purposes of a fuel surcharge program. Thus, it provides a "safe harbor" upon which carriers can rely for an index. Use of an alternative index may be subject to challenge.
>
> While we encourage carriers to use the EIA Index, we will not mandate its use.[70]

Although the Board endorsed the use of the EIA's HDF price *index* as a reasonable tool for measuring changes in railroad fuel prices, the Board did not endorse the use of HDF *prices* as surrogates for railroad fuel *prices*.

A simple example illustrates the difference between the model endorsed by the Board (use of a surrogate price index) and the model implemented by BNSF (use of a surrogate price). As shown in Table 4 below, prices for two commodities can have a perfectly positive linear correlation but increase/decrease in very different absolute amounts. For this example, we assume the price of Commodity A in period 1 is twice the price of Commodity B. Over the 10 periods in the Table 4 example, the Commodity prices increase at exactly the same pace, i.e., they are perfectly, positively correlated. However, the difference in prices is dramatically different as shown in Column (4).

[70] STB Ex Parte No. 661, *Rail Fuel Surcharges*, January 25, 2007 Decision, p. 11.

Table 4
Example of Perfect Price Correlation and Between
Commodities with Vastly Different Absolute Price Changes

Period	Commodity A Price	Commodity B Price	Price Differential 1/
(1)	(2)	(3)	(4)
1	$2.00	$1.00	$1.00
2	$4.00	$2.00	$2.00
3	$6.00	$3.00	$3.00
4	$8.00	$4.00	$4.00
5	$10.00	$5.00	$5.00
6	$12.00	$6.00	$6.00
7	$14.00	$7.00	$7.00
8	$16.00	$8.00	$8.00
9	$18.00	$9.00	$9.00
10	$20.00	$10.00	$10.00
Minimum	$2.00	$1.00	$1.00
Maximum	$20.00	$10.00	$10.00
Average	$11.00	$5.50	$5.50

1/ Column (2) minus Column (3)

In Table 4 above, the price correlation between the two commodities is perfectly positive (a correlative coefficient = 1.0)[71]. However, the price of Commodity B changes at one-half the rate of Commodity A or the slope of the linear relationship (measure of relative absolute change) is 0.5. That is, the linear relationship[72] can be expressed as follows:

Commodity B Price = (0.500 x Commodity A Price) + 0.000

[71] The strength of a linear correlation is measured by the correlation coefficient, which is equal to the covariance of the data sets divided by the individual standard deviations. A correlation coefficient of -1 implies a perfect negative linear association, while a correlation coefficient of 1 implies perfect positive linear association.

[72] Correlation provides a measure of the strength of any linear association between a pair of random variables, in which the random variables are treated symmetrically. In other words, we are indifferent in speaking about the "correlation between A and B," or the "correlation between B and A." Placing the relationship in a linear format creates a dependent relationship, which does not necessarily have to be symmetric. In the example above, Commodity B is shown with a linear dependency on Commodity A. The same linear relationship would not hold if Commodity A was shown with a linear dependency on Commodity B. In other words, if Commodity B was the dependent variable and Commodity A was the independent variable, the slope would not be 0.5 but rather 2.0.

The relative change in Commodity A prices over time can be used as a proxy for the relative change in Commodity B prices, e.g., a $1 increase in Commodity A will lead to a $0.50 increase in Commodity B. However, the absolute change in Commodity A prices cannot be used as a proxy for the absolute change in Commodity B prices, e.g., a $1 increase in Commodity A will not lead to a $1 increase in Commodity B. This same restriction holds for the use of HDF changes as a determinant for BNSF fuel prices. The relative change in HDF prices over time can be used as a proxy for the relative change in BNSF fuel prices. However, the absolute change in HDF fuel prices cannot be used as a proxy for the absolute change in BNSF fuel prices.

Basic statistical analysis of historical HDF and BNSF fuel prices reveals that while the correlation between the changes in the two prices shows a strong positive correlation, e.g., when the HDF changes BNSF's fuel prices also change in the same direction, the absolute change in price differs between the two commodities. From January 2006 (the inception of the MBFSC program) through December 2010, the linear relationship between monthly HDF prices and BNSF fuel prices was as follows:[73]

BNSF Fuel Price = ({ } x HDF) – { }

The relationship between BNSF fuel prices and BNSF fuel costs is dependent on BNSF fuel consumption rates. If one assumes BNSF averages { } loaded car-miles per gallon ("MPG") of fuel, then the ratio of the change in BNSF fuel costs per loaded car-mile to the change in BNSF fuel prices would be 1 to { } on average.[74] As shown above, HDF price and BNSF fuel price do not

[73] See electronic work paper "Fuel And Miles w added calcs v1305 strike .xlxs," work sheet "Strike Reset," cells H4, H6.

[74] We do not agree with the { } MPG consumption rate. However, for simplification purposes in this section we will use this figure in our demonstration.

rise and fall in lock-step. More specifically, for every one cent change in HDF price, there is a { } cent change in BNSF fuel price.

Absolute changes in HDF prices are not directly comparable to absolute changes in BNSF fuel prices. Therefore, the relationship between HDF prices and BNSF fuel costs are not directly comparable to the relationship between BNSF fuel prices and BNSF fuel costs. By extension, HDF prices are not directly comparable to BNSF fuel consumption. Therefore, even though HDF can be thought of as a reasonable surrogate for BNSF fuel prices as the independent variable in the MBFSC, introduction of HDF prices to the formula creates a disconnect between fuel prices and fuel consumption rates. The HDF price cannot be treated as a perfect proxy for BNSF fuel consumption rates. Rather, a consumption adjustment factor of { }[75] must be accounted for in the development of the fuel surcharge formula.

A simple example demonstrates this important disconnect as shown in Table 5 below.

Table 5
HDF Price Versus BNSF Fuel Consumption

Item (1)	Source (2)	Period 1 (3)	Period 2 (4)
1. HDF Price ($/gal.)	Given	$2.000	$3.000
2. BNSF Fuel Price ($/gal.)	({ }) x HDF – { }	${ }	${ }
3. HDF Price Change from Previous Period ($/gal.)	Line 1, Column (4) –Column (3)	xxx	$1.000
4. BNSF Fuel Price Change from Previous Period ($/gal.)	Line 2, Column (4) –Column (3)	xxx	${ }
5. Price for 100 Gallons BNSF Fuel	Line 2 x 100 gallons	${ }	${ }
6. BNSF per Car-mile Fuel Cost Assuming { } MPG ({ } mi)	Line 5 ÷ { } loaded car-miles	${ }	${ }
7. BNSF per Car-mile Fuel Cost Change from Previous Period	Line 6, Column (3) –Column (2)	xxx	${ }
8. BNSF Consumption Rate Calculation	Line 4 ÷ Line 7	xxx	{ }
9. Surrogate Step Function Calculation	Line 3 ÷ Line 7	xxx	{ }
10. Required Step Le ngth Adjustment when Using HDF Price as Proxy for BNSF Fuel price	Line 9 ÷ Line 8	xxx	{ }

[75] 1 ÷ { }.

As shown above in Table 5, even if one accepts BNSF's proposition that the MBFSC program is intended to recover fuel based on an implicit fuel consumption rate of { } MPG, the relationship between HDF and BNSF fuel prices would require the use of a step function length of { }[76] for the chosen formula that uses HDF price as the independent variable.

We ran two regression analyses to test the impact of using HDF price as a surrogate for BNSF fuel price. If BNSF were to use BNSF fuel prices rather than HDF prices as the independent variable, then the surcharge program step function would be { }[77] for Ag and { }[78] for Other Freight traffic. These results verify the step factor adjustment of { } needed to account for the use of HDF price in lieu of BNSF fuel price as the independent variable in the fuel surcharge formula.[79]

3. Comparison of Corrected Steps to BNSF's Actual Fuel Consumption

{

}.

[76] A one cent increase in fuel surcharge per loaded car-mile for every { } cent increase in HDF price.

[77] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx", level "MonthAll", cell AZ6.

[78] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Other.xlsx", level "MonthAll", cell AZ6.

[79] 5.18 Ag step based on FSC price divided by { } Ag step based on BNSF fuel price = { } Ag adjustment; and 4.57 Other Freight step based on FSC price divided by { } Other Freight step based on BNSF fuel price = { } Other Freight adjustment.

[80] {
}

Our analysis shows that during the 2006 through 2010 study period, BNSF actually averaged { } MPG for Ag traffic ({ } MPG when surcharge miles are used as the divisor)[81] and { } MPG for other traffic to which the ATI was applied ({ } MPG when surcharge miles are used as the divisor).[82]

We note here that one of the reasons for the significant differential in MPG for Ag traffic and Other Freight traffic is the fact that a far greater percentage of the Ag traffic moves in unit trains.[83] The MPG for Ag unit trains during the 2006 to 2010 study period is { } MPG ({ } MPG when surcharge miles are used as the divisor)[84]. During the study period, approximately { } of all Ag traffic was unit train traffic whereas unit trains composed less than { } of all Other Freight traffic.[85] Additionally, the data show that for shipments moving in carload service, Ag traffic generally moves on longer trains and is handled less (e. g., fewer I&I switching events) than Other Freight traffic.

The fact that BNSF's Ag traffic is more fuel efficient than its Other Freight traffic is also demonstrated using the GTM per gallon metric. GTM per gallon is a common metric railroads use to evaluate fuel consumption. We have quantified the GTM per gallon consumption rates for the

---

[81] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx", level "MonthAll", range: AK68: AP76.

[82] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Other.xlsx", level "MonthAll", range: AK68: AP76. For purposes of this analysis, we have included the 1% of miscellaneous coal and consumer products in the Other Freight Traffic group.

[83] Use of a single Ag fuel surcharge ignores the scale economies inherent in the railroad industry. Trainload (or "unit train") movements are far more efficient and less costly to handle than carload shipments for a number of reasons. Cars moving in trainload shipments are handled less often and for shorter durations than cars moving in carload service at terminal and interchange locations. Additionally, cars moving in carload shipments are switched between BNSF trains en route whereas cars moving in trainload service are not. This cost differential is a known and fundamental principle of railroad economics and operations. It is why railroads (including BNSF) have sought and continue to seek ways to increase the amount of traffic they move in trainload service since before the Staggers Act of 1980. {

}

[84] See electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx", level "Month And Type", range: AJ192:AO200.

[85] Source: electronic workpaper "Fuel And Miles Summary all-ag-other.xlsx", level "GTM Sum". The 2006-2010 breakdown for all traffic was { }% trainload traffic and { }% carload traffic.

provided traffic to determine the extent to which BNSF's fuel efficiency for the studied traffic has changed during the study period. Table 6 below shows the results of our analysis.

Table 6
BNSF GTM Per Gallon, 2006-2010

Year (1)	Ag Traffic (2)	Other Freight Traffic (3)	% Ag Greater Than Industrial 1/ (4)
1. 2006	{ }	{ }	+{ }%
2, 2007	{ }	{ }	+{ }%
3. 2008	{ }	{ }	+{ }%
4. 2009	{ }	{ }	+{ }%
5. 2010	{ }	{ }	+{ }%
6. 2006-2010 Average 2/	{ }	{ }	+{ }%

1/ Column (2) ÷ Column (3) – 1 x 100
2/ Cumulative fuel consumption for 2006 to 2010 divided by cumulative GTM for 2006 to 2010.
Source: Electronic work paper "Fuel And Miles Summary all-ag-other xlsx", level "GTM Sum" ranges M29, N34.

As shown in the Table 6 above, BNSF's Ag traffic is { } % more fuel efficient than Other Freight traffic when measured on a GTM per gallon basis.

{

}[87]

4. Other Step Function Calculations

We have conducted our analysis on a program basis, separating our consideration of BNSF's Ag MBFSC from its Other Freight MBFSC. We believe that this is the correct approach because it follows BNSF's program model, and follows the representations BNSF made to the STB in the 2006 Fuel Surcharge case that its mileage-based fuel surcharge tables are "[t]ables built on business unit fuel intensities"[88] which "reflect [BNSF's] best estimate of the average fuel consumption for [each] type of traffic"[89] because approximately { }% of the traffic subject to the ATI during the five year study period was either Ag traffic ({ }%) or Industrial traffic ({ }%).[90] We also based our analysis on all traffic subject to ATI – both regulated and unregulated traffic. We did so because we understand that BNSF's goal with its MBFSC programs is to collect mileage-based fuel surcharges from all of its traffic – both regulated and unregulated.[91]

B. USE OF THE WRONG HDF STRIKE PRICE

As documented above, BNSF represents its base $1.25 per gallon HDF price level as being equivalent to BNSF's stated $0.73 per gallon strike price. However, historical data clearly shows

[86] See e.g., BNSF_CARGILL_0020754.

[87] See studies cited in Section III.A.3 of Cargill's Opening Statement Argument.

[88] See BNSF, Fuel Surcharge Briefing, STB Hearing in *Fuel Surcharges* (May 11, 2006) at 6; see also http://bnsf.com/customers/fuel-surcharge/

[89] See http://bnsf.com/customers/fuel-surcharge/#%23subtabs-5

[90] See electronic work paper "Pauth And Stcc2 Summary w analysis.xlsx" at level "STCC2". Ag traffic consisted of STCC 1 and STCC 20. Industrial traffic consisted of all non-Ag traffic, excluding coal (STCC 11) and transportation equipment (STCC 37). We included the remaining { }% of miscellaneous traffic shipments in our "Other Freight" traffic analysis.

[91] We include in our workpapers alternate analyses, using our study procedures, wherein we calculate corrected step functions based on analysis of all traffic using different traffic groupings. In addition, for each of our analyses, we include sensitivities wherein we calculate step functions based on inclusion of only regulated traffic in the study group and based on further division of the traffic into two groups based on shipment parameters (specifically, we calculate separate step functions for carload and trainload traffic in all scenarios).

this to be incorrect. Since 2000, there have been three quarters in which BNSF reported fuel prices were within { } of $0.73 per gallon. In each of those quarters, the HDF price exceeded $1.25 per gallon by a wide margin. Table 7 below shows the fuel price data for the relevant quarters.

Table 7
BNSF Fuel Price vs. HDF Fuel Price at BNSF Strike Price Levels, Historical Data

	Quarter (1)	BNSF Fuel Price per Gallon (2)	HDF Fuel Price per Gallon (3)	Difference Between BNSF and HDF Price (4)
1.	{ }	${ }	${ }	${ }
2.	{ }	${ }	${ }	${ }
3.	{ }	${ }	${ }	${ }
4.	Average	${ }	$1.359	${ }

Source: Electronic work paper "Fuel And Miles Summary w added calcs v1305 strike Ag.xlsx", level "Strike Reset", range: B8:E16.

As shown in Table 7 above, historical quarterly price data indicate that the $0.73 per gallon BNSF strike price is roughly equivalent to an HDF price of ${ } per gallon, not $1.25 per gallon. Additionally, for full year 2002, BNSF fuel price averaged ${ } per gallon while HDF fuel price averaged $1.315 per gallon.

Analysis of recent historical price data further contradict BNSF's representations that $1.25 per gallon HDF is equivalent to the $0.73 per gallon BNSF strike price. Specifically, we also analyzed the relationship between BNSF fuel prices and HDF prices on a monthly basis from the ATI inception date of January 2006 through December 2010. Our analysis reveals that the

statistical relationship between monthly HDF prices and BNSF fuel prices for this time period was as follows[92]:

BNSF Fuel Price = ({ } x HDF) – { }

To solve for the HDF price equivalent to a BNSF fuel strike price of $0.73 per gallon based on the observed relationship during the study period, the following calculations are made:

$0.73 = ({ } x HDF) – ${ }

$0.73 + ${ } = { } x HDF

${ } = { } x HDF

${ } ÷ { } = HDF

$1.298 = HDF

Again we see that using $1.25 HDF price per gallon as an equivalent for $0.73 BNSF fuel price per gallon is incorrect. We use $1.298 ({

}) as the base HDF fuel price in our restatement of the BNSF MBFSC programs

C. USE OF THE WRONG POINT TO INITIATE FUEL SURHARGE COLLECTIONS

BNSF's methodology of applying a fuel surcharge at the HDF price it claims is equivalent to the BNSF strike price of $0.73 per gallon initiates the fuel surcharge collection at the wrong starting point. Specifically, BNSF claims that its chosen $1.25 per gallon HDF price level is

[92] See electronic work paper "BNSF unit costs and fsc 2002-2010 v2.xlsx", level "HDF vs BN Fuel", cell G22.

equivalent to $0.73 per gallon in BNSF fuel.[93] BNSF further claims that its "intention remains to recover the incremental fuel costs when fuel prices *exceed* a threshold fuel price, or strike price."[94] Even if one accepts that $1.25 per gallon HDF is equivalent to $0.73 per gallon in BNSF fuel, BNSF recovers all of its fuel costs through the base rate when fuel prices are at the $1.25 per gallon HDF price level. Yet BNSF collects a fuel surcharge of $0.01 per car-mile at the $1.25 per gallon HDF (i.e., strike price) level. BNSF collects fuel surcharges on movements for which BNSF incurs no incremental fuel costs above the costs incorporated in and recovered through its base rates based on BNSF's own definition of the strike price and "equivalent" HDF price.

To correct this flaw, we have made a simple and straightforward revision to the BNSF fuel surcharge formula. Rather than initiating surcharge collection at the strike price, the formula should (and our revised formula does) initiate surcharge collection at the strike price plus ½ step length fuel price level. The step length represents the increase in the HDF price in pennies for which there is a corresponding one cent increase in fuel cost per loaded car-mile. BNSF's extant formula, which assumes a strike price equivalent of $1.25 per gallon HDF and a 1 to 4 step length, implies that BNSF incurs no incremental fuel cost when the HDF price is $1.25 per gallon, and that BNSF incurs an incremental fuel cost of one cent per loaded car-mile when HDF price is $1.29 per gallon. The $0.01 per car-mile surcharge should be applied beginning at $1.27 per gallon HDF levels (when BNSF's incremental fuel costs are equal to half-a-cent per car-mile) and increase by one cent for every four cent increase in HDF price above that level ($0.02 at $1.31 HDF, $0.03 at $1.35 HDF, etc.). Under this scheme, BNSF recovers $0.01 per loaded-car-mile when its incremental fuel costs per loaded car-mile are between $0.005 and $0.015, BNSF recovers $0.02

[93] See electronic work paper "Strike Price.pdf."
[94] See e.g., http://www.bnsf.com/customers/fuel-surcharge/ (emphasis added).

per loaded-car-mile when its incremental fuel costs per loaded car-mile are between $0.015 and $0.025, etc.

D. CORRECTED TABLES

As demonstrated above, the correct step function for Ag traffic is 1:5.18, the correct step function for Other Traffic is 1:4.57, and the correct HDF strike price equivalent is $1.298, not $1.25 per gallon. Also as shown above, surcharges should not be collected until BNSF's incremental fuel costs equal half-a-cent per loaded car-mile. Therefore, the formulae should initiate surcharge collection at the strike-price plus ½ step length HDF fuel price level. Exhibit No. 7 contains restated Ag and Other Freight fuel surcharge tables that incorporate the required corrections.

VI. CALCULATION OF OVERPAYMENTS

We applied these corrected fuel surcharge formulae to all regulated Cargill shipments moving between April 19, 2008 and December 31, 2010 to determine the total overpayments Cargill made to BNSF during that time period. When the fuel surcharge program formula is recalibrated to incorporate the corrected base fuel price and step functions, Cargill is shown to have over paid BNSF $28.5 million[95] in surcharges on Ag traffic and $0.5 million[96] in surcharges on Industrial traffic during the study time period from August 19, 2008 through December 31, 2010. In addition, Cargill's 2011 shipments were, and continue to be, overcharged as well.

Importantly, the resulting statement of overpayments does not equal (and is less than) the actual difference between BNSF fuel costs in excess of the base fuel cost level and BNSF fuel surcharges on Cargill traffic during that period. Our restatement does not result in a precise match between total fuel-related revenues (base fuel costs plus corrected surcharges) and total fuel costs associated with Cargill shipments. Rather, our restatement reflects the surcharges that Cargill would have paid to BNSF under a fuel surcharge program calibrated to recover BNSF's fuel costs in the aggregate for all shipments to which the program was applied.

We emphasize that our statement of overcharges is based on the application of a reasonable fuel surcharge program to Cargill's traffic, i.e., one calibrated to properly recover BNSF's collective incremental fuel costs on all traffic to which the ATI was applied. The difference between fuel surcharges Cargill paid BNSF and the surcharges Cargill would have paid BNSF under a reasonable surcharge program constitutes Cargill's overcharges. In addition, we only included Cargill's regulated shipments (i.e., we excluded Cargill shipments that moved under

[95] Base case nominal fuel surcharges before interest. Source: Exhibit No. 3.
[96] Base case nominal fuel surcharges before interest. Source: Exhibit No. 3.

contract) that moved between April 19, 2008 and December 31, 2010 in our overcharge calculations.

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

I, THOMAS D. CROWLEY, verify under penalty of perjury that I have read the foregoing Verified Statement of Thomas D. Crowley, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Thomas D. Crowley

Sworn to and subscribed
before me this 25th day of August, 2011

Diane R. Kavounis
Notary Public for the State of Virginia

My Commission Expires: November 30, 2012
Registration Number: 7160645

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

I, ROBERT D. MULHOLLAND, verify under penalty of perjury that I have read the foregoing Verified Statement of Robert D. Mulholland, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Robert D. Mulholland

Sworn to and subscribed
before me this 25th day of August, 2011

Diane R. Kavounis
Notary Public for the State of Virginia

My Commission Expires: November 30, 2012
Registration Number: 7160645

STATEMENT OF QUALIFICATIONS

My name is Thomas D. Crowley. I am an economist and President of the economic consulting firm of L. E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Suite 200, Alexandria, Virginia 22314, 760 E. Pusch View Lane, Suite 150, Tucson, Arizona 85737, and 21 Founders Way, Queensbury, New York 12804.

I am a graduate of the University of Maine from which I obtained a Bachelor of Science degree in Economics. I have also taken graduate courses in transportation at George Washington University in Washington, D.C. I spent three years in the United States Army and since February 1971 have been employed by L. E. Peabody & Associates, Inc.

I am a member of the American Economic Association, the Transportation Research Forum, and the American Railway Engineering and Maintenance-of-Way Association.

The firm of L. E. Peabody & Associates, Inc. specializes in analyzing matters related to the rail transportation of all commodities. As a result of my extensive economic consulting practice since 1971 and my participation in maximum-rate, rail merger, service disputes and rule-making proceedings before various government and private governing bodies, I have become thoroughly familiar with the rail carriers that move coal over the major coal routes in the United States. This familiarity extends to subjects of railroad service, costs and profitability, cost of capital, railroad capacity, railroad traffic prioritization and the structure and operation of the various contracts and tariffs that historically have governed the movement of traffic by rail.

STATEMENT OF QUALIFICATIONS

As an economic consultant, I have organized and directed economic studies and prepared reports for railroads, freight forwarders and other carriers, for shippers, for associations and for state governments and other public bodies dealing with transportation and related economic problems. Examples of studies I have participated in include organizing and directing traffic, operational and cost analyses in connection with multiple car movements, unit train operations for coal and other commodities, freight forwarder facilities, TOFC/COFC rail facilities, divisions of through rail rates, operating commuter passenger service, and other studies dealing with markets and the transportation by different modes of various commodities from both eastern and western origins to various destinations in the United States. The nature of these studies enabled me to become familiar with the operating practices and accounting procedures utilized by railroads in the normal course of business.

Additionally, I have inspected and studied both railroad terminal and line-haul facilities used in handling various commodities, including unit train coal movements from coal mine origins in the Powder River Basin and in Colorado to various utility destinations in the eastern, mid-western and western portions of the United States and from the Eastern coal fields to various destinations in the Mid-Atlantic, northeastern, southeastern and mid-western portions of the United States. These operational reviews and studies were used as a basis for the determination of the traffic and operating characteristics for specific movements of numerous commodities handled by rail.

STATEMENT OF QUALIFICATIONS

I have frequently been called upon to develop and coordinate economic and operational studies relative to the rail transportation of various commodities. My responsibilities in these undertakings included the analyses of rail routes, rail operations and an assessment of the relative efficiency and costs of railroad operations over those routes. I have also analyzed and made recommendations regarding the acquisition of railcars according to the specific needs of various shippers. The results of these analyses have been employed in order to assist shippers in the development and negotiation of rail transportation contracts which optimize operational efficiency and cost effectiveness.

I have developed property and business valuations of privately held freight and passenger railroads for use in regulatory, litigation and commercial settings. These valuation assignments required me to develop company and/or industry specific costs of debt, preferred equity and common equity, as well as target and actual capital structures. I am also well acquainted with and have used the commonly accepted models for determining a company's cost of common equity, including the Discounted Cash Flow Model ("DCF"), Capital Asset Pricing Model ("CAPM"), and the Farma-French Three Factor Model.

Moreover, I have developed numerous variable cost calculations utilizing the various formulas employed by the Interstate Commerce Commission ("ICC") and the Surface Transportation Board ("STB") for the development of variable costs for common carriers,

STATEMENT OF QUALIFICATIONS

with particular emphasis on the basis and use of the Uniform Railroad Costing System ("URCS") and its predecessor, Rail Form A. I have utilized URCS/Rail form A costing principles since the beginning of my career with L. E. Peabody & Associates Inc. in 1971.

I have frequently presented both oral and written testimony before the ICC, STB, Federal Energy Regulatory Commission, Railroad Accounting Principles Board, Postal Rate Commission and numerous state regulatory commissions, federal courts and state courts. This testimony was generally related to the development of variable cost of service calculations, rail traffic and operating patterns, fuel supply economics, contract interpretations, economic principles concerning the maximum level of rates, implementation of maximum rate principles, and calculation of reparations or damages, including interest. I presented testimony before the Congress of the United States, Committee on Transportation and Infrastructure on the status of rail competition in the western United States. I have also presented expert testimony in a number of court and arbitration proceedings concerning the level of rates, rate adjustment procedures, service, capacity, costing, rail operating procedures and other economic components of specific contracts.

Since the implementation of the *Staggers Rail Act of 1980*, which clarified that rail carriers could enter into transportation contracts with shippers, I have been actively

STATEMENT OF QUALIFICATIONS

involved in negotiating transportation contracts on behalf of shippers. Specifically, I have advised shippers concerning transportation rates based on market conditions and carrier competition, movement specific service commitments, specific cost-based rate adjustment provisions, contract reopeners that recognize changes in productivity and cost-based ancillary charges.

I have been actively engaged in negotiating coal supply contracts for various users throughout the United States. In addition, I have analyzed the economic impact of buying out, brokering, and modifying existing coal supply agreements. My coal supply assignments have encompassed analyzing alternative coals to determine the impact on the delivered price of operating and maintenance costs, unloading costs, shrinkage factor and by-product savings.

I have developed different economic analyses regarding rail transportation matters for over sixty (60) electric utility companies located in all parts of the United States, and for major associations, including American Paper Institute, American Petroleum Institute, Chemical Manufacturers Association, Coal Exporters Association, Edison Electric Institute, Mail Order Association of America, National Coal Association, National Industrial Transportation League, North America Freight Car Association, the Fertilizer Institute and Western Coal Traffic League. In addition, I have assisted numerous government agencies, major industries and major railroad companies in solving various transportation-related problems.

STATEMENT OF QUALIFICATIONS

In the two Western rail mergers that resulted in the creation of the present BNSF Railway Company and Union Pacific Railroad Company and in the acquisition of Conrail by Norfolk Southern Railway Company and CSX Transportation, Inc., I reviewed the railroads' applications including their supporting traffic, cost and operating data and provided detailed evidence supporting requests for conditions designed to maintain the competitive rail environment that existed before the proposed mergers and acquisition. In these proceedings, I represented shipper interests, including plastic, chemical, coal, paper and steel shippers.

I have participated in various proceedings involved with the division of through rail rates. For example, I participated in ICC Docket No. 35585, *Akron, Canton & Youngstown Railroad Company, et al. v. Aberdeen and Rockfish Railroad Company, et al.* which was a complaint filed by the northern and mid-western rail lines to change the primary north-south divisions. I was personally involved in all traffic, operating and cost aspects of this proceeding on behalf of the northern and mid-western rail lines. I was the lead witness on behalf of the Long Island Rail Road in ICC Docket No. 36874, *Notice of Intent to File Division Complaint by the Long Island Rail Road Company*.

STATEMENT OF QUALIFICATIONS

ROBERT D. MULHOLLAND

My name is Robert D. Mulholland. I am an economist and a Vice President of the economic consulting firm of L. E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Suite 200, Alexandria, Virginia 22314, 760 E. Pusch View Lane, Suite 150, Tucson, Arizona 85737, and 21 Founders Way, Queensbury, New York 12804.

I am a graduate of George Mason University's School of Public Policy from which I obtained a Master's degree in Transportation Policy, Operations & Logistics and Bowdoin College from which I obtained a Bachelor of Arts degree in Government and Legal Studies. I have been employed by L. E. Peabody & Associates, Inc since 2008 and from 1995-2004. From 2004-2006, I was the staff economist for the Office of Freight Management and Operations of the Federal Highway Administration ("FHWA") of the United States Department of Transportation ("USDOT"). From 2006-2008, I worked for ICF International as a consultant in the transportation group.

The firm of L. E. Peabody & Associates, Inc. specializes in analyzing matters related to the rail transportation of all commodities. As a result of my extensive economic consulting experience since 1995 and my participation in and support of maximum-rate, rail merger, service dispute, and rule-making proceedings before various government bodies, I have become thoroughly familiar with the major rail carriers in the United States. This familiarity extends to subjects of railroad service, costs and revenues,

STATEMENT OF QUALIFICATIONS

capacity, traffic prioritization, operations, and contracts and tariff terms that historically have governed the movement of commodities by rail.

As an economic consultant, I have directed and conducted economic studies and prepared reports for freight carriers, shippers, federal agencies, the U.S. Congress, associations, and other public bodies dealing with transportation and related economic issues. Examples of studies I have participated in include organizing and directing traffic operations and cost analyses in connection with single and multiple car movements and unit train operations for various commodities, rail facilities analyses, rate and revenue division analyses, and other studies dealing with freight transportation markets for many commodities over various surface modes throughout the United States. Through conduct of these studies I have become familiar with the operating practices and accounting procedures utilized by railroads in the normal course of business.

I have inspected and studied railroad terminal facilities used in handling various commodities to inform studies that were used as a basis for the determination of the traffic and operating characteristics for specific movements of numerous commodities handled by rail.

I have developed economic and operational studies relative to the rail transportation of coal on behalf of electric utility companies, including analyses of the relative efficiency and costs of railroad operations over multiple routes. The results of these analyses have been used to assist shippers in the development and negotiation of rail transportation contracts that optimize operational efficiency and cost effectiveness.

STATEMENT OF QUALIFICATIONS

I have developed numerous variable cost calculations utilizing the various formulas employed by the Surface Transportation Board ("STB") for the development of variable costs for common carriers, with particular emphasis on the basis and use of the Uniform Railroad Costing System ("URCS"). I have utilized URCS costing principles since the beginning of my career with L. E. Peabody & Associates Inc. in 1995.

I have presented written testimony before the STB. This testimony was generally related to the development of rail traffic and operating patterns and forecasts, and economic principles concerning the maximum level of rates.

I have supported the negotiation of transportation contracts between shippers and railroads. Specifically, I have conducted studies concerning transportation rates based on market conditions and carrier competition, movement specific service commitments, and specific cost-based rate adjustment provisions.

I have conducted different economic analyses regarding rail transportation matters for dozens of electric utility companies located in all parts of the United States, and for major associations, including Chemical Manufacturers Association, National Industrial Transportation League, and Western Coal Traffic League. In addition, I have assisted numerous government agencies in analyzing and solving various transportation-related problems.

In the Western rail merger that resulted in the creation of the present Union Pacific Railroad Company, I reviewed the railroads' applications including their supporting traffic, cost and operating data and developed detailed evidence supporting requests for

STATEMENT OF QUALIFICATIONS

conditions designed to maintain the competitive rail environment that existed before the proposed merger.

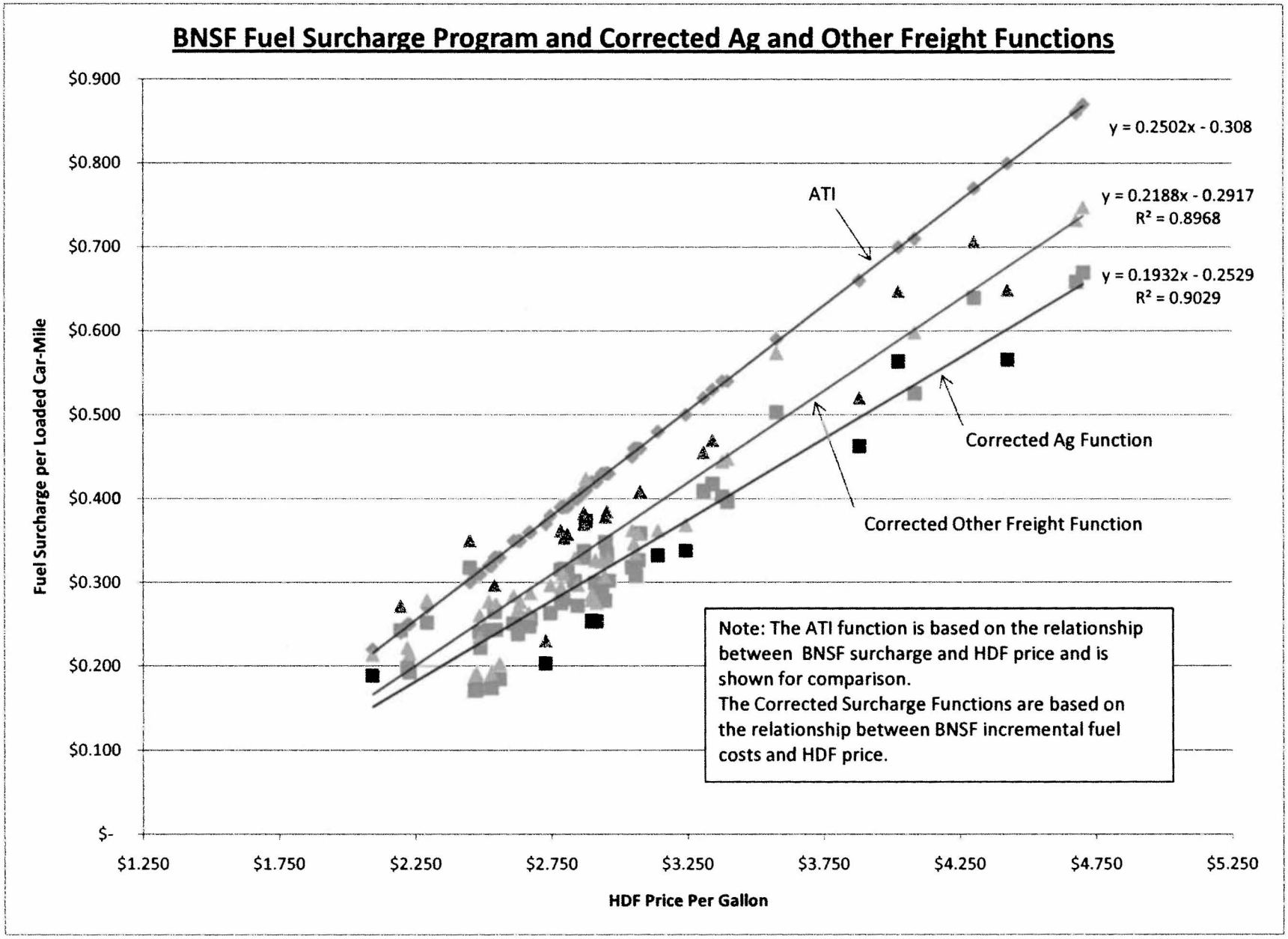
While employed at FHWA, I was a member of the USDOT inter-agency working group that drafted the current National Freight Policy. In addition, I served on the USDOT Freight Gateway Team, a group headed by the Undersecretary for Policy and composed of one representative from each of the surface modal agencies.

While employed at ICF International, I directed and conducted numerous analyses of the rail and trucking industries for federal transportation agencies including the Federal Railroad Administration ("FRA"), the Federal Motor Carrier Safety Administration ("FMCSA"), and the FHWA, including analyses of the current rail and trucking industries and forecasts of future trends in both industries.

EXHIBIT NO. 3
REDACTED

EXHIBIT NO. 4
REDACTED

EXHIBIT NO. 5
REDACTED


BNSF Fuel Surcharge Program and Corrected Ag and Other Freight Functions
$0.900
$0.800
$0.700
$0.600
$0.500
$0.400
$0.300
$0.200
$0.100
$-
Fuel Surcharge per Loaded Car-Mile
$1.250
$1.750
$2.250
$2.750
$3.250
$3.750
$4.250
$4.750
$5.250
HDF Price Per Gallon
y = 0.2502x - 0.308
ATI
y = 0.2188x - 0.2917
R² = 0.8968
y = 0.1932x - 0.2529
R² = 0.9029
Corrected Ag Function
Corrected Other Freight Function
Note: The ATI function is based on the relationship between BNSF surcharge and HDF price and is shown for comparison.
The Corrected Surcharge Functions are based on the relationship between BNSF incremental fuel costs and HDF price.

Restated BNSF Mileage Based Fuel Surcharge Tables

Restated Ag Traffic Surcharge Table

Strike Price $1.298
Step 0.0518

HDF value From	HDF value To	Step Length	Surcharge per Loaded Car-mile
$0.000	$1.297	xxx	$0.00
$1.298	$1.323	0.0259	$0.00 1/
$1.324	$1.375	0.0518	$0.01 2/
$1.376	$1.426	0.0518	$0.02
$1.427	$1.478	0.0518	$0.03
$1.479	$1.530	0.0518	$0.04
$1.531	$1.582	0.0518	$0.05
$1.583	$1.633	0.0518	$0.06
$1.634	$1.685	0.0518	$0.07
$1.686	$1.737	0.0518	$0.08
$1.738	$1.789	0.0518	$0.09
$1.790	$1.840	0.0518	$0.10
$1.841	$1.892	0.0518	$0.11
$1.893	$1.944	0.0518	$0.12
$1.945	$1.996	0.0518	$0.13
$1.997	$2.048	0.0518	$0.14
$2.049	$2.099	0.0518	$0.15
$2.100	$2.151	0.0518	$0.16
$2.152	$2.203	0.0518	$0.17
$2.204	$2.255	0.0518	$0.18
$2.256	$2.306	0.0518	$0.19
$2.307	$2.358	0.0518	$0.20
$2.359	$2.410	0.0518	$0.21
$2.411	$2.462	0.0518	$0.22
$2.463	$2.513	0.0518	$0.23
$2.514	$2.565	0.0518	$0.24
$2.566	$2.617	0.0518	$0.25
$2.618	$2.669	0.0518	$0.26
$2.670	$2.720	0.0518	$0.27
$2.721	$2.772	0.0518	$0.28
$2.773	$2.824	0.0518	$0.29
$2.825	$2.876	0.0518	$0.30
$2.877	$2.927	0.0518	$0.31
$2.928	$2.979	0.0518	$0.32
$2.980	$3.031	0.0518	$0.33
$3.032	$3.083	0.0518	$0.34
$3.084	$3.134	0.0518	$0.35
$3.135	$3.186	0.0518	$0.36
$3.187	$3.238	0.0518	$0.37
$3.239	$3.290	0.0518	$0.38
$3.291	$3.342	0.0518	$0.39
$3.343	$3.393	0.0518	$0.40
$3.394	$3.445	0.0518	$0.41
$3.446	$3.497	0.0518	$0.42
$3.498	$3.549	0.0518	$0.43
$3.550	$3.600	0.0518	$0.44
$3.601	$3.652	0.0518	$0.45
$3.653	$3.704	0.0518	$0.46
$3.705	$3.756	0.0518	$0.47
$3.757	$3.807	0.0518	$0.48
$3.808	$3.859	0.0518	$0.49
$3.860	$3.911	0.0518	$0.50
$3.912	$3.963	0.0518	$0.51
$3.964	$4.014	0.0518	$0.52
$4.015	$4.066	0.0518	$0.53
$4.067	$4.118	0.0518	$0.54
$4.119	$4.170	0.0518	$0.55
$4.171	$4.221	0.0518	$0.56
$4.222	$4.273	0.0518	$0.57
$4.274	$4.325	0.0518	$0.58
$4.326	$4.377	0.0518	$0.59
$4.378	$4.428	0.0518	$0.60
$4.429	$4.480	0.0518	$0.61
$4.481	$4.532	0.0518	$0.62
$4.533	$4.584	0.0518	$0.63
$4.585	$4.635	0.0518	$0.64
$4.636	$4.687	0.0518	$0.65
$4.688	$4.739	0.0518	$0.66
$4.740	$4.791	0.0518	$0.67
$4.792	$4.843	0.0518	$0.68
$4.844	$4.894	0.0518	$0.69
$4.895	$4.946	0.0518	$0.70
$4.947	$4.998	0.0518	$0.71
$4.999	$5.050	0.0518	$0.72

Surcharge will increase by $0.01 per car-mile for every 5.18 cent increase in HDF.

Restated Other Freight Surcharge Table

Strike Price $1.298
Step 0.0457

HDF value From	HDF value To	Step Length	Surcharge per Loaded Car-mile
$0.000	$1.297	xxx	$0.00
$1.298	$1.320	0.0229	$0.00 1/
$1.321	$1.366	0.0457	$0.01 2/
$1.367	$1.411	0.0457	$0.02
$1.412	$1.457	0.0457	$0.03
$1.458	$1.503	0.0457	$0.04
$1.504	$1.548	0.0457	$0.05
$1.549	$1.594	0.0457	$0.06
$1.595	$1.640	0.0457	$0.07
$1.641	$1.686	0.0457	$0.08
$1.687	$1.731	0.0457	$0.09
$1.732	$1.777	0.0457	$0.10
$1.778	$1.823	0.0457	$0.11
$1.824	$1.868	0.0457	$0.12
$1.869	$1.914	0.0457	$0.13
$1.915	$1.960	0.0457	$0.14
$1.961	$2.006	0.0457	$0.15
$2.007	$2.051	0.0457	$0.16
$2.052	$2.097	0.0457	$0.17
$2.098	$2.143	0.0457	$0.18
$2.144	$2.188	0.0457	$0.19
$2.189	$2.234	0.0457	$0.20
$2.235	$2.280	0.0457	$0.21
$2.281	$2.326	0.0457	$0.22
$2.327	$2.371	0.0457	$0.23
$2.372	$2.417	0.0457	$0.24
$2.418	$2.463	0.0457	$0.25
$2.464	$2.508	0.0457	$0.26
$2.509	$2.554	0.0457	$0.27
$2.555	$2.600	0.0457	$0.28
$2.601	$2.646	0.0457	$0.29
$2.647	$2.691	0.0457	$0.30
$2.692	$2.737	0.0457	$0.31
$2.738	$2.783	0.0457	$0.32
$2.784	$2.828	0.0457	$0.33
$2.829	$2.874	0.0457	$0.34
$2.875	$2.920	0.0457	$0.35
$2.921	$2.965	0.0457	$0.36
$2.966	$3.011	0.0457	$0.37
$3.012	$3.057	0.0457	$0.38
$3.058	$3.103	0.0457	$0.39
$3.104	$3.148	0.0457	$0.40
$3.149	$3.194	0.0457	$0.41
$3.195	$3.240	0.0457	$0.42
$3.241	$3.285	0.0457	$0.43
$3.286	$3.331	0.0457	$0.44
$3.332	$3.377	0.0457	$0.45
$3.378	$3.423	0.0457	$0.46
$3.424	$3.468	0.0457	$0.47
$3.469	$3.514	0.0457	$0.48
$3.515	$3.560	0.0457	$0.49
$3.561	$3.605	0.0457	$0.50
$3.606	$3.651	0.0457	$0.51
$3.652	$3.697	0.0457	$0.52
$3.698	$3.743	0.0457	$0.53
$3.744	$3.788	0.0457	$0.54
$3.789	$3.834	0.0457	$0.55
$3.835	$3.880	0.0457	$0.56
$3.881	$3.925	0.0457	$0.57
$3.926	$3.971	0.0457	$0.58
$3.972	$4.017	0.0457	$0.59
$4.018	$4.063	0.0457	$0.60
$4.064	$4.108	0.0457	$0.61
$4.109	$4.154	0.0457	$0.62
$4.155	$4.200	0.0457	$0.63
$4.201	$4.245	0.0457	$0.64
$4.246	$4.291	0.0457	$0.65
$4.292	$4.337	0.0457	$0.66
$4.338	$4.383	0.0457	$0.67
$4.384	$4.428	0.0457	$0.68
$4.429	$4.474	0.0457	$0.69
$4.475	$4.520	0.0457	$0.70
$4.521	$4.565	0.0457	$0.71
$4.566	$4.611	0.0457	$0.72

Surcharge will increase by $0.01 per car-mile for every 4.57 cent increase in HDF.

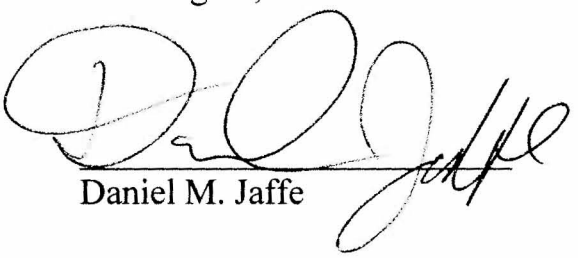
1/ At the strike price, BNSF incurs no incremental fuel cost above the costs recovered through its base rates.

2/ At the strike price plus half-step HDF price level, BNSF incurs incremental fuel cost equal to half-a-cent per loaded car-mile above the costs recovered through its base rates.

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of August, 2011, I caused copies of the foregoing Opening Statement and electronic workpapers to be served by hand upon counsel for Defendant BNSF Railway Company, as follows:

Samuel M. Sipe, Jr.
Anthony J. LaRocca
Linda S. Stein
Steptoe & Johnson LLP
1330 Connecticut Avenue, N.W.
Washington, DC 20036



Daniel M. Jaffe