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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

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Docket No. NOR 42144

NORTH AMERICA FREIGHT CAR ASSOCIATION; AMERICAN FUEL &
PETROCHEMICAL MANUFACTURERS; THE CHLORINE INSTITUTE; THE
FERTILIZER INSTITUTE; AMERICAN CHEMISTRY COUNCIL; ETHANOL PRODUCTS,
LLC D/B/A POET ETHANOL PRODUCTS; POET NUTRITION, INC.; AND CARGILL
INCORPORATED v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42150

VALERO MARKETING AND SUPPLY COMPANY
AND VALERO RAIL PARTNERS, LLC v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42152

TESORO REFINING & MARKETING COMPANY LLC;
TESORO GREAT PLAINS GATHERING & MARKETING, LLC;
AND DAKOTA PRAIRIE REFINING, LLC v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42153

ARKEMA INC. v. UNION PACIFIC RAILROAD COMPANY

COMPLAINANTS' JOINT REBUTTAL EVIDENCE AND ARGUMENT

Jeffrey O. Moreno, Esq.
Jason D. Tutrone, Esq.
Thompson Hine LLP
1919 M Street, NW
Suite 700
Washington, DC 20036
(202) 263-4107

*Counsel for the American Chemistry
Council, The Fertilizer Institute, and
Arkema, Inc.*

Thomas W. Wilcox, Esq.
David K. Monroe, Esq.
Kristine O. Little, Esq.
GKG Law, P.C.
1055 Thomas Jefferson Street NW
Suite 500
Washington, DC 20007
(202) 342-5248

*Counsel for North America Freight Car
Association; Ethanol Products, LLC d/b/a
POET Ethanol Products; POET Nutrition,
Inc.; and Cargill Incorporated*

Elizabeth H. Titus, Esq.
Hogan Lovells US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
(202) 637-5558

*Counsel for American Fuel &
Petrochemical Manufacturers; Tesoro
Refining & Marketing Company, LLC;
Tesoro Great Plains Gathering &
Marketing LLC; Dakota Prairie Refining,
LLC; Valero Marketing and Supply
Company; and Valero Rail Partners, LLC*

May 31, 2019

Paul M. Donovan, Esq.
LaRoe, Winn, Moerman & Donovan
1250 Connecticut Avenue, N.W., Suite 200
Washington, DC 20036
(202) 298-8100

Counsel for The Chlorine Institute

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TABLE OF EXHIBITS

Reb. Ex. No.	Description
32	UPRR0024322-25
33	UPRR0025770-75
34	UPRR0026215-19
35	UPRR0019106-21.
36	Deposition Transcript (excerpts) of J. Brent Grow (Arkema)

I. INTRODUCTION AND SUMMARY OF ARGUMENT.

Complainants in these consolidated proceedings (collectively “Complainants”)¹ hereby submit their “Joint Rebuttal Evidence and Argument” in response to “Union Pacific’s Reply Evidence and Argument” (“Reply”) filed Defendant Union Pacific Railroad Company (“UP”) on April 26, 2019.² UP’s Reply responded to “Complainants’ Joint Opening Evidence and Argument,” filed February 22, 2019 (“Joint Op.”) and the contemporaneously filed Supplemental Evidence submitted by each of the Individual Complainants. This joint rebuttal evidence is supported by the testimony of the following three witnesses:

- Rebuttal Verified Statement of Dr. Kevin W. Caves, a Senior Economist at Econ One Research Inc. (“Caves R.V.S.”), who responds to the testimony of UP witnesses Kevin M. Murphy and Robert C. Hirst.
- Rebuttal Verified Statement of Thomas D. Crowley, President of L.E. Peabody & Associates, Inc. (“Crowley R.V.S.”), who responds to the testimony of UP witness Michael R. Baranowski.
- Rebuttal Verified Statement of J. Brent Grow, Arkema’s Strategic Purchasing Manager, Domestic Transportation-Rail (“Grow R.V.S.”), who responds to UP claims that a portion of Arkema’s damages were subject to a contract.

¹ The Complainants in Docket NOR 42144 are the North America Freight Car Association (“NAFCA”); the American Fuel & Petrochemical Manufacturers (“AFPM”); The Chlorine Institute, Inc. (“TCI”); The Fertilizer Institute (“TFI”); the American Chemistry Council (“ACC”); Ethanol Products, LLC d/b/a POET Ethanol Products (“POET Ethanol”); POET Nutrition, Inc. (“POET Nutrition”); and Cargill Incorporated (“Cargill”) (collectively, “NOR 42144 Complainants”). The Complainants in Docket NOR 42150 are Valero Marketing and Supply Company and Valero Rail Partners, LLC (collectively “Valero”). The Complainants in Docket NOR 42152 are Tesoro Refining & Marketing Company, LLC; Tesoro Great Plains Gathering & Marketing LLC; and Dakota Prairie Refining, LLC (collectively “Tesoro”). The Complainant in Docket NOR 42153 is Arkema, Inc. (“Arkema”). NAFCA, AFPM, TCI, TFI and ACC are hereafter collectively referred to as “Association Complainants” and the other Complainants as “Individual Complainants.”

² Throughout this joint evidence and accompanying verified statements, information that has been designated “Highly Confidential” pursuant to the amended Protective Order entered in Docket NOR 42144 by decision served on October 20, 2017, is contained within double braces, e.g., {{...}}, and such information has been redacted from the public version of this pleading.

In addition, this rebuttal evidence is supported by documents, data, and deposition testimony from UP, Complainants, and other sources.³

UP spends most of its Reply attempting to convince this Board that (1) it is only fair that tank-car providers are charged for empty moves just like other private-car owners, and (2) it was not profit but, rather, a desire to achieve efficiencies, that motivated UP to implement Item 55-C. UP attempts further to justify charging for repair moves by characterizing them as a “free service” and “an entitlement” that could be eliminated at UP’s discretion. However, these and all of UP’s other justifications for Item 55-C are contrary to well-established law.

To be clear, UP has an obligation to compensate tank-car providers for the costs of ownership — full stop. Moreover, the law is clear that repair moves are included within the cost of ownership. UP cannot unilaterally abrogate this obligation. It may not charge for repair moves unless tank-car providers have been compensated for that cost. And, UP’s establishment of “zero-mileage rates” does not provide it a safe harbor for compliance with this obligation. Simply put, UP cannot lawfully charge for repair moves under Item 55-C because tank-car providers are not compensated for those charges.

Tank-car providers have a right to compensation for Item 55-C charges. And, pursuant to *IHB-II*,⁴ compensation for those charges is a predicate to UP’s ability to charge for tank-car repair moves. UP’s reliance on *IHB-II* in support of Item 55-C completely ignores the fundamental underpinning of that decision: Tank-car providers must be compensated for the related repair moves. UP also would have this Board reconsider the cross-subsidy and efficiency

³ Exhibits submitted for the first time in this rebuttal are attached hereto and referenced as “Reb. Ex. ____.” Previously submitted exhibits are referred to as either “Joint Op. Ex. ____” or “Reply Ex. ____.”

⁴ *General American Transp. Corp. v. Indiana Harbor Belt R.R. Co.*, 3 I.C.C. 2d 599 (1987); *on reconsideration*, 1988 ICC LEXIS 55 (Feb. 22, 1988) (“*IHB-II Reconsideration*”); *aff’d sub nom. Gen. Am. Transp. Corp. v. I.C.C.*, 872 F.2d 1048 (D.C. Cir. 1989) (“*IHB-II Appeal*”).

concerns that the Interstate Commerce Commission (“ICC”) resolved in *IHB-II*. However, those concerns are not at issue here because, unlike terminal and switching railroads, UP, the nation’s largest Class I railroad, does not bear a disproportionate responsibility for these repair moves relative to its participation in loaded revenue moves.

Accordingly, UP’s adoption of Item 55-C was an unreasonable practice. In addition to circumventing UP’s statutory car-compensation obligations, Item 55-C has no reasonable business purpose and it violates federal rail transportation policy. Moreover, this Board’s decision in *NAFCA-II*⁵ does not save UP. That case, brought against BNSF, did not involve a tariff that attempted to extract payments related to costs of car ownership. And, therefore, it is inapplicable here.

The Board also must reject UP’s contention that Item 55-C does not subvert the industry-wide mileage-equalization agreement approved by the ICC in *Ex Parte 328*.⁶ By charging for empty repair moves and, thus, removing those empty miles from the equalization program, tank-car providers are less likely to exceed the 106% equalization threshold and make payments for excess empty miles. As a result, UP effectively has gutted the *Ex Parte 328* Agreement and rendered the concept of mileage equalization meaningless.

Finally, the Individual Complainants are entitled to damages. Each UP argument against reparations lacks factual support. For example, the Individual Complainants could not have mitigated their damages by requesting that UP pay mileage allowances. There is simply no evidence that a rate that included mileage allowances would have mitigated the charges resulting from Item 55-C. Similarly, the Individual Complainants cannot be estopped from seeking

⁵ *N. Am. Freight Car Ass’n—Protest & Petition for Investigation—Tariff Publications of the Burlington N. & Santa Fe Ry.*, Docket No. 42060 (Sub-No. 1) (served Jan. 26, 2007).

⁶ *Investigation of Tank Car Allowance System*, 3 I.C.C. 2d 196 (1986).

reparations because they accepted zero-mileage rates. UP has failed to provide evidence that the any zero-mileage rate actually contains a discount in return for waiving mileage allowances or accepting empty-repair-move responsibility. Moreover, the Individual Complainants do not need to bring a rate case to recover damages. Item 55-C is an unreasonable practice, which gives this Board jurisdiction to award damages to the Individual Complainants. Lastly, an award of damages would not create a manifest injustice to UP. Unlike the cases it cites, UP did not rely upon well-established practice when it implemented Item 55-C. Rather it departed from a long-existing, established method for compensating tank-car providers for the costs of ownership. If anything, failure to award damages would be manifestly unjust to the Individual Complainants because this case has been pending for four years to permit UP to obtain discovery from them, during which time UP continued to collect its Item 55-C charges.

For the reasons fully set forth below and in the Complainants' Joint Opening Evidence, the Complainants request that Board find UP's adoption of Item 55-C and its related charges to be unlawful and order UP to rescind the tariff and pay reparations to the Individual Complainants.

II. UP HAS NOT ESTABLISHED THAT IT IS COMPENSATING TANK-CAR PROVIDERS FOR THEIR OWNERSHIP AND MAINTENANCE COSTS, INCLUDING THE ITEM 55-C REPAIR-MOVE CHARGE.

The essence of Complainants' case is that tank-car providers are not receiving compensation for the tank cars that they provide to UP to use in the performance of rail transportation services, including tank-car repair-move charges, as required by 49 U.S.C. §§ 11121 and 11122. Compensation for Item 55-C charges is a predicate to UP's ability to charge for tank-car repair moves consistent with *IHB-II*. UP's Reply, however, flips Complainants' compensation argument on its head by trying to make this case about UP's right to compensation for providing tank-car repair moves. That is not the law.

A. UP Cannot Unilaterally Abrogate Its Statutory Obligation To Compensate Providers Of Private Tank Cars That UP Uses In Its Common-Carrier Revenue Service.

UP begins with the contention that it has no duty to compensate tank-car providers at all under the law. To assert that it has no common-carrier obligation whatsoever to provide tank cars, and thus no obligation to compensate tank-car providers, UP relies upon a Supreme Court decision that Congress overturned. Perhaps recognizing the absurdity of its position, UP further contends that, even if it does have a duty to provide tank cars, it can avoid that duty, and any associated car compensation responsibility, merely by publishing so-called “zero-mileage” transportation rates. As addressed in subparts A.1 & 2 below, both contentions are meritless.

Moreover, UP’s attempt to advance a new interpretation of §§ 11121 and 11122 in its Reply is contrary to UP’s prior view of its statutory obligations in this case. In its Motion to Dismiss, UP plainly acknowledged that “[s]hippers are entitled to compensation in some form for furnishing tank cars to provide transportation.”⁷ UP asserted that it provided such compensation by establishing zero-mileage rates that are lower than if UP paid mileage allowances pursuant to the industry-wide agreement approved by the ICC in *Ex Parte 328* (“the *Ex Parte 328 Agreement*”).⁸ Yet, despite the best efforts of Complainants through discovery requests and deposition questions, UP has not produced one shred of evidence to show the amount by which it is discounting so that the existence of actual compensation can be verified, quantified, and tested for compliance with § 11122.⁹

⁷ Docket NOR 42144, “Motion to Dismiss Complaint or to Make Complaint More Definite,” at 5 (filed April 20, 2015). UP nowhere explains the glaring contradiction of its inconsistent positions.

⁸ See, Docket NOR 42144, First Amended Answer ¶¶ 33–35; Motion to Dismiss at 2 & 13.

⁹ If UP actually were discounting its rates to compensate tank-car providers, it surely would make every effort internally to ensure that the discounts offered did not exceed the amount of compensation it owed car providers. Moreover, since the proper amount of the discount would

By urging the Board to accept an interpretation of §§ 11121 and 11122 in its Reply that entails accepting that UP has no obligation to compensate tank-car providers, UP seeks to avoid a gaping hole in its case: it does not provide compensation to tank-car providers. The complete absence of any evidence of such compensation totally undercuts UP's reliance on *IHB-II* to justify its adoption of Item 55-C.

1. UP's common-carrier car-service obligation under 49 U.S.C. § 11121 includes tank cars.

Buried in a footnote in its Reply, UP asserts that “railroads actually do not have a common carrier obligation to provide tank cars,” relying principally on *United States v. Pennsylvania Railroad* — a 1916 Supreme Court decision.¹⁰ Based upon this remarkable assertion, UP argues that it owes no compensation under § 11122 to providers of tank cars that UP uses in its revenue service to satisfy its statutory common-carrier obligation. UP's reliance on the *Pennsylvania* case falters for three compelling reasons.¹¹

First, the Court in *Pennsylvania* did not hold that railroads lack a common-carrier obligation to provide tank cars. Quite to the contrary, the Court assumed that railroads have a common-carrier obligation to provide tank cars.¹² The question addressed in *Pennsylvania* was

need to be determined on a movement-specific basis to reflect differing shipment characteristics such as route length and type and age of the tank cars used, there undoubtedly would be voluminous documentation to reflect this discounting. The fact that UP produced no internal spreadsheets, charts, emails, or any other evidence reflecting such calculations conclusively demonstrates that UP does not discount its rates to compensate providers of private tank cars.

¹⁰ See Reply at 35, n. 43, citing *United States v. Pennsylvania R.R.* (“*Pennsylvania*”), 242 U.S. 208, 37 S.Ct. 95 (1916).

¹¹ UP cites two additional cases in support of its claim that tank cars are not covered by § 11121. Reply at 35. However, both of those cases rely on the continued validity of the *Pennsylvania* decision.

¹² *Pennsylvania*, 242 U.S. at 227 ([T]here was no question of the duty of carriers either under the Act of 1887 or under the amendment of 1906. It was their duty under both to furnish the

the scope of the ICC's authority to enforce the car-service obligation — i.e., whether the ICC or the courts had the jurisdiction to enforce the common-carrier obligation to provide tank cars.¹³ The Court found that absent a specific delegation of enforcement authority by Congress to the ICC, only the courts had jurisdiction to order railroads to acquire additional tank cars to satisfy their common-carrier car-service obligation.

Second, as subsequently recognized by both the courts and the ICC, Congress legislatively overruled *Pennsylvania* with the passage of the Esch Car Service Act (“Esch Act”) seven months after the Court decided *Pennsylvania*.¹⁴ Indeed, as the ICC later pointed out in *Winnebago*, the legislative history of the Esch Act leaves no doubt that Congress intended to overrule the *Pennsylvania* decision on the specific issue of whether the ICC could enforce the railroads' common-carrier obligation to provide tank cars:

The legislative history clearly indicates that the rule of the *Pennsylvania* case, *supra*, was to be nullified. The 1920 amendment in defining car service, added the authority to regulate ‘the use, control [and] supply of cars.’ Congressman Esch, Chairman of the House Committee on Interstate and Foreign Commerce, and one of the chief sponsors of the legislation, stated, in discussing the bill on the House floor, that the *Pennsylvania* case, *supra*, had held that the Commission has no power to order a carrier to supply itself with tank cars, but that ‘[t]his legislation would give the Commission power to order the carrier to supply itself with cars.’ 58 Cong. Rec. 8315-16 (1919).¹⁵

instrumentalities of transportation.). See also *id.* at 233 (“The duty [to supply tank cars], as far as this question is concerned, may be admitted . . .”).

¹³ *Id.* at 227 (The question is whether under the latter, as under the former, jurisdiction to enforce the duty was at common law in the courts or under the statute and in the Commission.).

¹⁴ See *Akron, Canton & Youngstown R.R. Co. v. I.C.C.*, 611 F. 2d 1162, 1164 (6th Cir. 1979) (“The *Pennsylvania Railroad* case is now questionable precedent. The Court's specific ruling was overturned by Congress only one year after judgment was rendered.”); *Winnebago Farmers Elevator Co. v. Chicago & N.W.* (“*Winnebago*”), 354 I.C.C. 859, 866-67 (1978) (holding that *Pennsylvania* “is no longer valid precedent”).

¹⁵ *Winnebago* at 866.

Third, in the nearly 40 years since *Winnebago*, the Board, the ICC, and the courts all repeatedly have made clear that railroads have a common-carrier obligation under § 11121 to provide tank cars and, if they do not do so, a duty under § 11122 to compensate private tank-car owners that provide the tank cars used by the railroads.¹⁶ For example, the *B&P* decision—a tank-car case upon which UP heavily relies—plainly states that railroads are obligated to provide tank cars, by furnishing their own cars or compensating parties who provide them with tank cars:

Railroads generally are obligated to furnish the cars necessary to provide the service they hold out to the public. They may furnish their own cars, or use equipment supplied by other carriers or private parties. When railroads rely on private equipment, as is the case with respect to tank cars, they must compensate the owner for the use of that equipment.¹⁷

Indeed, if railroads were not statutorily obligated either to provide tank cars or compensate providers of private cars, the *Ex Parte 328* Agreement, reached after years of disputes between carriers and tank-car providers over appropriate compensation, would not have been necessary. UP's suggestion that railroads are not obligated to provide tank cars is meritless.

2. UP cannot avoid its statutory car-service and private-tank-car compensation obligations by establishing zero-mileage rates.

UP also argues that even if it generally has a statutory obligation to provide tank cars under § 11121, it can avoid the application of § 11121 — and thus also avoid the duty to compensate private car owners under § 11122 — by establishing what it labels “zero-mileage” rates. As noted above, this is a change of position from UP's Motion to Dismiss, which asserted

¹⁶ See, e.g., *N. Am. Freight Car Ass'n – Protest & Petition for Investigation – Tariff Publ'n of Burlington N. & Santa Fe Ry* (“NAFCA”), STB Docket No. 42060 (Sub-No. 1) slip op. at 2 (served Aug. 13, 2014) (noting that the *Ex Parte 328* Agreement on tank cars was consistent with the railroads' obligation to compensate tank-car owners under § 11122); *IHB-II Appeal* at 1050 (“Railroads, under the Interstate Commerce Act, must provide railcars suitable for transportation of a broad range of property, including...flammable liquids....”). See also *IHB-II; Ex Parte 328; Charges for Movement of Empty Cars, Buffalo & Pittsburg R.R. (B&P)*, 7 I.C.C. 2d 18 (1990).

¹⁷ *B&P*, 7 I.C.C. 2d at 19.

that UP provides such compensation *through* zero-mileage line-haul rates that are lower than if UP paid mileage allowances pursuant to the *Ex Parte 328* Agreement. In its Reply, UP has recast its definition of zero-mileage rates as a rate for a rail transportation service that does not include a tank car supplied by it. UP then claims that, if the transportation service it is offering does not include a tank car, then it is not obligated to provide the tank car — and perforce has no duty to compensate the tank-car provider for the use of the tank car in UP’s revenue service.¹⁸

Indeed, UP goes so far in its Reply as to now say that shippers have no entitlement to *any* compensation at all for providing tank cars unless UP first establishes a rate that obligates it to supply cars, and then the shipper provides the cars.¹⁹ Yet UP admits that, in the normal course, it does not establish any rates that obligate it to provide the tank car. Moreover, UP admits that the only way it would ever establish a rate that *assumed* UP was obligating itself to supply tank cars²⁰ was if a customer had a “genuine desire” for such a rate and UP determined whether such a request was reasonable, in its sole discretion, even though the evidence in this case shows that UP discourages such requests.²¹

UP’s new assertion that it can unilaterally exempt itself from its statutory obligations under §§ 11121 and 11122 by quoting zero-mileage rates — and thereby provide no

¹⁸ Reply at 29-30, 90-92.

¹⁹ *Id.* at 92.

²⁰ UP can only publish a rate that *assumes* it provides a tank car because UP does not actually have any tank cars in which to offer its transportation services. In such instances, the customer still would have to supply the tank car for which UP agrees it would pay a mileage allowance.

²¹ Reply at 95, n. 107. *See also* *Rocker Tr.* at 76:12-18; 77:6-20 (*Joint Op. Ex. 30*).; *Reb. Ex. 32* at UPRR 0024322 ({{

}}); *Reb. Ex. 33* at UPRR0025770 ({{

}}); *Reb. Ex. 34* at UPRR0026215 ({{

}}); *Reb. Ex. 35* at UPRR0019108 ({{

}}).

compensation to its customers who supply all of the tank cars UP utilizes — contravenes the plain language of § 11121.²² Section 11121 *mandates* in no uncertain terms that railroads providing common-carrier transportation *shall* furnish adequate car service — i.e., provide the tank cars “needed to transport the commodities they hold themselves out to carry.”²³ Accordingly, a railroad’s duty to provide tank cars, either directly or by compensating those who do provide cars for its use, is integral to the common-carrier obligation to provide service and § 11121 prohibits a railroad from divesting itself from that statutory obligation.²⁴ Any other reading of § 11121 would render the statute’s car-service mandate meaningless.

The mere fact that a zero-mileage rate contemplates that the transportation will occur in a private tank car does not relieve a railroad from its statutory obligation to provide the tank car in the first instance, nor does it absolve the railroad from its statutory obligation to compensate the owner of the private car for its use. Indeed, because UP does not supply tank cars at all, even if it did establish a full-mileage allowance rate, the transportation would nonetheless occur in a private tank car. In such a case, it would be ridiculous to suggest that the railroad had no obligation to provide the tank car since it would be paying mileage allowances for the express purpose of compensating the private-car owner. It is equally ridiculous to contend that UP has no statutory duty to provide tank cars under zero-mileage rates, particularly since UP elsewhere contends that zero-mileage rates are discounted to account for its not providing the car. UP

²² See 49 U.S.C. § 11121 (2018) (“A rail carrier providing transportation subject to the jurisdiction of the Board under this part shall furnish safe and adequate car service . . .”).

²³ See, e.g., *NAFCA* at 2.

²⁴ See *id.* at 2 (noting that although a railroad can satisfy its car-service obligation under § 11121 by supplying its own tank cars, using another railroad’s tank cars, or using private tank cars, when it uses a private car, it must compensate the lessor or owner for its use).

cannot escape its clear statutory car-service obligations through such sophistry and semantic gymnastics.

UP's reliance on *LOSAC*²⁵ to support its assertion that it has no tank-car-service obligation if it quotes zero-mileage rates is equally without merit.²⁶ While *LOSAC* indicated that a railroad was not obligated to "provide" a car (in the colloquial sense) or publish an allowance for zero-mileage rates that contemplated transportation in a private car, it did not hold or even suggest that zero-mileage rates absolve a railroad of its obligations under §§ 11121 and 11122. In fact, *LOSAC* makes clear that zero-mileage rates were generally understood to be discounted in order to compensate private-car owners.²⁷ What's more, *LOSAC* makes clear that zero-mileage rates are permissible only if they are sufficiently discounted to ensure that the railroad is satisfying its compensation obligation under § 11122.²⁸

B. UP Cannot Lawfully Charge For Repair Moves Because Tank-Car Providers Are Not Compensated For Those Charges.

UP's attempt to rewrite the car-service statutes and precedent goes beyond claiming that it has no duty to compensate tank-car providers at all. UP goes so far as to claim that the statute entitles UP to charge tank-car providers for repair moves to avoid cross-subsidization. As demonstrated in the following subparts: (1) tank-car providers still have a statutory right to compensation for UP's Item 55-C repair-move charge, (2) they are not receiving that compensation through zero-mileage rates, and (3) UP's claimed right to separately charge for

²⁵ *LO Shippers Action Comm. v. Aberdeen and Rockfish Ry. Co.*, 4 I.C.C. 2d 1 (1987).

²⁶ See Reply at 35, n.43 and 92.

²⁷ See *LOSAC* at 17 ("it has long been accepted that railroads may eliminate allowance payments and instead compensate a shipper supplying private cars by adjusting the freight rate.").

²⁸ *Id.* at 18 (noting that a railroad does not escape its private car compensation obligation if it publishes a zero-mileage rate in a dual rate scale so long as the differential (discount) is subject to the same tests as the adequacy of an allowance).

repair moves is predicated upon a false choice between compensation and cross-subsidization. Therefore, Item 55-C is unlawful.

1. Tank-car providers have a statutory right to compensation for Item 55-C charges.

Complainants have established that charges to transport tank cars to repair facilities, such as Item 55-C, are a maintenance cost for which they are entitled to compensation by statute.²⁹ UP never fully acknowledges this right in its Reply, and feigns ignorance as to the role of 49 U.S.C. §§ 11121 and 11122 in establishing this right.³⁰ The ICC, however, unequivocally declared, in the very proceeding that allowed railroads to assess tank-car repair-move charges, that “[t]he railroads’ obligation to compensate car owners for costs of ownership including repair movements still exists, but the most plausible statutory basis for discharging that obligation within the regulatory framework of published rates is section 11122, which governs private car compensation generally.”³¹ The ICC could not have painted a more clear link between the statute and tank-car providers’ right to compensation for repair-move charges.

Because the railroads’ duty to compensate tank-car providers *still exists*, railroads may charge for repair moves only if and when they actually compensate tank-car providers and that compensation reflects the railroads’ repair-move charges paid by tank-car providers. The ICC

²⁹ Joint Op. at 22-23.

³⁰ Reply at 18-19.

³¹ *IHB-II Reconsideration*, at *4. The ICC also explicitly stated that it “did not reject the railroads’ overall responsibility for repair movements” but “did reject the prevailing means of compensation: [the free repair move rule].” *Id.* See also, *IHB-II* at 607 (addressing “the lawfulness...of initially collecting charges on instrumentalities of transportation pending final railroad settlement of responsibility through the mileage allowance mechanism.”).

repeated this numerous times throughout *IHB-II*.³² This also was critical to the DC Circuit's affirmance of *IHB-II*.³³

UP's argument founders upon its new claim that the statute requires shippers to compensate *it* for repair moves.³⁴ Although UP identifies statutory provisions that permit and encourage railroads to establish separate charges for distinct services, UP fails to harmonize and reconcile those permissive provisions with its mandatory duty to compensate tank-car providers.³⁵ Fundamentally, repair moves are not a separate service that can be evaluated in isolation. In *IHB-II*, the ICC observed that repair moves are distinct from line-haul service, but also noted that “[l]ine-haul transportation cannot be performed without the use of rail cars, and rail cars cannot be operated over their useful lifespans without periodic maintenance.”³⁶ Thus, the ICC acknowledged that the issue of charging for repair moves “is not as simple as considering the separate operational nature of the service alone.”³⁷ The ICC concluded that railroads could price their repair moves separately, without doing violence to the tank-car providers’ statutory compensation rights, *but only so long as those repair-move charges were*

³² See Joint Op. at 22, n. 61. UP dismisses these ICC references to compensation merely as a response to shipper “double payment” concerns, which UP claims have been rejected in more recent decisions. Reply at 30-31 & n. 35. That was not the ICC’s reason, however, for requiring compensation. The ICC invoked the statutory compensation rights of tank-car providers at multiple places throughout *IHB-II*, but only referred to the “double payment” argument in one place to make the point that the compensation that would occur through mileage-allowance payments *also* addresses shipper “double payment” concerns. *IHB-II* at 614. Even if shippers had not expressed “double payment” concerns, the statute would have required compensation of tank-car providers that included repair-move charges.

³³ Joint Op. at 23, n. 62.

³⁴ Reply at 29-30, 34-37.

³⁵ *Id.* at 17-18, 29-30.

³⁶ *IHB-II* at 609.

³⁷ *Id.*

*included in the compensation the tank-car providers ultimately received from railroads.*³⁸ The ICC noted with approval that a “passback through mileage allowances” would be a permissible form of such compensation.³⁹ While the ICC did not require compensation of tank-car providers through allowances, it unequivocally required some form of compensation. Throughout its Reply, UP mischaracterizes Complainants’ argument as insisting upon payment of mileage allowances, when in fact Complainants have insisted on payment of compensation which may take the form of mileage allowances.⁴⁰

The compensation requirement takes on even greater significance for repair movements, in contrast to other tank-car ownership costs. That is because a repair-move charge is the only ownership cost that a tank-car provider pays directly to a railroad; all other costs are paid to a third party. If a railroad actually supplied tank cars to shippers, it would pay the same costs to third parties to repair and maintain its cars but it would not pay itself to transport cars to repair facilities. Therefore, a railroad could not profit from transporting its own tank cars to repair facilities except through the line-haul rates it charged its customers to transport loaded tank cars. Furthermore, unlike all other tank-car ownership and maintenance costs, which accrue in competitive markets where the tank-car provider has a choice of suppliers, tank-car repair moves are not competitive. The compensation requirement of *IHB-II* provides some protection against those concerns because the railroad, not the tank-car provider, is the ultimate responsible party

³⁸ See Joint Op. at 22-23, 26.

³⁹ *IHB-II* at 613-16. Of particular note, the heading in this portion of *IHB-II* is “Repair-movement charging, with a passback through mileage allowances.”

⁴⁰ Joint Op. at 2 (“Item 55-C is unlawful because UP does not compensate tank car providers for that, or any other, cost of tank car ownership through mileage allowances or any other form of compensation.”). See also *id.* at 20-21.

for paying repair-move charges. For these reasons, the Board must be especially vigilant when it comes to ensuring tank-car providers are compensated for repair-move costs.

UP's Reply fails to engage the central tenet of Complainants' compensation argument. Rather than explain how tank-car providers are compensated for repair-move charges, and prove its assertion that it compensates them through zero-mileage rates (despite no evidence in the record), UP denies that tank-car providers have *any* right to be compensated and that it is UP which is entitled to compensation from tank-car providers for repair moves. That clearly is not the law. Therefore, because tank-car providers are not being compensated for the charges they incur under Item 55-C, the Board should declare that tariff unlawful.

2. Tank-car providers are not compensated for Item 55-C.

UP would have the Board construe *IHB-II* as a blank check authorizing empty-repair-move charges under any circumstances. But in *IHB-II*, the ICC permitted railroads to separately charge for repair moves based upon the critical assumption that the tank-car providers who pay those charges *initially* to a railroad *ultimately* will recoup those charges through the compensation that railroads must pay them under 49 U.S.C. § 11122. The ICC concluded that the mileage-allowance pass-back approach would enable railroads to charge for repair moves, thereby addressing both the cross-subsidy and efficiency concerns, and would still ensure that tank-car providers would be compensated for those charges through allowance payments. Whether or not any other approach could satisfy that requirement, however, was a matter the ICC left for subsequent decisions.⁴¹ The ICC's reasoning was sufficient for the D.C. Circuit to affirm *IHB-II*, but the court left open the prospect for future challenges if regulatory obstacles to

⁴¹ See *IHB-II* at 16 ("While we do not require it, we commend it to the parties for consideration."); *IHB-II Reconsideration*, 1988 ICC LEXIS at *5 ("the primary issue in this proceeding is the lawfulness of tariff charges for repair moves, rather than the suitability of alternatives open to car owners for recouping those costs.").

compensation should emerge in practical real-world applications. In rejecting an appellate argument that the ICC was required to examine other techniques by which tank-car providers could recoup repair-move charges from railroads (e.g., zero-mileage rates), the court noted that, if a petitioner could present “any *regulatory* obstacle to recovery of empty-repair move costs from carriers,” that would be “a concern that might warrant immediate Commission attention.”⁴² This proceeding presents precisely such a scenario.

In this case, as discussed in subpart a. below, Complainants have identified major changes in the rail industry since *IHB-II* that challenge the fundamental assumptions about compensation that underscored the ICC’s willingness to permit separate charges for repair moves. In addition, UP’s own Reply underscores that zero-mileage rates cannot be a substitute for mileage allowances in the pass-back approach that the ICC envisioned as a means to ensure that railroads, not tank-car providers, ultimately bear responsibility for repair-move charges.

In subpart b., Complainants, through the testimony of UP’s own economic witness, Professor Kevin Murphy, as well as Complainants’ Rebuttal Witness, Dr. Kevin Caves, show: (1) that UP’s zero-mileage rates for tank-car movements are not compensating tank-car providers, and (2) how UP is able to apply its market power to exploit Item 55-C to extract more economic surplus from shippers than it could by simply increasing rates on loaded moves. Because the result is that UP is not compensating tank-car providers for repair moves through zero-mileage rates, Item 55-C is unlawful.

⁴² *IHB-II Appeal* at 1058 (emphasis in original).

- a. **Changes in the rail industry since *IHB-II* undermine the ICC’s assumption that tank-car providers could be compensated for repair-move charges through means other than mileage allowances.**

Complainants have identified changes in both the rail industry and its practices in the thirty years since *IHB-II* that merit a reassessment of that decision.⁴³ Those changes challenge the fundamental assumptions about compensation that underscored the ICC’s willingness in 1987 to permit separate charges for repair moves.

The most significant change, which UP concedes, is that after 1987 the rail industry eventually gravitated from the payment of mileage allowances to the establishment of zero-mileage rates.⁴⁴ Consequently, the only method of compensation actually approved by the ICC in *IHB-II* has all but ceased to exist. Since *IHB-II* did not expressly consider other compensation techniques, such as zero-mileage rates, it cannot be construed to have approved them as compliant with § 11122.⁴⁵ As Complainants have demonstrated, zero-mileage rates are not a permissible form of compensation for tank-car providers.⁴⁶

⁴³ Joint Op. at 24-29.

⁴⁴ Reply, Craven V.S. at 1; Joint Op. at 23. *See also*, Joint Op. Ex. 12, Stipulation Nos. 8-10.

⁴⁵ UP wrongly claims that the ICC approved of zero-mileage rates to compensate for repair moves in the *IHB-II Reconsideration* decision when it discussed shipper concerns over contract rates. Reply at 32-33. That decision never refers to zero-mileage rates, but even assuming that was the subject, the issue decided by the ICC was not the propriety of zero-mileage rates for compensating tank-car providers, but whether parties who entered into contracts in reliance upon an existing regulatory scheme can bind the agency to maintenance of the regulatory status quo. *IHB-II Reconsideration* at *5-6. That also was the D.C. Circuit’s focus when, in affirming *IHB-II*, it rejected shipper concerns that their rail contracts, “which rates *presumably* incorporate an offset amount reflecting the shippers’ cost of providing railcars[...] do not currently account for the possibility of shipper-borne empty-repair charges.” *IHB-II Appeal* at 1058 (emphasis added). The court was not deciding that such offsets existed, but merely assumed that, if they did, these “industry practices may [not] prevent the [ICC] from implementing even a justified and well-explained departure from previous policy.” *Id.* at 1059.

⁴⁶ Joint Op. at 29-39.

UP claims that the Board need not wade into a debate over allowances versus zero-mileage rates because the parties stipulated that “there is no evidence that [UP] has refused a request to establish rates for movements in cars that provide for payment of a mileage allowance.”⁴⁷ But elsewhere in its Reply, UP identifies two reasons that rendered it pointless for tank-car providers to request allowances. First, for shippers to recover empty-repair-move charges through mileage allowances, *all* railroads must pay allowances, not just those charging for repair moves, because the purpose of the mileage-allowance-pass-back approach is to allocate responsibility for repair-move costs among all railroads which benefit from using a tank car in revenue service to the extent of each railroad’s use.⁴⁸ At the time of *IHB-II*, zero-mileage rates were the exception rather than the rule; today, mileage allowances are the exception. Second, the method of calculating mileage allowances does not currently reflect repair-move costs because the *Ex Parte 328* Agreement develops tank-car ownership costs based on the experience of the three (formerly four) largest tank-car leasing companies, but repair-move charges today are primarily billed to and paid by tank-car lessees — not the lessor reporting car ownership costs under the *Ex Parte 328* Agreement.⁴⁹ Consequently, mileage allowances do not currently reflect railroad repair-movement charges. Until these facts are remedied, mileage allowances will not compensate tank-car providers for repair-move charges. Lastly, as discussed in subpart b. below, Complainants’ economic witness, Dr. Caves, has described how a railroad

⁴⁷ Reply at 82 (quoting Stipulation #4).

⁴⁸ *Id.* at 34, n. 40.

⁴⁹ *Id.* at 43, n. 52.

with market power can extract economic surplus through separate repair-move charges, thereby avoiding its duty to compensate the car provider for those charges.⁵⁰

That all railroads would have to pay mileage allowances for the pass-back approach to function as described in *IHB-II* exemplifies the obstacle to relying upon zero-mileage rates to compensate tank-car providers. As *LOSAC* makes clear, a dual-rate scale comprised of a rate in a railroad-supplied car and a lower zero-mileage rate in a private car is critical to the Board's ability to ensure that zero-mileage rates actually contain a discount to compensate the car provider.⁵¹ The existence of a dual-rate scale renders the method of compensation, whether by allowance or zero-mileage rate, irrelevant because the Board can verify that both are in fact providing adequate compensation. While this is true for all other car types, *it is not true for tank cars*. Because railroads do not supply tank cars, they cannot establish the dual-rate scales that were essential to *LOSAC*'s conclusion that zero-mileage rates are a permissible form of car compensation. Therefore, the mileage-allowance-pass-back approach to compensation for repair-move charges in *IHB-II* cannot function as intended unless all railroads pay mileage allowances.

UP asserts that the foregoing concerns are both "irrelevant" and "nonsense,"⁵² and cavalierly dismisses the quoted language from *LOSAC* as dicta.⁵³ UP contends that a dual-rate scale just as easily could refer to a zero-mileage rate and a full-allowance rate, both for the same service in a private car. According to UP, the full-allowance rate would be higher than the zero-

⁵⁰ These factors also explain why the Individual Complainants have not asked UP for mileage allowances in rate negotiations since Item 55-C became effective. *Id.* at 42-43. In addition, UP admits that, because it strongly prefers zero-mileage rates, it would discourage mileage-allowance requests by creating a rate differential that favors zero-mileage rates. *Id.* at 95, n. 107.

⁵¹ Joint Op. at 29-32.

⁵² Reply at 93.

⁵³ *Id.* at 91.

mileage rate by a sufficient amount to offset the mileage-allowance payment.⁵⁴ In other words, UP claims that this differential would reflect the discount that UP has provided to compensate the tank-car provider.⁵⁵

Complainants already have explained that a dual-rate scale must contain rates for two *different* services, whereas UP has hypothesized a dual-rate scale for the *same* service.⁵⁶ Notably, UP concedes that the Complainants' interpretation of *LOSAC* *might* be correct, but contends "we cannot know what the ICC had in mind."⁵⁷ But we do know because the ICC told us that dual-rate scales enable it to ensure that "[a] railroad escapes no legal obligation concerning car compensation" *because* it can validate such compensation based upon "[t]he adequacy of the differential" between the two rates.⁵⁸

The only economically meaningful dual-rate comparison that fulfills this purpose requires a market-based, full-service rate for transportation in a railroad-supplied tank car. In his rebuttal verified statement, Dr. Caves explains the economic significance of this requirement in response to testimony from UP witnesses Murphy and Hirst.⁵⁹ According to Dr. Caves, Mr. Hirst's calculation contains no differential on net, because all shippers pay the same profit-maximizing

⁵⁴ *Id.* at 94-95. *See also, id.*, Hirst V.S. at 1-2 (explaining how, if requested by a customer, UP would develop an upcharge to its zero-mileage rate to account for the mileage allowance such that the net outcome for both UP and its customer would be the same as the zero-mileage rate); Murphy V.S. at 22 (a "zero-mileage rate will incorporate the implicit mileage allowance that Complainants claim should be paid separately to providers of tank cars [because...] the railroad would require a higher transportation rate to offset the mileage allowance...").

⁵⁵ But UP does not actually establish full-mileage rates in the normal course of business, and so UP's assertion is purely hypothetical, and as Complainants demonstrate herein, not credible.

⁵⁶ Joint Op. at 31.

⁵⁷ Reply at 91-92 (conceding that "[t]he ICC might have been thinking about challenges to rates for service in *railroad-provided cars* where railroads offered zero-mileage rates..." (emphasis in original)).

⁵⁸ *LOSAC* at 18.

⁵⁹ Caves R.V.S. at ¶¶ 6-7, 31-34.

price in both rate calculations. In contrast, the *LOSAC* rate differential has economic content because, when offered a choice between a rate in a railroad-supplied car or a rate in a private car, the shipper would rationally choose a private car only if it receives real compensation in the form of an economically significant discount.⁶⁰

Under UP's definition of a dual-rate scale, any rail carrier could claim to compensate tank-car providers — as UP has claimed in this case — by first establishing a profit-maximizing market rate and then hypothesizing an imaginary full-mileage rate that exceeds that market-based rate by the product of the applicable mileage allowance multiplied by the route distance. If that is an acceptable standard, the Board might as well have no standard at all because this is an arithmetic exercise devoid of any foundation in a real-world market for transportation in railroad-supplied tank cars. In addition, UP has every incentive to create a rate differential that discourages the use of full-mileage rates by setting those rates at artificially high levels. Indeed, UP concedes that it would do exactly this, and its historical practice bears that out.⁶¹ But that would enable UP to offer “above-market” full-mileage rates to discourage the use of such rates, and still claim to be in compliance with the statutory compensation requirement even though the rate differential is not based upon market rates that would move the traffic. UP's “arithmetic” discount thus would not be the equivalent of a true “market” discount that passes muster under § 11122. The Board should reject a standard that permits such “gamesmanship” that would enable railroads to avoid their statutory car compensation obligations.

In the absence of a dual-rate scale that includes a rate for transportation in a railroad-supplied tank car, the Board cannot conclude that tank-car providers are compensated through

⁶⁰ *Id.* at ¶ 34 & n. 49.

⁶¹ *See* n. 21, *supra*.

zero-mileage rates. The Board therefore also must reject Item 55-C because tank-car providers are not compensated for that charge as required by § 11122 and *IHB-II*.

b. UP has no incentive to compensate tank-car providers for repair-move charges.

UP witness Murphy attempts to “explain the underlying economics that [he] believe[s] should be applied in evaluating Complainants’ claims and requests for relief.”⁶² Professor Murphy views this case through a rose-colored lens that stresses the perceived efficiency benefits of separately pricing for repair moves in a competitive marketplace. In rebuttal, Dr. Caves points out the naiveté of Professor Murphy’s assumption of a perfectly competitive rail industry, an assumption inconsistent with the reality of a rail industry with substantial market power in the hands of a few main players like UP. UP’s significant market power means that it can use separate pricing of repair moves to extract more economic surplus from shippers than would be possible simply by increasing the rates for loaded moves. Such a result is inconsistent with the *IHB-II* requirement that tank-car providers, which pay initially for repair-move charges, ultimately recoup those charges through mileage allowances or some other form of compensation.

Dr. Caves uses the same illustrations as Professor Murphy for shoes and socks, apartments, and smartphone accessories, to demonstrate how the results differ when changing the assumption from a competitive market to one where the seller possesses market power.⁶³ Professor Murphy’s apartment analogy is particularly apt for demonstrating that tank-car providers are *not* compensated for Item 55-C.⁶⁴ Specifically, Professor Murphy compares

⁶² Reply, Murphy V.S. at 3.

⁶³ Caves R.V.S. at ¶¶ 19-25.

⁶⁴ Reply, Murphy V.S. at 10-11.

landlords who include utilities in the rent and those who charge separately for utilities to illustrate the efficiencies of separate pricing. Under this scenario tenants who pay the all-inclusive rent have little incentive to economize on their utility usage. But because the apartment rental market is significantly more competitive than the freight rail market, the landlord who charges separately for utilities also is obliged to reduce the rent, which Professor Murphy concedes.⁶⁵ In other words, competition among landlords can be counted on to ensure that a separate utility charge is offset by a discount in the base rent.

But the same cannot be said of Item 55-C. Just as a landlord whose tenants had no alternative living arrangements could introduce a separate utility charge without an offsetting discount to the base rent, UP is capable of exploiting its market power to separately charge for repair moves without compensating tank-car providers through offsets to their line-haul rates.⁶⁶ Indeed, Professor Murphy concedes that UP likely did not embed compensation for Item 55-C in its zero-mileage rates when he states that “Complainants wrongly expected offsetting declines in Union Pacific’s rates for loaded tank-car moves once UP began imposing Item 55-C charges for empty repair moves.”⁶⁷ Dr. Caves points out that UP, as a profit-maximizing firm with market power, faces clear incentives to execute a profitable price increase *without* offsetting it elsewhere, whereas competition otherwise might oblige UP to substantially reduce its loaded-movement rates to prevent shippers from defecting to another railroad.⁶⁸

In addition, Dr. Caves analogizes Item 55-C to a “tying” arrangement that allows firms with market power to extract more surplus from their customers than they otherwise could in a

⁶⁵ Caves R.V.S. at ¶ 22.

⁶⁶ *Id.* at ¶ 23.

⁶⁷ Reply, Murphy V.S. at 13, n. 25.

⁶⁸ Caves R.V.S. at ¶ 31.

competitive market.⁶⁹ In this case, empty repair moves are the tied product, while loaded moves are the tying product, because a shipper cannot make loaded tank-car moves on UP without also making repair moves.⁷⁰ Because such shippers could not avoid Item 55-C charges without ceasing to make loaded moves on UP, and the economic harm of doing so will be much greater than the harm caused by Item 55-C, the shipper must submit to Item 55-C.⁷¹ Dr. Caves concludes that this enables UP to exploit Item 55-C “to extract more economic surplus from shippers than it could simply by increasing the rate for loaded movements.”⁷²

In another illustration, Professor Murphy opines that, because the sale of shoes separately from socks is more efficient than bundled pricing, separately pricing loaded moves and empty repair moves has similar benefits.⁷³ But as Dr. Caves points out, that logic breaks down when applied to Item 55-C because, unlike the plethora of choices that exist for purchasers of shoes and socks, purchasers of repair-move services have few choices, if any.⁷⁴ Furthermore, although one can wear shoes without socks, one cannot use tank cars for loaded moves without also purchasing repair moves for required maintenance and cleaning. If Professor Murphy had assumed a similar scarcity of sock retailers and required that shoes be worn with socks, consumers would have no choice but to pay higher prices for socks in his example.

⁶⁹ *Id.* at ¶¶ 26-30.

⁷⁰ *Id.* at ¶ 27. The ICC recognized this tying relationship in *IHB-II* at 609 (“Line-haul transportation cannot be performed without the use of rail cars, and rail cars cannot be operated over their useful lifespans without periodic maintenance.”).

⁷¹ *Caves R.V.S.* at ¶¶ 27-30.

⁷² *Id.* at ¶ 28.

⁷³ Reply, Murphy V.S. at 4.

⁷⁴ *Caves R.V.S.* at ¶¶ 19-20. Indeed, a railroad that participates in a loaded tank-car move inevitably will participate in some portion of the repair move either to or from the repair facility.

We can use Mr. Hirst’s example of the alleged UP “arithmetic” discount for zero-mileage rates to demonstrate that UP is not compensating tank-car providers for Item 55-C charges.⁷⁵ In Table 1 below, we assume the same \$1000 zero-mileage rate as Mr. Hirst in Column 1. In Column 2, we assume the same \$200 mileage allowance as Mr. Hirst and make the same arithmetic calculation to back into the same full-allowance rate of \$1200 as Mr. Hirst. In Cells D1 and D2, we calculate the same net revenue to UP as Mr. Hirst in both scenarios of \$1000.

Table 1

		1	2	3
		Zero-Mileage (No Repair Charge)	Full-Mileage (No Repair Charge)	Full-Mileage (Repair Charge)
A	Line-Haul Rate	\$1000	\$1200 (A1+B2)	\$1210 (A1+B3)
B	Allowance	\$0	\$200	\$210 (B2+C3)
C	Repair Charge	\$0	\$0	\$10
D	Net UP Revenue	\$1000	\$1000 (A2-B2)	\$1010 (A3-B3+C3)

Next, this illustration adds Column 3 to reflect the fact that the mileage allowance must increase upon the imposition of repair-move charges, such as Item 55-C, to include compensation for those charges in the mileage-allowance rate. In this illustration, we have assumed the applicable mileage-allowance increase is \$10, which produces a new mileage-allowance rate of \$210. Applying Mr. Hirst’s arithmetic calculation, the full-mileage rate also increases by \$10 to \$1210. But, unlike the scenarios illustrated by Mr. Hirst, UP’s net revenue *also* increases by \$10 because the shipper must pay UP’s new repair-move charge in addition to the full-mileage rate. In other words, consistent with Dr. Caves’ testimony, by separately charging for repair moves, UP is able to exploit its market power to extract surplus revenue from shippers that would not be possible in a competitive market. If UP truly were compensating tank-car providers for Item 55-C, as required by both the statute and *IHB-II*, there could be no such surplus.

⁷⁵ Reply, Hirst V.S. at 2.

The foregoing illustration casts doubt upon the fundamental precept of *IHB-II* that tank-car providers could be compensated for repair-move charges through mileage allowances, much less zero-mileage rate discounts. It demonstrates that, even if UP paid mileage allowances, it still would be able to extract this economic surplus from tank-car providers, which means they would not be compensated for Item 55-C. Thus, the entire notion of separately charging for repair moves is legally questionable.

Furthermore, even if the Board were to conclude that zero-mileage rates are a permissible form of compensation to tank-car providers for *other* tank-car ownership and maintenance costs, it could *not* conclude the same for repair-move charges. Unlike other tank-car ownership and maintenance costs which are paid to third parties, tank-car providers pay repair-move charges directly to railroads. It is that distinction that enables railroads to exercise their market power to extract surplus revenue through separate repair-move charges.⁷⁶

Professor Murphy's testimony actually proves Complainants' claims that they are not being compensated for Item 55-C. UP has no economic incentive to do so and Professor Murphy acknowledges that any expectation Complainants had of such compensation was unrealistic. In the absence of compensation, Item 55-C is unlawful.

3. The Board should apply *IHB-II* narrowly to permit only terminal and switching railroads to assess repair-move charges.

UP mischaracterizes Complainants' challenge to Item 55-C as seeking a return to the free repair move rule that pre-dated *IHB-II*.⁷⁷ UP uses that mischaracterization to resurrect the cross-subsidy and efficiency concerns that the ICC sought to resolve when it reversed the free repair move rule in *IHB-II* and to further bolster its claimed right to separately charge for repair

⁷⁶ See Part II.B.1. above (explaining the significance of this distinction in the penultimate paragraph). See also Joint Op. at 28.

⁷⁷ Reply at 22, 25.

moves.⁷⁸ UP's argument, however, presents a false choice between compensation and cross-subsidization. The Board's many varied, and sometimes conflicting, statutory mandates require a more balanced approach.

The most serious cross-subsidy concerns could be addressed, and compensation concerns substantially mitigated, if the Board restricted *IHB-II* to terminal and switching railroads that serve repair facilities on their lines and otherwise do not participate in significant loaded tank-car movements like the *IHB-II* defendants.⁷⁹ Those rail carriers pose the most serious cross-subsidy concerns because they have virtually no opportunity to recoup their cost of providing repair moves through rates for transportation of loaded tank cars. The number of such carriers and the distances of their repair moves are sufficiently small that their repair-move charges would raise only very minor compensation concerns. This essentially would restore the status quo that has existed for the past thirty years since *IHB-II* when nearly all repair-move charges were assessed by terminal and switching railroads that handled tank cars to and from repair facilities on their lines over relatively short distances. Only when UP, the nation's largest Class I railroad, adopted Item 55-C did the impact upon compensation provoke the concern of tank-car providers.

While restoration of the status quo might not provide *all* of the same efficiency incentives that UP claims Item 55-C provides,⁸⁰ UP witness Murphy concedes that tank-car providers already consider a multitude of factors, independent of repair-move charges, that "might also

⁷⁸ *Id.* at 20-27.

⁷⁹ Joint Op. at 29. These are the railroads who sought relief under *IHB-II*, where "moving to and from" repair shops meant a switch move to and from their point of interchange with line-haul railroads. *IHB-II* at 604. In contrast, UP has applied Item 55-C to include line-haul moves to repair facilities and subsequent line-haul moves from repair facilities to the next loading point.

⁸⁰ Reply at 56-66. But even when a tank-car provider pays repair-move charges initially to a railroad, the efficiency incentives claimed by the ICC in *IHB-II* and touted by UP in its Reply are lessened by the expectation that the tank-car provider ultimately will recover that cost through mileage-allowance compensation.

tend to minimize transportation costs incurred by UP”⁸¹ His objection is that, absent an explicit repair-move charge, the tank-car provider will not take into account the *full* costs it imposes on UP when deciding where and when to move cars for repairs.⁸² Accepting that proposition as true, arguendo, that factor nevertheless *cannot* eclipse a tank-car provider’s statutory compensation rights.

In *IHB-II*, the ICC held, and the D.C. Circuit agreed, that it had to harmonize abolition of the free repair move rule with the statutory compensation requirement, which is why compliance with the latter is a predicate to the former. For the reasons discussed in Part II.B.2. above, the mileage-allowance-pass-back approach for repair-move charges envisioned in *IHB-II* does not function as intended. Therefore, a different approach is needed to address the cross-subsidy and misallocation issue that was the principal objective of *IHB-II* without doing violence to the tank-car providers’ statutory compensation rights.⁸³

The Board need not, nor should it, mandate an alternative approach in this proceeding, just as the ICC did not mandate the mileage-allowance-pass-back approach in *IHB-II*. The Board, however, must reject UP’s assessment of repair-move charges upon tank-car providers for lack of the required compensation. That will provide the rail industry the necessary incentive to consider alternatives that do not require tank-car providers to be the conduit for reallocating repair-move costs. Otherwise, the Class I railroads will have no incentive to adopt any alternative that places responsibility directly upon themselves because, presently, they not only avoid their statutory duty to compensate through the shell game of zero-mileage rates, but they

⁸¹ Reply, Murphy V.S. at 13.

⁸² *Id.*

⁸³ *IHB-II* at 603-06.

also profit from repair moves to an extent that would not be possible if they supplied their own tank cars. Thus, the Board should declare Item 55-C unlawful.

III. ADOPTING ITEM 55-C WAS AN UNREASONABLE PRACTICE, AND FEDERAL LAW PROHIBITS UP FROM CONTINUING TO IMPLEMENT THIS TARIFF.

Railroads must establish reasonable practices on matters related to the transportation or services they provide.⁸⁴ In promulgating this requirement, “Congress did not limit the Board to a single test or standard for determining whether a rule or practice is reasonable.”⁸⁵ Rather, the Board has “broad discretion to conduct case-by-case fact-specific inquiries to give meaning to these terms . . . in the wide variety of factual circumstances encountered.”⁸⁶

UP fundamentally mischaracterizes Complainants’ arguments as a demand for a free service in an effort to cast Item 55-C in a reasonable light. But federal law, longstanding historical policy, and the circumstances surrounding Item 55-C’s implementation undermine UP’s assertions. UP shirked its federal mandate to compensate tank-car providers by demanding compensation *from* tank-car providers and mislead them about its reasons behind implementing its unlawful tariff. Item 55-C has no reasonable business purpose and contravenes federal rail transportation policy. It is thus an unreasonable practice in violation of federal law.

A. The Evidentiary Record Shows that Item 55-C Has No Reasonable Business Purpose.

Contrary to UP’s claims, Item 55-C has no reasonable business purpose. The empty-repair-move charges violate federal rail transportation policy, and they were imposed solely {{ [REDACTED]

⁸⁴ 49 U.S.C. § 10702.

⁸⁵ *CF Indus., Inc. v. Indiana & Ohio Ry.*, Fin.Docket No. 35517, slip op. at 6 (Served Nov. 28, 2012).

⁸⁶ *Granite State Concrete Co. v. STB*, 417 F.3d 85, 92 (1st Cir. 2005).

██████████}}. UP cannot implement these unlawful charges on the basis of fabricated policy justifications intended to deceive its customers.

1. Item 55-C violates federal rail transportation policy.

UP attempts to portray its empty-repair-move charges as consistent with federal rail transportation policy.⁸⁷ But UP’s reasoning rests on the faulty premise that Item 55-C lawfully imposes a separate charge for a separate service. For nearly every specific rail policy UP cites in its favor, UP asserts that its Item 55-C charges advance the policy by providing compensation to the railroad for its services.⁸⁸ As established in the Joint Opening Evidence and in Part II above, empty repair moves are *not* a separate service for which UP may charge, but are a cost of ownership for which UP is obligated to compensate tank-car providers. For this reason, UP’s arguments fail.

Item 55-C does not merely fail to advance rail transportation policy; it plainly *violates* rail transportation policy. The rail transportation policy, for example, requires the Board “to promote a safe and efficient rail transportation system by allowing rail carriers to earn adequate revenues, as determined by the Board.”⁸⁹ But by charging tank-car providers for repair movements while failing to compensate them for these ownership costs, Item 55-C allows UP to earn revenues far in excess of what might be deemed adequate. And it does so in direct violation of what is allowable as determined by the Board. Moreover, as explained in more detail below

⁸⁷ Reply at 46.

⁸⁸ See *id.* (asserting that its Item 55-C charges advance: 49 U.S.C. § 10101(1) by “creat[ing] actual rates for empty repair moves, rather than leaving railroads . . . uncompensated for their services”; 49 U.S.C. § 10101(2) by relying on market forces to “compensate railroads for empty repair costs”; 49 U.S.C. § 10101(3) by “eliminat[ing] free movements that do not contribute to going concern value”; 49 U.S.C. § 10101(5) by “provid[ing] compensation for services provided in moving empty cars to repair facilities”; and 49 U.S.C. 10101(10) by “seek[ing] compensation . . . for the costs associated with shippers’ decisions to direct empty cars to repair facilities.”

⁸⁹ 49 U.S.C. § 10101(3).

in part III.A.3, a tariff that results in a 10-mile move costing the same as a 250-mile move is hardly a measure that promotes efficiency.

Additionally, the federal rail transportation policy requires the “operat[ion of] transportation facilities and equipment without detriment to the public health and safety.”⁹⁰ Item 55-C discourages this policy by forcing tank-car providers to incur unlawful charges while they seek to comply with federally mandated retrofit requirements designed to improve the safety features of tank cars in the North American fleet.

Item 55-C contravenes multiple tenets of the rail transportation policy enumerated in the federal statute. And it does not advance a single one of these enumerated policies. Thus, Item 55-C is an unreasonable practice.

2. Ample evidence shows that UP’s external justifications for Item 55-C were inconsistent with its internal, unreasonable objectives.

UP claims that it made no misrepresentations but affirmatively shared Item 55-C’s objectives with its customers. Not so. The record overwhelmingly demonstrates that UP’s external justifications for Item 55-C, which UP now claims were the tariff’s true purpose, bore no relationship to its internal objectives.⁹¹

On Reply, UP attempts to counter Complainants’ extensively documented evidence of UP’s internal motives by relying on a verified statement submitted by Mr. Kenny Rocker where he states, among other things, that UP was “extremely interested in increasing efficiency.”⁹² This statement is offered to demonstrate belatedly that UP’s internal objectives for Item 55-C were identical to the external justifications it communicated to customers. But Mr. Rocker’s

⁹⁰ *Id.* § 10101(8).

⁹¹ Joint Op. at 9-18 and Exhibits referenced therein.

⁹² Reply, Rocker V.S. at 5.

verified statement is in no way consistent with either UP's internal documents up to, and including, the Operating Committee meeting in which UP approved Item 55-C, or Mr. Rocker's own deposition testimony. {{ [REDACTED]

UP's Reply does not identify a *single* piece of documentary evidence showing that Mr. Rocker or anyone else at UP ever considered efficiency of tank-car movements before UP began to develop its strategy to explain Item 55-C to customers. {{ [REDACTED] }}.⁹⁷

In the face of overwhelming contemporaneous evidence that {{ [REDACTED]

⁹³ Joint Op. at 9-15.

⁹⁴ Deposition Transcript of Douglass Craven ("Craven Tr.") at 67:5–68:12 (Joint Op. Ex. 31); Deposition Transcript of Kenny Rocker ("Rocker Tr.") at 10:17–19, 18:21–19:17 (Joint Op. Ex. 30); *see also* UPRR 0003937.

⁹⁵ UPRR0000808 (Joint Op. Ex. 16).

⁹⁶ UPRR0025230–37 (COLOR) (Joint Op. Ex. 15); Rocker Tr. at 65:14–66:11 (Joint Op. Ex. 30).

⁹⁷ UPRR 0000061–74 (Joint Op. Ex. 20). *See also* Rocker Tr. at 39:14–40:23 (Joint Op. Ex. 30).

claim that it considered other justifications simply is not credible.

UP attempts to downplay its internal documents by asserting that “business people do not spell out their thoughts in economic terms.”⁹⁸ But UP provides no alternate explanation for its business team’s sudden ability to develop economic-focused efficiency and cross-subsidization language when determining how to communicate and market its new tariff. The contemporaneous documentary evidence points to the only logical conclusion: UP did not consider its efficiency and cross-subsidization justifications for Item 55-C until it needed to provide its customers an explanation for its adoption of a new tariff other than its true purpose {{[REDACTED]}}.

UP further attempts to legitimize Item 55-C by asserting, without support, that the Board cannot consider the motives behind a railroad's practices.⁹⁹ This is unfounded. Agency and federal-court decisions routinely look to the purpose of a railroad's practice to determine whether it is reasonable.¹⁰⁰

Even in *NAFCA-II*, which UP cites for this assertion, the Board looked to the purpose and business objectives underlying the charges at issue to determine whether imposing them was a

⁹⁸ Reply at 76.

⁹⁹ Reply at 77.

¹⁰⁰ See, e.g., *Granite State Concrete Co.*, 417 F.3d at 95 (describing the Board’s role as “to determine whether, on the record, Guilford had good reasons to be concerned about safety and whether its responses to those concerns were reasonable”); *Ark. Elec. Coop. Corp.—Pet. for Decl’y Order*, Fin. Docket No. 35305, slip op. at 4 (served Mar. 3, 2011) (in case regarding tariff intended to limit coal dust emissions, “[t]he extent of the problem caused by coal dust emissions is a fundamental finding in determining the reasonableness of the tariff”); *Consol. Rail Corp. v. ICC*, 646 F.2d 642, 648 (D.C. Cir. 1981) (“The mere assertion of safety as a justification for any particular expenditure by a railroad company is not conclusive upon the [ICC’s] judgment of the reasonableness of that expenditure or the tariff based upon it.”).

reasonable practice.¹⁰¹ The language UP quoted relates only to the burden of proof in an unreasonable-practice case, not what the Board may or may not consider when adjudicating whether a practice is reasonable.¹⁰² That Complainants here bear the burden of proving UP's practice is unreasonable does not preclude the Board from considering UP's unreasonable motives. To the contrary, case law and Board precedent demonstrate that it is incumbent upon this Board to consider the true purpose behind Item 55-C.

UP points to the specific facts of *Rail Fuel Surcharges*¹⁰³ in an effort to distinguish its own misleading conduct from the misleading conduct at issue in that decision.¹⁰⁴ But UP's distinction between misleading its customers as to the true purpose of Item 55-C and when it previously misled its customers through "mislabeling" its fuel surcharge formula is a distinction without a difference. In both cases UP misled its customers. Regardless, UP's weak distinction ignores the Board's extremely broad authority to proscribe rail carriers' unreasonable misrepresentations. This Board has broad discretion to determine whether a rail practice is reasonable under the circumstances.¹⁰⁵ It specifically has prohibited rail carriers from engaging in "misrepresentations or misleading conduct."¹⁰⁶ This prohibition is consistent with federal rail policy to encourage honest management of railroads.¹⁰⁷

¹⁰¹ Docket No. 42060 (Sub-No. 1), slip op. at 6 (served Jan. 26, 2007).

¹⁰² *Compare* Reply at 19 with *NAFCA-II* at 7 ("Complainants wrongly assume that BNSF must justify the new practice of charging for empty private cars before imposing these charges. However, as discussed above, the burden of proving that the 2001 Charges are unreasonable is on Complainants.")

¹⁰³ Ex Parte No. 661, *Rail Fuel Surcharges* (served Jan. 26, 2007).

¹⁰⁴ Reply at 77-78.

¹⁰⁵ *Granite State Concrete Co.*, 417 F.3d at 92.

¹⁰⁶ *Rail Fuel Surcharges*, slip op. at 7.

¹⁰⁷ 49 U.S.C. § 10101(9).

Here, UP anticipated a substantial increase in tank-car repair moves resulting from new safety regulations {{[REDACTED]}}. UP did not want to compensate tank-car providers for these movements, as required by law, {{[REDACTED]}}. UP knew that it needed to give customers reasonable-sounding justifications for the new tariff, so it fabricated a list of purposes for its customers while masking Item 55-C's true purpose. This is precisely the sort of misrepresentation that the Board can — and should — forbid.

3. UP did not design Item 55-C to encourage more efficient repair moves.

Regardless of UP's attempt, through the verified statement of Mr. Rocker, to revise the history behind the development of Item 55-C to now include an allegedly keen interest in tank-car efficiency, UP clearly did not design Item 55-C to promote efficiency. {{[REDACTED]}}

First, the structure of the Item 55-C charges eliminates efficiency and cost as a consideration for a wide range of empty repair moves. Under the charge, a flat rate of \$1317 applies to *any* empty repair movement not exceeding 250 miles and a flat rate of \$1477 applies to *any* empty repair movement exceeding 250 miles but less than 501 miles.¹⁰⁸ A movement of 10 miles costs the same as a movement of 250 miles; 251 miles cost the same as a 500 miles. As Dr. Caves notes, this structure provides no incentive for shippers to economize on empty repair movements within each mileage band.¹⁰⁹

Even for shippers deciding between empty movements under 251 miles and those between 251 and 500 miles, the pricing signals from Item 55-C are nearly non-existent and

¹⁰⁸ Joint Op. Ex. 2 (UP Tariff 4703, Item 1100-J).

¹⁰⁹ Caves R.V.S. at ¶¶ 37-38 .

confusing. Not only is the \$160 rate differential for moving to the shorter mileage band merely an 11% reduction, shippers who make the smallest mileage reductions will see the largest benefit. For example, a shipper deciding between a 10-mile and 500-mile movement will save only 11% by selecting the 10-mile movement, even though it reduces the distance by 98%. A shipper deciding between a 250-mile move and a 251-mile movement will also save 11%, but it will reduce the distance by only 0.4%. This pricing scheme clearly dampens the efficiency incentives UP touts.¹¹⁰

As a matter of economics, UP's adoption of an Item 55-C pricing scheme that provides little or no incentive to reduce empty-repair-move mileage for a wide range of empty moves indicates that UP's true motive for Item 55-C was profit. As Dr. Caves explains, UP's decision to make Item 55-C charges flat for movements of less than 501 miles suggests that UP wanted to ensure that it received a certain profit-maximizing price *regardless of distance*.¹¹¹

Second, to the extent that Item 55-C promotes some reduction in empty repair movements, it still is not an efficiency measure. As Dr. Caves observes, "[t]he economically efficient [Item 55-C charge] would reflect the marginal cost to UP of performing an empty repair movement. This would ensure that empty repair movements would occur only when the economic benefit to the shipper of the empty repair movement is greater than or equal to the cost to UP of performing the movement."¹¹² Clearly UP is charging far above its marginal cost of performing empty repair moves, {{ [REDACTED] }}.¹¹³ Not only has UP

¹¹⁰ *Id.* at ¶ 39.

¹¹¹ *Id.* at ¶ 40.

¹¹² *Id.* at ¶ 41.

¹¹³ See Joint Op. Ex. 13 at UPRR0000686 {{ [REDACTED] }}
 {{ [REDACTED] }}

failed to provide any evidence that its Item 55-C charges reflect its marginal costs, but also, as explained above, it has structured these charges in a profit-maximizing manner.

Third, shippers already have incentives to operate their fleets in an efficient manner that would reduce UP's costs associated with empty repair moves. UP's economic witness, Professor Murphy, concedes as much, stating that shippers consider factors that "might also tend to minimize transportation costs incurred by UP."¹¹⁴ Tank-car providers have invested millions of dollars to acquire their fleets, and they pay all the costs associated with owning and maintaining the tank cars, including depreciation. There is thus every incentive to maximize the efficient use of these assets in revenue service and to eliminate the time that a non-productive tank car is out of revenue service. Individual Complainants have testified that they closely track the movements of all their tank cars on a daily basis to maximize their use at all times, and also to ensure that the empty movements do not exceed the 106% threshold that would result in mileage-equalization charges.¹¹⁵ Their testimony also indicates that UP incorrectly attributes their efficiency measures to Item 55-C.¹¹⁶ Any additional incentive that Item 55-C provides has little incremental benefit to UP.¹¹⁷

 } Joint Op. Ex. 14 at UPRR0018361. Six months later, UP began assessing that same charge on tank-car repair moves. UP also assesses its standard fuel surcharge on top of this highly lucrative repair move charge even though UP consumes less fuel to transport an empty tank car.

¹¹⁴ Reply, Murphy V.S. at 13.

¹¹⁵ Supplemental Opening Evidence and Argument of Ethanol Products LLC d/b/a/ POET Ethanol Products at 10-12, 22; Verified Statement of Phil Spieckermann at 6-8; Supplemental Opening Evidence and Argument of POET Nutrition, Inc. at 9-11, 18-19; Verified Statement of Jeff Siebrecht at 6-7.

¹¹⁶ See, e.g., Reply at 67-68 (attributing procedures to Item 55-C). For example, UP partially quotes testimony of an Arkema witness for the proposition that Arkema has focused on qualifying additional repair shops to minimize transit distance. *Id.* But UP omitted the portion of the quote that stated Arkema was following the same procedure it had before Item 55-C. Reply

Plainly, Item 55-C was not developed, and is not structured, to provide the strong efficiency incentive UP claims. Instead, Item 55-C was designed {{ [REDACTED] }} to increase UP's revenues and profits at the expense of shippers and tank-car providers who have no choice but to send their empty tank cars to repair facilities to meet their legal obligations. The cynical claim, after the fact, that Item 55-C had or has some noble efficiency-based motive is a canard.

4. UP does not bear a disproportionate responsibility for empty tank-car repair moves.

Complainants established in their opening evidence that, at no point in the development of Item 55-C, its public roll-out, or previously in this case, has UP ever claimed that Item 55-C was necessary to remedy UP's cross-subsidization of any other railroad's repair-move responsibility.¹¹⁸ On Reply, UP now claims that its practice of charging for tank-car repair moves in Item 55-C is reasonable to address UP's disproportionate burden of handling repair moves.¹¹⁹ But UP has not established that it bears a disproportionate responsibility for repair moves relative to its participation in loaded moves, which was the ICC's concern in *IHB-II*.

Ex. 7 (Grow Tr. 179:6-15 (“Q: So what, if anything, is Arkema doing today to mitigate the cost associated with [Item 55-C]? A: We’re essentially following the same procedures. I know that Gary Chaney, on or behalf, is constantly looking to try to get new shops qualified and available for work so that we have more options in terms of both capacity and geography to try to minimize – maximize use of the asset and minimize transit distance.”)). Moreover, Arkema’s witness clearly testified that when Arkema became aware of Item 55-C, it simply reiterated its *existing* procedures. Reb. Ex. 36 (Grow Tr. 158:17-159:25).

¹¹⁷ For example, UP asserts that Arkema recognizes that Item 55-C incentivizes Arkema to use mobile repair facilities. But Arkema already had a strong preference to use mobile repair facilities and used them where possible, because they increase car utilization. Reb. Ex. 36 (Grow Tr. 150:18-25).

¹¹⁸ Joint Op. at 24.

¹¹⁹ Reply at 51-55.

As Complainants have demonstrated, the ICC permitted tank-car-repair-move charges in *IHB-II* as a means to address the cross-subsidization and misallocation of repair-move responsibility among railroads that resulted in certain railroads bearing a disproportionate responsibility for repair moves relative to their participation in loaded revenue moves.¹²⁰ Complainants further demonstrated that UP bears no resemblance to the *IHB-II* defendants or otherwise suffers a comparable disproportionate responsibility for tank-car repair moves, particularly in view of UP's sizeable loaded-tank-car and mileage-equalization revenue.¹²¹ Although UP did not produce any documents in discovery to demonstrate that it adopted Item 55-C to remedy a similar misallocation of repair-move responsibility to it, UP's Reply includes the Verified Statement of Michael Baranowski to make a *post hoc* argument that UP does bear a disproportionate responsibility for repair moves.¹²² The Complainants are submitting the Rebuttal Verified Statement of Thomas D. Crowley in response to Mr. Baranowski.

As a threshold matter, Mr. Baranowski fails to address the measure of disproportionate responsibility that concerned the ICC in *IHB-II*. The ICC was concerned with carriers that made a disproportionate number of repair moves relative to their loaded moves.¹²³ Mr. Baranowski, however, has made this into a comparison of UP versus other Class I railroads. The incorrect implication of such a comparison is that UP suffers a disproportionate burden so long as it is at the high end of the Class I railroads as a group. But Mr. Baranowski's analyses fail to consider the distribution of the results among the Class I railroads and UP's size relative to each of the

¹²⁰ Joint Op. at 24-29.

¹²¹ *Id.* at 26-28.

¹²² Reply, Baranowski V.S. at 1.

¹²³ *IHB-II* at 604; *see also B&P* at 22-23.

other Class I railroads.¹²⁴ Most importantly, however, he *completely* ignores Class III railroads that were the focus of *IHB-II* because many of them handled large numbers of repair moves and few, *if any*, loaded moves.¹²⁵

Mr. Crowley's analyses demonstrate that UP's alleged burden pales by comparison to Class III railroads. For example, Mr. Baranowski attempts to demonstrate UP's burden in terms of the number of repair facilities located on UP.¹²⁶ To give Mr. Baranowski's analysis perspective, Mr. Crowley compares the number of repair facilities per thousand route miles on each Class I railroad and all Class III railroads in the aggregate.¹²⁷ UP, at {{[REDACTED]}} shops per thousand miles, does not even have the most repair facilities among just the Class I railroads.¹²⁸ That distinction belongs to {{[REDACTED]}}, a much smaller railroad, at {{[REDACTED]}} shops per thousand route miles.¹²⁹ Class III railroads, by comparison, have {{[REDACTED]}} shops per thousand route miles, which is nearly {{[REDACTED]}} times {{[REDACTED]}}.¹³⁰ Mr. Baranowski also claims that UP did not participate in loaded moves before or after a shop movement {{[REDACTED]}} of the time.¹³¹ Because Mr. Baranowski, unlike his other analyses, did not compare that figure to other Class I railroads, Mr. Crowley has done so and he extended that analysis to both Class II and III railroads. UP again is only {{[REDACTED]}} among Class I railroads—this time to {{[REDACTED]}}—and also trails both

¹²⁴ Crowley R.V.S. at 11-12.

¹²⁵ Joint Op. at 25.

¹²⁶ Reply, Baranowski V.S. at 5-6, Table 4.

¹²⁷ Crowley R.V.S. at 13-14.

¹²⁸ *Id.*, Table 1. UP is {{[REDACTED]}} when this metric is applied to repair facilities served by shortline rail carriers that connect with each Class I. *Id.* at 15, Table 2.

¹²⁹ *Id.*, Table 1.

¹³⁰ *Id.*

¹³¹ Reply, Baranowski V.S. at 8.

Class II and III railroads at {{[REDACTED]}} and {{[REDACTED]}}, respectively.¹³² Mr. Crowley also drilled deeper into Mr. Baranowski's data to identify ten Class III railroads with the largest number of tank-car repair moves that were not preceded or followed by a loaded move. Seven of the ten had from {{[REDACTED]}} of such moves and the other three had {{[REDACTED]}}.¹³³ This extreme disproportional responsibility of Class III railroads mirrors the circumstances that motivated the ICC in *IHB-II* to allow such carriers to charge for repair moves *initially*, and to rely upon the mileage-allowance pass-back approach to ensure other railroads that benefited from loaded tank-car moves *ultimately* would bear that cost in their mileage allowance compensation paid to tank-car providers.

Even if comparing Class I railroads were appropriate, Mr. Baranowski completely ignores the relevant metric from *IHB-II*, which is the ratio of shop moves to loaded moves. Mr. Crowley has made this comparison in Table 4 of his Rebuttal Verified Statement. UP's shop miles in 2016 were {{[REDACTED]}} of its loaded miles, which although the highest among Class I railroads, was not disproportionately so. {{[REDACTED]}}
{{[REDACTED]}}.¹³⁴

In addition, although Mr. Baranowski indicates that UP participates as an originating, terminating or overhead carrier in {{[REDACTED]}} of all movements to, from and between repair facilities, this is one instance where he does not compare that figure to other Class I railroads.¹³⁵ Mr. Crowley gives perspective to Mr. Baranowski's figure by comparing the number of all such

¹³² Crowley R.V.S. at 22, Table 6.

¹³³ *Id.* at 23 & Crowley R.V.S. Ex. 2.

¹³⁴ *Id.* at 18.

¹³⁵ Reply, Baranowski V.S. at 7.

repair movements on each Class I railroad per route mile.¹³⁶ UP has just {{[REDACTED]}} repair movement per route mile, which is only {{[REDACTED]}} among all Class I railroads.¹³⁷ This clearly is not disproportionate to other Class I railroads.

Mr. Baranowski further claims that UP is burdened by the fact that Item 55-C is the only revenue that UP received over the course of each year from 2015-17 on {{[REDACTED]}} of the tank cars that UP transported to repair facilities.¹³⁸ Mr. Crowley first points out why Mr. Baranowski cannot conclusively assert that UP did not receive *any* revenue at all from those cars.¹³⁹ But even so, Mr. Crowley testifies that those Item 55-C moves represented just {{[REDACTED]}} or less of UP's total tank-car revenue moves in each year.¹⁴⁰ UP clearly did not suffer a disproportionate responsibility for repair moves relative to its participate in in loaded revenue moves.

Finally, Mr. Crowley has identified four factors that distort Mr. Baranowski's analyses in ways that cannot be fully measured, thereby casting doubt upon his conclusions:

- First, Mr. Crowley has found numerous instances where the Railinc data overstate the tank-car miles for loaded and empty movements.¹⁴¹
- Second, even if the movement miles were accurate, the railroads that dictate the routing of empty cars do not always follow the most direct route to a repair facility. The very example of a repair move that Mr. Baranowski offers in Table 3 of his verified statement illustrates this fact.¹⁴² UP, for its operating convenience, chose a round-trip route that was {{[REDACTED]}} more circuitous than the most direct route.¹⁴³ Those excess empty miles are included in Mr. Baranowski's

¹³⁶ Crowley R.V.S. at 19-21.

¹³⁷ *Id.* at 20, Table 5.

¹³⁸ Reply, Baranowski V.S. at 9.

¹³⁹ Crowley R.V.S. at 24.

¹⁴⁰ *Id.* at 25, Table 7.

¹⁴¹ *Id.* at 4-6.

¹⁴² *Id.* at 8-10.

¹⁴³ *Id.* at 10.

analyses despite an implied assumption that railroads transport tank cars to repair facilities via the shortest, most direct routes.

- Third, Mr. Crowley has identified at least seven instances where Mr. Baranowski incorrectly identified a repair facility as being served by multiple railroads that did not in fact serve those locations.¹⁴⁴
- Fourth, Mr. Baranowski evaluates just two years (2015-16) of tank-car movement data when comparing UP to other Class I railroads.¹⁴⁵ But he acknowledges that most tank cars move to repair facilities on average once every {{[REDACTED]}} years.¹⁴⁶ Therefore, he cannot reach any firm conclusions about UP's responsibility for tank-car repair moves relative to other railroads based solely upon just two years of data.

Although Mr. Crowley does not endorse Mr. Baranowski's mileage estimates or analyses, he demonstrates that Mr. Baranowski's conclusions are erroneous even based upon his own flawed data.¹⁴⁷

B. This Case Is Distinguishable from *NAFCA-II*.

UP relies on a complaint brought against BNSF nearly two decades ago to bolster its claim that its practice of charging tank-car providers for empty-repair movements is reasonable.¹⁴⁸ But *NAFCA-II* involved unrelated charges imposed to recoup costs for a service provided for the *tank-car providers'* convenience, not to extort payment from tank-car providers for necessary repair movements for which railroads are required to compensate tank-car providers as a cost of ownership. It is therefore distinguishable from the issues presented in this litigation.

NAFCA-II addressed whether BNSF's newly implemented tariff imposing storage charges on empty private tank cars constituted, among other violations, an unreasonable practice

¹⁴⁴ *Id.* at 6-8.

¹⁴⁵ Reply, Baranowski V.S., Tables 2, 5 (2016 only) & 6.

¹⁴⁶ *Id.* at 5.

¹⁴⁷ Crowley R.V.S. at 6, n. 14.

¹⁴⁸ See *NAFCA-II*, Docket No. 42060 (Sub-No. 1) (served Jan. 26, 2007).

in violation of § 10702. There, the Board recognized that tank-car providers had increased their tank-car fleets to have more cars available when demand increased.¹⁴⁹ This increased the number of empty private tank cars on rail systems.¹⁵⁰ To manage inefficiencies stemming from the number of empty private cars sitting on rail lines at a time when rail capacity systemwide was tight¹⁵¹ BNSF and other railroads began to charge shippers for holding empty tank cars on their rail lines without moving them to private tracks or to their own facilities.¹⁵²

UP's reliance on *NAFCA-II* is misguided. The Board made clear that storing tank cars beyond a reasonable free period was a service provided for the benefit of tank-car providers who supplied excess tank cars.¹⁵³ This is precisely the distinction made between permissible charges for tank-car usage as “property” of the tank-car provider and impermissible charges made for tank cars as “instrumentalities of transportation” necessary for railroads to fulfill their common-carrier obligation.¹⁵⁴

Here, the empty tank-car movements at issue are not made for the benefit of tank-car providers as “property.” They are not a “service” generously provided by railroads for which railroads may demand fees. They are critical (and in some cases, federally-mandated) repair movements, a cost of ownership that railroads as common carriers are statutorily obligated to

¹⁴⁹ *NAFCA-II*, at 1.

¹⁵⁰ *Id.*

¹⁵¹ The years 2006 and 2007 marked a period when there were rail capacity shortages on the Class I systems, which is not the case today. *NAFCA-II* was decided in that environment. *See id.* at 6 (“Moreover, railroad conditions today are quite different from what they were even 10 years ago. Traffic is up and capacity is tight. Thus, even if holding cars for a private owner’s convenience without separate compensation was a common practice in the past, that does not mean that it is unlawful for carriers to try to move them more quickly under today’s conditions.”).

¹⁵² *Id.* at 2.

¹⁵³ *Id.* at 4.

¹⁵⁴ *See generally, Consol. Rail Corp. v. ACF Indus., Inc.*, 750 F. Supp. 935, 939 (N.D. Ill. 1990).

provide.¹⁵⁵ And, consistent with that statutory obligation, rail carriers historically *have* provided reasonable repair moves. The 106% calculation under the mileage equalization program was intended to capture this obligation: Railroads would cover a reasonable number of empty miles associated with tank-car repair moves (estimated at 6% of loaded movements) while requiring tank-car providers to cover the costs of excessive movements.¹⁵⁶

Necessary repair movements for tank cars that UP is obligated to provide are in no way comparable to tank-car storage provided for the benefit of tank-car providers. *NAFCA-II*'s holding allowing railroads to charge storage fees thus is inapposite to this litigation. Railroads must compensate tank-car providers for their costs of ownership, and those costs include the costs of repair movements. Instead of compensating tank-car providers for these costs, UP is demanding payment for them under Item 55-C. That practice is unreasonable and must be stopped.

C. UP's Remaining Defenses Fail.

UP recites a litany of additional defenses in support of its unreasonable practice. None of them succeed.

UP asserts that Item 55-C was reasonable because it was not the first railroad to adopt charges for empty-tank-car repair moves. Like a schoolyard retort, UP's claim that others were doing the same thing too does not make its own conduct — much less other railroads' conduct — permissible.¹⁵⁷ UP fails to explain how having company in imposing an unlawful tariff

¹⁵⁵ 49 U.S.C. §§ 11101, 11121.

¹⁵⁶ See *IHB-II Appeal* at 1054, n. 12.

¹⁵⁷ Moreover, UP was the largest railroad to adopt such charges on a broad scale. UP points only to Canadian Pacific and Kansas City Southern as Class I railroads that implemented similar measures *before* UP adopted Item 55-C. Reply at 48. But both rail carriers have far smaller networks and fewer repair facilities than UP. Thus, while such measures might also be contrary to applicable law and therefore would also be susceptible to legal challenge, their impact on

provision might make its own actions reasonable and lawful.¹⁵⁸ To the contrary, the fact that all of the major Class I railroads had adopted and were vigorously enforcing fuel surcharges that were calculated as a percentage of the line-haul rate did not stop the Board in *Rail Fuel Surcharges* from finding that such provisions violated § 10702 and directing all Class I railroads to remove them from their tariffs. There is no reason why other railroads' similarly unreasonable practices would prevent the Board from doing so here.

UP also claims that its practice is reasonable because it could have charged for empty repair movements "even before *IHB-II*."¹⁵⁹ That is false. UP compares movements *to* repair facilities with movements for dismantling, sale, and scrap; and movements *from* repair facilities and movements of new cars into first revenue service. But these analogies blatantly violate the case law and longstanding history of tank-car compensation.

Historically, railroads were permitted to charge for empty tank-car movements *only* when tank cars were transported as "property" of the tank-car owner.¹⁶⁰ This was the case when new cars entered commercial service for the first time and when tank cars moved for dismantling, sale, or scrap.¹⁶¹ In contrast, railroads historically could *not* charge for empty tank-car movements when tank cars were transported as "instrumentalities of transportation" because these moves were necessary for railroads to fulfill their common-carrier obligation.¹⁶² The 106%

tank-car providers has been comparatively small. UP inexplicably also points to BNSF and Canadian National, neither of which implemented charges for empty tank-car repair moves until *after* UP implemented Item 55-C. *Id.*

¹⁵⁸ Moreover, if railroads acted in concert to establish new charges, such an action could raise antitrust concerns. See 15 U.S.C. § 1.

¹⁵⁹ Reply at 48.

¹⁶⁰ *Consol. Rail Corp.*, 750 F. Supp. at 939.

¹⁶¹ See *id.*

¹⁶² *Id.*

calculation under the mileage equalization system was premised on the distinction between empty repair moves made as “instrumentalities of transportation” for which railroads were responsible and excessive empty miles that were typically made for the benefit of the tank-car provider and thus were chargeable.¹⁶³

Despite UP’s attempt to blur the distinction between repair moves and moves of new or retired cars, this distinction persists throughout tank-car-movement history. Tank-car movements for retrofits and cleanings were not chargeable before *IHB-II*. They remain non-chargeable today. Accordingly, UP’s Item 55-C implementing these charges is an unreasonable practice that must be reversed.

IV. UP’S UNILATERAL REMOVAL OF EMPTY REPAIR MILES FROM THE EQUALIZATION CALCULATION SUBVERTS THE *EX PARTE* 328 AGREEMENT.

UP claims that its implementation of Item 55-C and associated charges does not subvert the industry-wide mileage-equalization agreement approved by the ICC in *Ex Parte* 328.¹⁶⁴ UP also argues that to the extent its Item 55-C charges have undermined the equalization agreement, that result was expressly contemplated and authorized by the ICC in *IHB-II* and *B&P*.¹⁶⁵ UP is wrong on both counts.

As an initial matter, UP’s imposition of Item 55-C charges — which resulted in the removal of empty repair miles from the equalization calculation — is inconsistent with the equalization agreement that was prescribed by the ICC in *Ex Parte* 328. By separately charging for empty repair movements and removing those empty miles from the equalization program, UP has made it significantly less likely that tank-car providers would exceed the 106% equalization

¹⁶³ See *IHB-II Appeal* at 1054, n. 12.

¹⁶⁴ Reply at 78-81.

¹⁶⁵ *Id.*

threshold and make payments for excess empty miles.¹⁶⁶ Because the *Ex Parte* 328 mileage-equalization calculation aggregates empty miles across all railroads, UP's removal of empty repair miles from the equalization program also significantly reduced the likelihood that other railroads would be able to receive equalization payments.

In short, UP's unilateral removal of empty repair miles from the mileage-equalization calculation effectively guts the *Ex Parte* 328 Agreement.¹⁶⁷ UP's recent petition to modify the *Ex Parte* 328 Agreement — filed 32 years after the ICC prescribed that agreement and on the eve of UP's Reply in this proceeding — is a tacit acknowledgment that imposing separate charges for empty repair moves has rendered the equalization agreement meaningless.

Moreover, the *IHB-II* and *B&P* decisions did not contemplate that implementing separate charges for repair moves would nullify the *Ex Parte* 328 provisions addressing mileage equalization. To be sure, the *IHB-II* decision recognized that allowing railroads to separately charge for empty repair moves — and remove those miles from the equalization calculation — *could* undermine the equalization agreement. However, the ICC indicated that changes to equalization through the process that produced the *Ex Parte* 328 Agreement would be required to avoid that result. Noting that the *Ex Parte* 328 stakeholders were already discussing changes to

¹⁶⁶ The 106% threshold was established to account for empty miles in excess of the miles required to return the car to its origin—primarily empty repair miles—that were considered the responsibility of the railroads using the car in revenue service. *See IHB-II Appeal*, 872 F. 2d at 1054, n. 12 (“The 106% figure was designed to account for both empty-return mileage (100% of revenue mileage) and reasonable empty-repair mileage (an additional 6% of revenue mileage”). UP's observation that the 106% threshold was also intended to include other types of empty miles does not counter the fact that empty repair miles were understood to be the major component of the 106% threshold.

¹⁶⁷ Other Class I railroads have adopted tariff items similar to Item 55-C, which even further undermines *Ex Parte* 328. All such provisions also are unlawful for the same reasons Item 55-C is unlawful, and a finding in favor of Complainants in these consolidated proceedings would be expected to lead to the elimination of such terms from other railroads' tariffs.

the equalization formula, the ICC clearly expected that the Agreement would be renegotiated before the major line-haul railroads implemented separate charges for empty repair moves:

We recognize that for the changeover that we are approving to be fully effective, there will have to be a change in the equalization rule. The carriers and private car interests in *Ex Parte No. 328* already plan to restudy the 106% equalization ratio and the mileage charge to determine whether changes are needed. It is inappropriate for us to change the equalization rule in this case. Accordingly, at this point, we leave the matter to the parties in interest.¹⁶⁸

Subsequently, in *B&P*, the ICC refused the request of tank-car owners to stay the effect of the *IHB-II* decision allowing separate charges for empty repair moves until the mileage-equalization provision in the *Ex Parte 328* Agreement was renegotiated. But it did so based upon an assumption that, although reasonable at the time, has turned out to be clearly erroneous. Specifically, the ICC believed that imposing separate charges for empty repair moves and removing empty repair miles from the equalization calculation would harm the railroads' interests unless changes were made to the equalization formula.¹⁶⁹ Consequently, the ICC assumed that the major line-haul carriers¹⁷⁰ would not implement separate charges for empty repair moves until they negotiated the changes to the equalization agreement that the ICC recognized would be necessary.¹⁷¹

¹⁶⁸ *IHB-II* at 619.

¹⁶⁹ *B&P* at 28 (“Moreover, the effect of *IHB-II* on equalization accounting is essentially adverse to the railroads, since charging for empty repair moves eliminates mileage that would have applied to the 106% threshold.”).

¹⁷⁰ The railroads seeking to impose empty repair-move charges in *IHB-II* and *B&P* were small terminal or switching railroads whose implementation of separate charges would be unlikely to have a material effect on the industry-wide equalization calculations under *Ex Parte 328*.

¹⁷¹ *B&P* at 28. (“Also, to the extent the 6% excess of empty over loaded miles was intended to represent repair moves, that threshold may no longer be justified. Thus, if anyone would seek modification of the equalization rule it would be the railroads.”).

That assumption was eminently reasonable at the time of the *B&P* decision. If the major line-haul railroads had established separate charges for empty repair moves, they also would have had to remove empty repair miles from the equalization calculation — meaning tank-car owners would be less likely to exceed the 106% threshold and thus be less likely to owe equalization payments. Since *IHB-II* contemplated that the empty-repair-move charges collected by the railroads ultimately would be passed back to tank-car providers, either through mileage allowances or some other form of compensation, the railroads were not expected on net to receive much, if any, additional revenue from empty-repair-move charges.¹⁷² Consequently, unless the railroads first sought changes to the mileage-equalization agreement, major line-haul railroads who were paying the lion's share of mileage allowances at that time would suffer a net loss in revenue. They would gain nothing by collecting separate empty-repair-move charges that had to be passed back to car providers, while losing any realistic opportunity to collect mileage-equalization payments.

The ICC could not have anticipated that the railroads would stop compensating tank-car providers for the increased cost of ownership resulting from separate charges for empty repair

¹⁷² Although terminal and switching railroads with many tank-car repair moves and no tank-car line-haul moves would receive more revenue from separate repair-move charges than from mileage equalization, the major line-haul carriers ultimately would be responsible for those charges through their mileage-allowance compensation payments to tank-car providers. Furthermore, even line-haul carriers with significant amounts of *both* repair moves and line-haul moves would pass-back their repair-move charges to the tank-car providers through the allowances they paid on the line-haul moves. In other words, only those rail carriers with a significant imbalance of repair moves versus loaded moves (i.e., terminal and switching carriers) had much to gain from separately charging for repair moves. That explains why Class I railroads did not rush to impose repair-move charges after *IHB-II*, despite the ICC's contrary assumption. See *B&P* at 23, n. 9 ("Substantial use of the *IHB-II* ruling is economically inevitable, since any railroad with a potential for repair move traffic will have everything to gain and nothing to lose by publishing such tariffs."). Kansas City Southern, the smallest of the Class I railroads was the only one to charge for repair moves for most of the time since *IHB-II*, followed over 20 years later by Canadian Pacific Railroad.

moves through the elimination of mileage-allowance payments or any other form of compensation. As a result of these changes, the separate charges for empty repair moves are no longer passed back to tank-car providers as the ICC anticipated in *IHB-II* and *B&P*.

Eliminating mileage-allowance payments or any other form of measurable compensation, coupled with UP's establishment of separate charges for empty repair moves, therefore, eviscerates the entire *Ex Parte 328* Agreement and undoes the careful balancing of competing stakeholder interests reached by the rail industry and approved by the ICC in *Ex Parte 328*.¹⁷³ Given the significant changes in the rail industry since the *IHB-II* decision — including the significant consolidation in the rail industry since 1987 — a re-examination of that Agreement may be appropriate. However, neither *IHB-II* nor *B&P* supports the UP's unilateral subversion of the Agreement by implementing Item 55-C charges.

V. INDIVIDUAL COMPLAINANTS ARE ENTITLED TO DAMAGES.

UP does not dispute that its unlawful adoption of Item 55-C and unlawful assessment of zero-mileage rates caused Individual Complainants to suffer damages. It simply does not believe it should have to pay for these damages. While it asserts multiple defenses to liability, UP misinterprets the legal standards for applying them, ignores key exceptions to them, and either fails to prove their elements or relies upon factual assertions that are either incorrect or conflict

¹⁷³ UP denies that the mileage-allowance and equalization provisions of the *Ex Parte 328* Agreement are intricately related because the mileage-allowance provisions were amended during the 1986 negotiation of the agreement, while the parties did not reach a consensus on change to the equalization provisions. Reply at 80, n. 97 (arguing that Complainants “fabricated” a connection between mileage allowances and equalization provisions of the *Ex Parte 328* Agreement that never existed). UP's view is misguided. The 1986 renegotiation simply amended the 1979 agreement previously reached by the same stakeholders. The fact that the parties adjusted only part of the 1979 agreement does not mean that the 1986 agreement no longer represents a balancing of the competing interests of the various stakeholders. To argue otherwise is simply disingenuous.

with assertions it makes elsewhere in its Reply. The Board should reject this attempt by UP to profit off its unlawful activity at the expense of Individual Complainants.

A. Individual Complainants Could Not Mitigate Their Damages By Asking UP For Rates That Provided For Payment Of Mileage Allowances And Had No Duty To Do So.

UP's mitigation claim fails for two simple reasons. First, Individual Complainants could not have mitigated damages by asking UP to pay mileage allowances.¹⁷⁴ Second, Individual Complainants had no duty to mitigate by asking UP to pay mileage allowances.

UP bases its assertion that the Individual Complainants could mitigate their damages with respect to Item 55-C, and in the case of POET Ethanol, POET Nutrition, and Cargill, for UP's lack of compensation for providing tank cars generally, upon the fallacious presumption that mileage allowances would have reduced these damages.¹⁷⁵ As to the charges associated with Item 55-C, UP has acknowledged that those repair-move charges are not currently reflected in the mileage-allowance rates due to changes in industry practices since *IHB-II* and *Ex Parte* 328.¹⁷⁶ Even if that were not the case, however, Complainants have argued, and UP has conceded, that for the mileage-allowance-pass-back approach to function as described in *IHB-II* all railroads would have to pay mileage allowances.¹⁷⁷ Furthermore, Complainants also show that, by separately charging for repair moves, UP can exploit its market power to extract surplus revenue from shippers that would not be possible even if UP paid mileage allowances.¹⁷⁸

¹⁷⁴ UP bears the burden to prove how losses could have been avoided. See *TruServ Corp. v. Morgan's Tool & Supply Co.*, 39 A.3d 253, 262 (Pa. 2012).

¹⁷⁵ Reply at 99-103.

¹⁷⁶ *Id.* at 43, n. 52.

¹⁷⁷ See Part II.B.2.a. above; Reply at 34, n. 40.

¹⁷⁸ See Part II.B.2.b., Table 1, above; Caves R.V.S. at ¶¶ 27-30.

Additionally, as with many of UP's arguments in its Reply, its mitigation argument requires the Board to presume as fact that the zero-mileage rates UP has established for the transportation of the Individual Complainants' tank cars are discounted to compensate them for providing tank cars, which Complainants vigorously argue is not the case and UP has not made any attempt to prove. Rather, the rates are set at the maximum level the market will bear, and they therefore by definition are not discounted. Asking UP to establish an even higher rate that entailed mileage-allowance payments therefore would do nothing to mitigate the damages caused by the Item 55-C charges or UP's zero-mileage rates. As Dr. Caves observes, this would not be a proper way to set full-mileage rates.¹⁷⁹ But in any case, UP concedes that if a shipper requested mileage allowances and UP agreed to establish full-mileage rates, it would simply increase the market rates it currently charges by even more than the mileage allowance to discourage their use.¹⁸⁰ Consequently, a request for mileage allowances would not have mitigated the Individual Complainants' damages under Item 55-C and likely would have exacerbated them.¹⁸¹

Even if mileage allowances could mitigate the Individual Complainants' damages (which they cannot), Individual Complainants had no duty to mitigate by requesting mileage allowances. While an injured party generally cannot recover damages it could have reduced through reasonable mitigation efforts, "an injured party . . . is not obligated to mitigate damages when

¹⁷⁹ Caves R.V.S. at ¶ 34.

¹⁸⁰ Reply at 95, n. 107.

¹⁸¹ The notion in UP's Reply at 101-104 that Individual Complainants could have mitigated their damages by renegotiating contract rates or negotiating different tariff rates is wrong. Each Individual Complainant submitted verified testimony describing how their rates are established by UP on a "take it or leave it" basis as well as increased annually by UP arbitrarily, and how each believed attempts to negotiate different terms and rate levels with UP would be futile. Again, UP would have the Board turn a blind eye to the significant market power UP exerts over its customers.

both it and the liable party have an equal opportunity to reduce damages.”¹⁸² This prevents the liable party from asserting that it has no responsibility for performing its obligations that the injured party could have performed.¹⁸³ Here, UP had an equal opportunity to do exactly what it claims Individual Complainants should have asked it to do for mitigation purposes — UP could have paid mileage allowances. UP’s mitigation claim thus is invalid.

B. Individual Complainants Are Not Estopped From Seeking Damages.

UP has failed to articulate a valid estoppel defense.¹⁸⁴ To assert estoppel, UP must demonstrate that acceptance of zero-mileage rates by Individual Complainants is so inconsistent with their damage claims that awarding damages would be unconscionable.¹⁸⁵ UP bears the burden of proof on its estoppel claims.¹⁸⁶

UP asserts that Individual Complainants are estopped from seeking reparations for Item 55-C charges because they accepted the “benefits” of zero-mileage rates in return for assuming responsibility for empty-repair movements.¹⁸⁷ But again, UP provides no evidence to support this.¹⁸⁸ UP merely implies that Individual Complainants would have sought mileage allowances

¹⁸² *TruServ Corp.*, 39 A.3d at 262; *see also Smith v. Watson*, 406 N.W.2d 685, 687 (N.D. 1987).

¹⁸³ *Smith*, 406 N.W.2d at 687.

¹⁸⁴ We understand UP’s equitable-estoppel defense to be that of quasi-estoppel. Equitable estoppel requires misrepresentation by the party to be estopped and detrimental reliance by the party alleging estoppel. *Thomas v. Arkoosh Produce*, 48 P.3d 1241, 1246 (Idaho 2002). UP does not allege either of these estoppel elements. By contrast, quasi-estoppel requires unconscionability in lieu of misrepresentation and detrimental reliance. *Id.*

¹⁸⁵ *See Atwood v. Smith*, 138 P.3d 310, 314 (Idaho 2006) (stating that quasi-estoppel prevents a person from taking a position that is inconsistent with a position from which it derived a benefit, if it would be unconscionable).

¹⁸⁶ *See Arkoosh Produce*, 48 P.3d at 1246 (holding that the party asserting estoppel bears the burden of proving its elements).

¹⁸⁷ Reply at 103-104.

¹⁸⁸ Outside of its estoppel argument, UP states that {{

if they believed zero-mileage rates were inadequate consideration for empty-repair-move liability.¹⁸⁹ For this assertion to be valid, however, mileage allowances had to reflect compensation for Item 55-C. UP's own reply evidence concedes that mileage allowances do not reflect Item 55-C.¹⁹⁰ Further, Individual Complainants' failure to ask for mileage allowances does not support estoppel, because they had no duty to ask for them.¹⁹¹

Even assuming for the sake of argument that the Individual Complainants received some benefit from zero-mileage rates, UP has not addressed how the receipt of those benefits is inconsistent with reparations claims for Item 55-C. Those benefits obviously did not include compensation for the new tank-car costs imposed on them by the operation of Item 55-C and Tariff 4703, since UP uniformly *increased* its rates instead of reducing them to reflect this increased cost.

UP also has not provided any proof that an Individual Complainant has received a zero-mileage rate that actually contains a discount in return for waiving mileage allowances or accepting empty-repair-move responsibility, as opposed to being the profit-maximizing rate for that traffic, as Complainants contend. Thus, UP's concern that a damages award would result in a double credit through lower rates and again through damage payments is misplaced.¹⁹²

}}

¹⁸⁹ Reply at 104.

¹⁹⁰ *Id.* at 43, n. 52.

¹⁹¹ See *Arkoosh Produce*, 48 P.3d at 1247 (holding that silence cannot be relied upon to support estoppel absent a duty to speak).

¹⁹² Reply at 105.

Finally, even if UP was able to show that Individual Complainants accepted a benefit of zero-mileage rates, it has not shown how any such acceptance makes reparations unconscionable. It merely alleges that reparations could result in a double-recovery without attempting to quantify the double-recovery. UP thus has failed to prove all required elements of estoppel.

C. Individual Complainants Do Not Need To Bring A Rate Case To Recover Damages.

In its Reply, UP resurrects an argument raised four years ago in its unsuccessful Motion to Dismiss: that each of the Individual Complainants should have filed rate cases instead of challenging UP's development and implementation of Item 55-C as an unreasonable practice.¹⁹³ The Board should reject this frivolous argument once again. In the first place, UP's argument that the "overall rate" paid by Individual Complainants includes the Item 55-C charges is directly contrary to its current position that empty repair movements are a separate service that has "no necessary connection to its loaded moves," and therefore can be independently priced at "market" (i.e., monopoly) levels.¹⁹⁴ To attempt again to argue that the charges associated with Item 55-C are part of the overall rate paid for the transportation of loaded tank cars is diametrically opposed to such a theory. UP cannot have it both ways.

In any event, UP's arguments should be rejected because no Complainant is challenging the levels of its line-haul rates in this case, nor are they challenging the levels of the charges associated with Item 55-C. Rather, the Individual Complainants allege that UP engaged in an unreasonable practice by implementing Item 55-C in the first instance, because it had no basis in law and violated UP's statutory obligations to compensate them for supplying UP with tank cars. Complainants Cargill, POET Ethanol, and POET Nutrition also allege that UP has not been

¹⁹³ Reply at 106-07; see Motion to Dismiss at 16-17 (filed April 20, 2015).

¹⁹⁴ Reply at 14.

compensating them for supplying tank cars for years, since they believe (and have submitted verified testimony supporting that belief) that UP's so-called zero-mileage rates are not discounted to provide such compensation, and UP has not provided one shred of evidence in this entire case to demonstrate otherwise. The Board clearly has jurisdiction to award damages to the Individual Complainants for these unreasonable practices.¹⁹⁵

UP incorrectly relies on *Insulating Materials, Between Points in Official Territory*¹⁹⁶ to support its renewal of this rejected claim. In that decision, the ICC found that it could not award reparations for an unreasonable practice that effectively resulted in an increased line-haul rate, because it had not found the resulting rate unlawful, and thus, could not conclude that harm had occurred.¹⁹⁷ This is not the issue currently before the Board with Item 55-C. The unreasonable practice involving Item 55-C is the assessment of the charge itself. Item 55-C is unlawful at *any* level. Individual Complainants thus do not need to prove that Item 55-C charges are at an unreasonable level to demonstrate specific harm.¹⁹⁸

¹⁹⁵ 49 U.S.C. § 11704(c).

¹⁹⁶ 364 I.C.C. 599 (1981) ("*Insulating Materials*").

¹⁹⁷ *Id.* at 603. As it did in its failed Motion to Dismiss, UP also cites *Union Pacific v. ICC*, 867 F.2d 646 (D.C. Cir. 1989) as support for the proposition that Individual Complainants are not entitled to reparations based on their unreasonable-practice claim. But that case, which was commenced as a rail rate-reasonableness case before the ICC, stands for the limited proposition that a complainant must pursue relief through a rate case if the unreasonable practice it complains of is manifested *exclusively* in the level of rates that customers are charged," which is obviously not the case with Item 55-C and its related charges. *Id.* at 649 (emphasis in original).

¹⁹⁸ {{ [REDACTED] }}. Reply at 108 n.118. Arkema is seeking damages for empty repair moves that occurred during this period only to the extent UP billed for them pursuant to Item 55-C, {{ [REDACTED] }}. See *Grow R.V.S.* at 2 (including updated list of these movements). Thus, 49 U.S.C. § 10709(c) does not prevent the Board from awarding damages for these movements.

D. Awarding Damages To Individual Complainants Will Not Create A Manifest Injustice.

UP disingenuously claims that awarding damages to Individual Complainants, if the Board were to reject Item 55-C or preclude the use of zero-mileage rates, would create a manifest injustice because those decisions would constitute an abrupt departure from well-established practice upon which UP relied when adopting Item 55-C and offering zero-mileage rates.¹⁹⁹ All of the case law that UP cites for this proposition, however, contemplates that “there is a substitution of new law for old law that was reasonably clear.”²⁰⁰ That is not the situation presented by this case.

In the first place, Complainants have demonstrated that, despite UP’s attempts in its Reply to rewrite the history of the purpose and implementation of Item 55-C, UP did not rely on *IHB-II* for its plan {{ [REDACTED] }} until just prior to its roll-out, when UP was searching for some legal justification for it. Moreover, with respect to Item 55-C, Complainants have identified a clear predicate to charging for repair moves in *IHB-II* — a predicate founded upon the statute — that has not been satisfied. That predicate requires that tank-car providers be compensated for repair-move charges, which Complainants demonstrate is not occurring. Therefore, any reliance that UP placed upon *IHB-II* was unwarranted.

Similarly, UP cannot credibly claim to have relied upon *IHB-II* to support its use of zero-mileage rates to compensate tank-car providers for Item 55-C because that decision and the affirming decision of the D.C. Circuit expressly did not consider the suitability of alternatives for recouping Item 55-C, leaving that question for subsequent proceedings, such as this one, if

¹⁹⁹ Reply at 109-11.

²⁰⁰ Reply at 110, *quoting Verizon Tel. Cos. v. FCC* 269 F.3d 1098, 1109 (D.C. Cir. 2001). Other decisions quoted by UP on that same page have similar holdings.

needed.²⁰¹ Moreover, *LOSAC*, and the absence of any ICC or STB precedent expressly holding that zero-mileage rates were permissible for tank cars, should have put UP on notice that, absent a dual-rate scale for service in railroad-supplied cars and private cars, zero-mileage rates may not satisfy the statutory requirement to compensate private-car owners. Thus, UP cannot claim to have relied upon reasonably clear precedent in its favor. If anything, that precedent should have alerted UP to the very issues Complainants have raised in this proceeding.

With respect to damage claims for mileage allowances, the thirty-year-old *LOSAC* decision at least should have raised serious questions regarding the lawfulness of zero-mileage rates for tank cars. UP's willful blindness to such questions cannot constitute reliance.

If anything, it would be a manifest injustice to deny reparations in this case. This case has been pending for more than four years, during which time UP has continued to collect the Item 55-C charges from Individual Complainants and all other UP tank-car customers. The procedural schedule has been delayed multiple times *at UP's request* and over Complainants' objections, which were partially based upon the continuing financial drain of Item 55-C.²⁰² UP's manifest-injustice claim is particularly ironic because the delays in this case were prompted by UP's desire to obtain extensive discovery from the Individual Complainants, who would not have joined in this case but for the prospect of obtaining damages. If the Individual Complainants had not joined in this case, UP would not have been entitled to much of the evidence upon which it now relies and this case could have proceeded to final resolution in far less time, thereby reducing the Individual Complainants' exposure to Item 55-C charges. It is

²⁰¹ *IHB-II Reconsideration* at *5; *IHB-II Appeal* at 1058.

²⁰² See "Complainants' Reply to Union Pacific's Motion to Consolidate Proceedings," at 5 (filed Feb. 15, 2017); "Reply to Union Pacific's Second Motion for Consolidation," at 10-11 (filed Aug. 29, 2017).

UP that wants “to have [its] cake and eat it too.”²⁰³ If the Board denies reparations for Item 55-C, it will wreak a manifest injustice upon the Complainants who have continued to pay those charges to UP throughout each delay.

Finally, this is not a situation in which UP had been assessing repair-move charges for decades, or even just years, in reliance upon Board precedent prior to Complainants’ challenge to Item 55-C. Although UP claims to have relied upon the thirty-year-old ICC decisions in *IHB-II*, *IHB-II Reconsideration*, and *B&P*, Item 55-C was not announced until December 2014 and became effective only in January 2015. Complainants expressed their opposition to Item 55-C within weeks of UP’s public announcement and filed their initial complaint within three months of the effective date.²⁰⁴ Thus, UP had prompt notice that Item 55-C’s lawfulness was in question. That fact distinguishes this case from *Rail Fuel Surcharges* in which the Board declined to make its decision retroactive so that shippers could pursue reparations for fuel surcharges assessed as a percent of the base rate.²⁰⁵ There, both the precedent and the practice were nearly thirty years old. In this case, despite UP’s claimed reliance upon thirty-year-old precedent, UP’s practice was brand new when it was *immediately* challenged in this proceeding. There was nothing for Complainants to challenge prior to the publication of Item 55-C.

VI. CONCLUSION.

For the foregoing reasons, and for the reasons set forth in the Complainants’ Joint Opening Evidence, Complainants request that the Board: (1) find UP’s adoption of Item 55-C, Subpart D, and its related charges to be unlawful, and (2) order UP to rescind its tariff and pay

²⁰³ Reply at 3.

²⁰⁴ See Joint Op., Ex. 22.

²⁰⁵ Nor were there any individual complainants in *Rail Fuel Surcharges* actually seeking damages.

reparations to Individual Complainants for the tariff charges incurred. In addition, the NOR 42144 Complainants request that the Board (1) find that UP does not compensate for use of tank cars, and (2) direct UP to pay POET Ethanol, POET Nutrition, and Cargill reparations for compensation owed to them since March 31, 2013.

Respectfully submitted,



Jeffrey O. Moreno, Esq.
Jason D. Tutrone
Thompson Hine LLP
1919 M Street, NW Suite 700
Washington, DC 20036
(202) 263-4107

*Counsel for The Fertilizer Institute, the
American Chemistry Council and Arkema,
Inc.*



Thomas W. Wilcox, Esq.
David K. Monroe, Esq.
Kristine O. Little, Esq.
GKG Law, P.C.
1055 Thomas Jefferson Street NW, Suite 500
Washington, DC 20007
(202) 342-5248

*Counsel for North America Freight Car
Association; Ethanol Products, LLC d/b/a
POET Ethanol Products; POET Nutrition,
Inc.; and Cargill Incorporated*



Elizabeth H. Titus, Esq.
Hogan Lovells US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
(202) 637-5558

*Counsel for American Fuel &
Petrochemical Manufacturers; Tesoro
Refining & Marketing Company, LLC;
Tesoro Great Plains Gathering &
Marketing LLC; Dakota Prairie Refining,
LLC; Valero Marketing and Supply
Company; and Valero Rail Partners, LLC*

May 31, 2019



Paul M. Donovan, Esq.
LaRoe, Winn, Moerman & Donovan
1250 Connecticut Avenue, N.W., Suite 200
Washington, DC 20036
(202) 298-8100

Counsel for The Chlorine Institute

CERTIFICATE OF SERVICE

I do hereby certify that on this 31st day of May, 2019, I have served a copy of
“Complainants’ Joint Rebuttal Evidence and Argument” by electronic delivery upon:

Michael Rosenthal
Kavita Pilai
Covington & Burling, LLP
One CityCenter
850 10th Street, N.W.
Washington, DC 20001

/s/ Jason D. Tutrone
Jason D. Tutrone

Rebuttal Verified Statement
of
Dr. Kevin W. Caves

**BEFORE THE SURFACE
TRANSPORTATION BOARD**

IN RE:)
NORTH AMERICA FREIGHT CAR)
ASSOCIATION; AMERICAN FUEL)
& PETROCHEMICALS MANUFACTURERS;)
THE CHLORINE INSTITUTE; THE)
FERTILIZER INSTITUTE; AMERICAN)
CHEMISTRY COUNCIL; ETHANOL)
PRODUCTS, LLC D/B/A POET ETHANOL)
PRODUCTS; POET NUTRITION, INC.; and)
CARGILL INCORPORATED)
vs.)
)
UNION PACIFIC RAILROAD)
COMPANY)

STB Docket No.
NOR 42144

**VERIFIED STATEMENT OF
KEVIN W. CAVES**

May 30, 2019

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INTRODUCTION AND ASSIGNMENT

1. I have been asked by counsel for the Association Complainants and the Individual Complainants (collectively, “Complainants”)¹ to respond to the Verified Statements of Kevin M. Murphy² and Robert C. Hirst³ concerning the purported compensation that tank car providers receive from Union Pacific (“UP”) through zero-mileage rates (“ZMRs”). I understand that UP is legally obligated to provide shippers with the instrumentalities of transportation, including the rail tank car, and that UP may comply with the law either by providing the tank car itself or by compensating the entity that does provide the tank car. I understand that the law requires that the rate of compensation for the rail tank car be determined by the expense of owning and maintaining tank cars, and must also consider factors that affect the adequacy of the national freight car supply.⁴

2. Historically, railroads compensated tank car providers explicitly for the use of tank cars through tariffed mileage allowance (“MA”) payments, which accrue on a per-loaded-mile basis and are paid to the entity that provides the tank car.⁵ MA payments are effectively rebates that lower the overall net price to the shipper and tank car owner.⁶

1. The Complainants in Docket NOR 42144 are the North America Freight Car Association (“NAFCA”); the American Fuel & Petrochemical Manufacturers (“AFPM”); The Chlorine Institute, Inc. (“TCI”); The Fertilizer Institute (“TFI”); the American Chemistry Council (“ACC”); Ethanol Products, LLC d/b/a POET Ethanol Products (“POET Ethanol”); POET Nutrition, Inc. (“POET Nutrition”); and Cargill Incorporated (“Cargill”). I shall refer to NAFCA, AFPM, TCI, TFI and ACC as the “Association Complainants” and to the other Complainants as “Individual Complainants”

2. Verified Statement of Professor Kevin M. Murphy on Behalf of Union Pacific Railroad Company in NAFCA vs. Union Pacific Railroad Company (April 25, 2019) [hereafter “Murphy VS”].

3. Verified Statement of Robert C. Hirst (April 25, 2019) [hereafter “Hist VS”].

4. See *North American Freight Car Association et. al. vs. Union Pacific Rail Company* (NOR 42144), First Amended Complaint (June 2, 2015) [hereafter “Complaint”], ¶14, citing 49 U.S.C. §§ 11121 and 11122.

5. See, e.g. Ex Parte No. 328, *Investigation of Tank Car Systems*, 3 I.C.C. 2d 196 (1986) (“[Mileage] [a]llowances paid by the railroads for privately owned tank cars are...set forth in Item 695 of the national tank car tariff PHJ-6007-F.”). The current iteration of this tariff is RIC-6007-O, Item 195.

6. MA payments are made to the owner of the tank car, which often is not the shipper but a lessor who leases its tank cars to the shipper. When the shipper is the tank car owner, MA payments are made directly from the railroad to the shipper. When the shipper is a lessee, MA payments are made to the lessor, although the shipper-

3. Beginning more than 20 years ago, UP increasingly eliminated MA payments on tank cars in favor of ZMRs. According to UP, since the early 2000s, more than 85 percent of its tank car shipments were made under ZMRs; in addition, less than one percent of UP's loaded tank car movements have involved MA payments since 2014 (the year before the Empty Repair Charge was implemented).⁷ I understand that UP claims that MA payments are unnecessary because its ZMRs incorporate discounts consistent with the compensation to which tank car providers are entitled (the "Alleged Discounts"). The Complainants claim that the Alleged Discounts are merely an accounting fiction, such that "UP has systematically all but ceased to pay any compensation to those entities supplying the rail tank cars that UP uses to meet its common carrier obligation."⁸

4. Starting in 2015, UP began to levy a separate charge for empty movements of private tank cars to and from repair facilities ("Empty Repair Charge"). I understand that UP is legally permitted to levy the Empty Repair Charge only to the extent that UP makes MA payments, or some alternative form of compensation, to ensure that UP, rather than tank car providers, ultimately bears the cost of transporting tank cars to and from repair facilities. I understand UP's position to be that it is not obligated to make MA payments when ZMRs are used.⁹

lessee is typically entitled to recover the MA payments based upon the lease arrangement between the shipper and the car owner.

7. Murphy VS at 8, citing Verified Statement of Douglas Craven at 1 ("Union Pacific and our customers rarely use rates for movements in tank cars providing for mileage allowance payments. Since at least the early 2000s, more than 85% of all Union Pacific's loaded tank car movements involved zero-mileage rates. In 2014, the year before we instituted empty repair move charges, approximately 0.28% of loaded tank car movements involved mileage allowance payments. In 2017, approximately 0.13% of loaded tank car movements involved mileage allowance payments")

8. Complaint ¶17.

9. See *North American Freight Car Association et. al. vs. Union Pacific Rail Company* (NOR 42144), Union Pacific's Reply Evidence and Argument (April 26, 2019) [hereafter "UP Reply"], at 96 ("railroads have no obligation to pay allowances when railroads and shippers use zero-mileage rates.")

5. I understand that the precedent permitting railroads to offer ZMRs in lieu of other compensation derives from *LO Shippers v. Aberdeen & Rockfish Ry Co.* (“LOSAC”).¹⁰ That case involved ZMRs that were offered by railroads to compensate agricultural commodity shippers for the cost of providing covered hopper cars. In LOSAC, the railroads themselves supplied more than half of covered hopper cars.¹¹ This allowed for a relatively straightforward comparison between (1) the market rates charged by railroads when they supply the covered hopper car to shippers; and (2) the market rates charged by railroads when they do not bear these costs. The ICC observed in LOSAC that the differential between these two rates could be used to determine whether a railroad’s ZMRs include actual discounts consistent with the compensation to which tank car providers are entitled.¹²

6. The instant case differs from LOSAC in that UP supplies no tank cars. This means that the relatively straightforward benchmarking implied by LOSAC is infeasible here, because there exist essentially no market rates pursuant to which railroads bear the cost of providing tank cars to shippers. In the absence of a market-based benchmark to which UP’s ZMRs could be directly compared, I understand that UP bears the burden of demonstrating that its ZMRs provide compensation for its Empty Repair Charge.

7. I have been asked to determine whether Professor Murphy and Mr. Hirst have made such a demonstration. As explained below, I find that they have not. To the contrary,

10. *LO Shippers v. Aberdeen & Rockfish Ry Co., et al.* 4 I.C.C. 2d 1 (1987) [hereafter, “LOSAC”]; *see also LO Shippers Action Comm. v. ICC*, 857 F.2d 802 (D.C. Cir. 1988).

11. *LOSAC, supra*, at 17 (noting that “the railroads own more than half of the covered hopper fleet.”)

12. *LOSAC, supra*, at 40 (“The adequacy of the differential [when zero allowance rates are published in dual rate scales] is subject to the same tests as the adequacy of an allowance.”) *Id.* At 12, explaining that the railroads “sought to remedy depressed market conditions, particularly for grain traffic, with reduced freight rates premised on use of surplus railroad-owned cars.” In other words, railroads discounted their grain rates by accepting lower compensation for supplying railroad-owned tank cars. This reduced compensation was then incorporated into the pricing offered to shippers supplying private cars, who were offered only “limited rate differentials” in exchange for supplying their own private cars. *See also id.* at 17-18.

Professor Murphy explicitly concedes that UP's ZMRs likely do *not* reflect compensation for the Empty Repair Charge. Similarly, Mr. Hirst confirms that UP explicitly structures its ZMRs so as to ensure that UP achieves its target (profit-maximizing) price, without providing any real discounts relative to that price. If UP charges shippers the same profit-maximizing price for loaded movements, regardless of whether or not it earns revenue from the Empty Repair Charge, it makes no economic sense to claim that shippers receive compensation for the Empty Repair Charge through UP's ZMRs. This is further corroborated by economic principles, which show how UP can implement the Empty Repair Charge without having to provide offsetting discounts. This implies that shippers' total payments to UP—inclusive of the Empty Repair Charge and shippers' payments for loaded movements—are unambiguously higher as a result of UP's implementation of the Empty Repair Charge.

8. I have also been asked to assess Professor Murphy's efficiency-based rationales for the Empty Repair Charge. Professor Murphy opines that shippers, when faced with the cost of performing empty repair movements, would tend to choose shorter movements and to avoid wastefully long movements. As explained below, Professor Murphy ignores that the Empty Repair Charge is structured such that it fails to provide shippers with any incentives to do so for broad ranges of empty repair movements: For empty repair movements up to 500 miles, shippers have little or no economic incentive to select shorter movements, rather than longer ones. In addition, Professor Murphy's efficiency rationales ignore the likelihood that, due to UP's market power, the Empty Repair Charge likely exceeds the marginal cost to UP of providing empty repair movements; this implies that the Empty Repair Charge likely introduces economic inefficiencies of its own.

QUALIFICATIONS

9. My name is Kevin W. Caves. I am a Senior Economist at Econ One Research Inc. I have applied my expertise to a variety of industries, including cable, broadcasting, energy, finance, freight rail, Internet & tech platforms, healthcare, wireless and wireline networks, payment cards, pharmaceuticals, and professional sports. My published work has appeared in numerous popular and academic outlets, including *Antitrust*, *The Antitrust Source*, *The Atlantic*, *Broadcasting & Cable*, *The Capitol Forum*, *Communications & Strategies*, *Competition Policy International*, *Econometrica*, *The Economists' Voice*, *George Mason Law Review*, *Information Economics & Policy*, *Journal of Competition Law & Economics*, *Labor Law Journal*, *Regulation*, *Research in Law & Economics*, *Review of Network Economics*, and *Telecommunications Policy*. I have published two book chapters, and I serve on the Editorial Advisory Board of the *Journal of Transportation Law, Logistics, & Policy*. In conjunction with my co-authors in academia, I have developed econometric techniques that have been integrated into STATA, a leading statistical software package used globally by economists and empirical analysts in a range disciplines. A copy of my CV is attached at Appendix A.

I. PROFESSOR MURPHY FAILS TO ESTABLISH THAT UP'S ZERO MILEAGE RATES PROVIDE COMPENSATION FOR UP'S EMPTY REPAIR CHARGE

10. Professor Murphy does not establish that UP's ZMRs provide compensation for its Empty Repair Charge. To the contrary, he explicitly agrees that UP likely has *not* adjusted its line-haul rates downward to compensate for the imposition of the Empty Repair Charge:

If Complainants are saying UP did not expect to change line-haul rates for loaded moves as a result of its adoption of Item 55-C, *this would be consistent with my conclusion that rates for loaded rates would not incorporate compensation for empty repair moves because loaded and empty moves are subject to different demand conditions. I would not*

*expect the rates for loaded moves generally to have included compensation for empty repair moves.*¹³

Complainants *wrongly expected offsetting declines* in Union Pacific's rates for loaded tank car moves once UP began imposing Item 55-C charges for empty repair moves.¹⁴

Therefore, Professor Murphy agrees that UP likely did *not* lower its line-haul rates to compensate for its imposition of the Empty Repair Charge. This implies that the Empty Repair Charge was an unambiguous price increase levied by UP on its customers.

11. Moreover, as explained below, Dr. Murphy consistently ignores the likelihood that UP's Empty Repair Charge reflects the exercise of market power by one of the largest Class I railroads operating in today's concentrated freight rail industry. Instead, he offers uninformative hypotheticals from unconcentrated, competitive markets. Economics shows that firms with significant market power can extract economic surplus from their customers by implementing pricing mechanisms such as UP's Empty Repair Charge, obliging their customers to accept higher prices on one product (here, empty repair movements) in exchange for the ability to purchase some other product (here, loaded movements).

12. Therefore, Professor Murphy (1) agrees that UP likely levied the Empty Repair Charge without compensating discounts to its ZMRs; yet (2) ignores the likelihood that this price increase reflects the exercise of market power in the concentrated freight rail industry, as opposed to an economically efficient outcome in some hypothetical competitive industry.

A. Professor Murphy Ignores That UP Likely Wields Significant Market Power

13. Professor Murphy's economic arguments rely on hypothetical examples from markets far removed from the railroad industry. Specifically, he offers inapposite thought

13. Murphy VS at 23 (emphasis added).

14. Murphy VS at 13 n. 25 (emphasis added).

experiments involving consumer markets for shoes,¹⁵ socks,¹⁶ apartments,¹⁷ and smartphone accessories.¹⁸ But a consumer shopping for socks, shoes, apartments, or earbuds can typically choose from a wide array of competing alternatives, and can typically change from one competitor to the next with only negligible switching costs. In contrast, as detailed below, the freight rail industry is concentrated, and shippers frequently have few close substitutes for transporting their commodities. Professor Murphy’s hypothetical thought experiments involving unconcentrated, competitive markets are therefore uninformative.

1. The Rail Industry Is Concentrated

14. The rail industry has undergone significant consolidation over time, and market structures have become significantly more concentrated as a result. In 1920, there were more than 180 Class I railroads; by 1980, there were 39.¹⁹ Additional mergers ensued after the passage of the Staggers Act, leaving only 16 Class I railroads as of 1987.²⁰ The 1990s saw significant additional consolidation. By early 1995, there were eleven Class I railroads, only four of which served the western U.S.²¹ After two large mergers in 1995 (Burlington Northern’s acquisition of Santa Fe) and 1996 (Union Pacific’s acquisition of Southern Pacific), only two Class I railroads

15. Murphy VS at 3-5; 12; 21.

16. Murphy VS at 4.

17. Murphy VS at 10-11.

18. Murphy VS at 12; 16.

19. Lawrence White, *Staples-Office Depot and UP-SP: An Antitrust Tale of Two Proposed Mergers*, in D. Slottje, ed., *MEASURING MARKET POWER* (North Holland 2002) [hereafter “White”], at 161. There are currently seven Class I railroads in the United States: BNSF Railway, CN, Canadian Pacific, CSX Transportation, Kansas City Southern, Norfolk Southern, and Union Pacific. Class I railroads account for about 70 percent of U.S. freight rail mileage and 90 percent of employment. See <http://archive.freightrailworks.org/network/class-i/>.

20. Transportation Research Board, *Modernizing Freight Rail Regulation*, Special Report 318 (2015) [hereafter “TRB 2015”], at 25, citing Association of American Railroads, *Railroad Facts* (Washington, D.C.; various years); see also 158 (“A wave of mergers followed soon after passage of the Staggers Rail Act. In late 1980, the Chessie System and the Family Lines System combined to form CSX Corporation. Two years later, the Norfolk and Western Railroad and the Southern Railway merged to form Norfolk Southern Corporation (NSC). At about the same time, the Frisco Railroad merged with Burlington Northern (BN), and Union Pacific (UP) Railroad acquired the Missouri Pacific and Western Pacific Railroads.”)

21. John Kwoka and Lawrence White, *Manifest Destiny? The Union Pacific and Southern Pacific Railroad Merger* (1996), in John Kwoka and Lawrence White, eds. *THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY* (Oxford University Press 2004), 66-67.

remained in the West.²² In the East, CSX and Norfolk Southern reached an agreement to jointly purchase Conrail, dividing its route structure and equipment between them. The STB approved the transaction in 1998; this left two large Class I railroads serving the east coast.²³

15. In 2000, the STB implemented a moratorium on merger applications and revised its merger review procedures, due in part to service disruptions experienced in the wake of the UP-SP merger and the CSX-NS-Conrail transaction.²⁴ Merger applications involving Class I railroads ceased after the STB's moratorium was lifted,²⁵ and the industry structure has remained stable at seven Class I railroads: There are two large western carriers (UP and BNSF), and two larger eastern carriers (CXS and NS), along with three smaller carriers (Canadian National Railway, Canadian Pacific, and Kansas City Southern) serving the central U.S.²⁶

16. Economists and antitrust agencies use the Herfindahl–Hirschman Index (HHI) of market concentration to analyze competition.²⁷ The figure below illustrates the increase in nationwide concentration that has resulted from consolidation among Class I railroads in recent decades. As recently as the early 1980s, the industrywide HHI for Class I railroads has been well below 1,000. Subsequent consolidation has substantially decreased the number of firms, while increasing the HHI to between 2,000 and 2,500. According to the *Horizontal Merger Guidelines*,

22. *Id.*

23. White at 171; see also TRB 2015 at 158-159 (“During the 1990s, the four largest Class I railroads took their current shape. CSX and NSF split Conrail’s assets, BN merged with the Santa Fe Railroad, and UP merged with the Southern Pacific Railroad (SP).”)

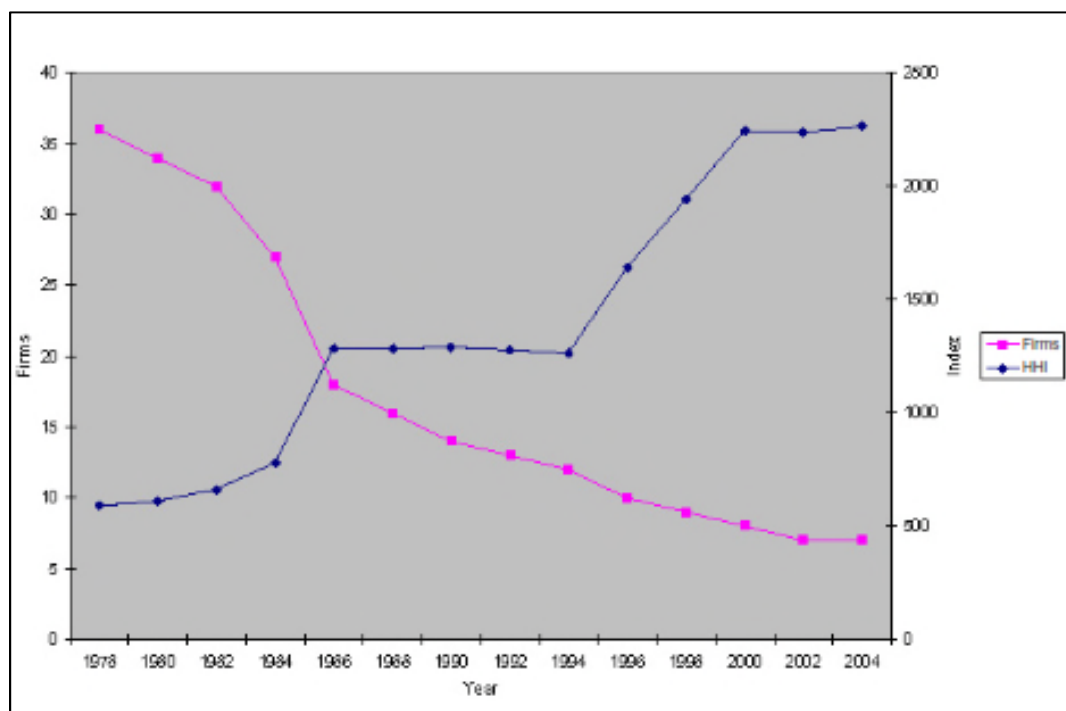
24. TRB 2015 at 36; see also White at 171.

25. TRB 2015 at 36.

26. United States Department of Agriculture, “Railroad Concentration, Market Shares, and Rates” (February 2014); see also <http://archive.freightrailworks.org/network/class-i/>.

27. United States Department of Justice & Federal Trade Commission, Horizontal Merger Guidelines (August 19, 2010) [hereafter “Merger Guidelines”], §5.3.

mergers that result in concentration at these levels “potentially raise significant competitive concerns and often warrant scrutiny.”²⁸



Source: Gerard McCullough, *U.S. Railroad Efficiency: A Brief Economic Overview*, NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE, RESEARCH TO ENHANCE RAIL NETWORK PERFORMANCE (National Academies Press 2007), Figure 7.

17. Moreover, because the statistics above are nationwide, they tend to substantially understate concentration in local markets: The calculations above assume (unrealistically) that Class I railroad networks have a uniform geographic distribution. In reality, different Class I rail networks are concentrated in specific regions of the country. Given that merger activity in the 1990s created two coastal duopolies, many local markets are served by only one or two Class I railroad competitors.²⁹ The HHI in a duopoly market is 5,000 or higher.³⁰ According to the

28. Merger Guidelines §5.3.

29. United States Department of Agriculture, “Railroad Concentration, Market Shares, and Rates” (February 2014); see also Marvin Prater et. al., *Rail Competition Since the Staggers Act* 49(3) Journal of the Transportation Research Forum (2010) [hereafter “Prater 2010”], 111 – 132, at 117; 120-121.

30. In a duopoly market, the HHI is equal to $(1-S)*S*10,000$, where S and $(1-S)$ are the market shares of the two duopolists. In such a market, the lowest possible HHI occurs when the two duopolists divide the market evenly, such that $S = 0.5$. The HHI will increase to the extent that one duopolist enjoys a higher share than the other.

Merger Guidelines, markets with an HHI above 2,500 are classified as “highly concentrated;”³¹ mergers resulting in highly concentrated market structures are “presumed to be likely to enhance market power.”³² In a market served by a monopoly, the HHI is equal to 10,000. According to one study, the share of Crop Reporting Districts (CRDs) served by a Class I railroad monopoly ranged from 13 percent to 25 percent for the period 2003 - 2007, depending on the commodity grouping.³³ In addition, the study found that many CRDs are served by only two Class I railroads.³⁴ There is also evidence that a high percentage of individual stations and individual shipper facilities are served by a single Class I railroad: A 2012 survey of 76 companies operating 677 chemical production facilities in the U.S. found that, on average, 73 percent of the respondents’ facilities with inbound rail transportation were served by a single railroad; in addition, on average, 65 percent of the respondents’ facilities with outbound rail transportation were served by a single railroad.³⁵

18. The trend towards concentrated markets in the West is evident in the antitrust analysis that preceded Union Pacific’s acquisition of Southern Pacific. The Department of Justice, which objected to the merger, found that the transaction would result in 3-to-2 markets (duopolies) and 2-to-1 markets (monopolies) across a range of traffic corridors and commodities.³⁶ The DOJ also found that the proposed remedy for these anticompetitive effects was inadequate, and that any merger-related efficiencies were outweighed by the likely anticompetitive effects of the transaction:

31. *Merger Guidelines* §5.3.

32. *Merger Guidelines* §5.3.

33. Prater (2010), Table 1.

34. Prater (2010), Figure 6 (showing originating shipments with an inverse HHI of 1.01 to 2.00, indicating that the CRD is served by only two railroads).

35. Veris Consulting, *ACC Rail Issues Survey* (2012), at 1.

36. *Union Pacific Corp. – Control & Merger – Southern Pacific Corp.*, STB Finance Docket No. 32760 (Decided August 6, 1996), at 89.

DOJ contends that the merger would have 3-to-2 or 2-to-1 impacts in hundreds of traffic corridors throughout the West, involving such commodities as wood products, intermodal freight, agricultural products, iron and steel, and plastics. The BNSF agreement, DOJ notes, will not remedy the loss of competition in any 3-to-2 market, and...BNSF is unlikely to be an effective competitor even in the 2-to-1 corridors. The BNSF agreement, DOJ insists, is simply an inadequate remedy, and its flaws cannot be corrected by imposing oversight conditions or monitoring. And the merger-related efficiencies claimed by the applicants...are vastly overstated and, in any event, are not enough to outweigh the probable anticompetitive effects of the merger.³⁷

2. Professor Murphy's Analogies to Competitive Consumer Markets Are Uninformative

19. Professor Murphy's economic arguments rely heavily on hypothetical thought experiments from competitive, unconcentrated industries. In relying on such hypotheticals, Professor Murphy assumes a competitive environment and assumes away the likelihood that UP possesses significant market power. For example, Professor Murphy opines that

[L]oaded moves and empty repair moves are more like shoes and socks than pairs of shoes. Offering and pricing empty repair moves separately from loaded moves is likely more efficient than bundle pricing, or essentially providing empty repair moves at no explicit price...[I]t creates incentives for shippers to make more efficient use of a railroad's infrastructure because they will take into account explicitly how their decisions about empty repair moves impose costs on railroads.³⁸

According to Professor Murphy, the economic logic of UP's Empty Repair Charge is analogous to the pricing of socks and shoes: Socks and shoes are "not sold at a bundle at a single price, even though consumers wear socks with most types of shoes...Consumers purchasing the same shoes may want to buy socks from other suppliers, and will purchase different quantities and styles of socks."³⁹ This economic reasoning makes sense in competitive markets; a consumer would generally be expected to have access to a range of alternative suppliers when purchasing both shoes and socks. But the economic analogy breaks down when applied to UP's Empty Repair charge: As explained above, shippers frequently have extremely limited competitive

37. *Id.*

38. Murphy VS at 4.

39. Murphy VS at 4.

options. Moreover, shippers cannot use their tank cars for loaded movements unless they send them to repair facilities for maintenance and cleaning.

20. Professor Murphy's example might have been more relevant if he had assumed (1) that consumers face a monopoly (or a concentrated oligopoly) when purchasing socks and shoes; and (2) consumers could not purchase shoes without also purchasing socks. The Empty Repair Charge would then be analogous to an abrupt increase in the price of socks. Given the scarcity of competitive sock retailers (which might otherwise undercut the price increase) and given the necessity of purchasing shoes and socks together (preventing customers from escaping the price hike by purchasing shoes without socks), many consumers would have no choice but to pay the elevated price for socks. The net result would be a substantial increase in the total price paid by consumers for socks and shoes.

21. Professor Murphy also attempts to draw an economic analogy to the apartment rental market, focusing on the landlord's decision of whether to charge tenants separately for utilities:

Consider, for example, a landlord deciding whether or not to provide heat to his apartment tenants without charging each tenant separately for the heat that tenant consumes each month. In a building with more than a couple of tenants and where the rent includes an allocation to each tenant of the building's heating costs (based, say, on apartment square footage), no tenant will perceive her own use as affecting what she pays. This is because no individual apartment will contribute meaningfully to the total cost of heat for the building, and the rent will be unaffected by any variation in costs to heat one individual's apartment. In this scenario, no individual tenant's economization by turning down the thermostat will be rewarded.

22. As before, Professor Murphy ignores that the apartment rental market is likely significantly more competitive than the freight rail market: Prospective renters are unlikely to face a monopoly landlord, or a concentrated oligopoly of landlords. In light of this, Professor Murphy's analogy to the apartment rental market indicates that, under competitive conditions, competitive pressure would have obliged UP to implement offsetting declines in its rates for

loaded tank car moves. As Professor Murphy concedes, if landlords charged tenants separately for heat, competition would oblige them to decrease apartment rents:

A landlord choosing only to offer leases that include heat, and to charge rents that include the average per-apartment heating costs, may find that there is little or no demand for his apartments because most or even all renters prefer to pay their individual heating costs and so choose other apartments.⁴⁰

23. Therefore, Professor Murphy acknowledges that apartments that charge separately for heating would not include “the average per-apartment heating costs” in the base rental rates. Put differently, tenants that separately “pay their individual heating costs” would enjoy offsetting declines in the base rent—and could “choose other apartments” to take advantage of the lower base rent. But whereas competition among landlords can be counted on to ensure that a separate heating charge is indeed offset by a discount in the base rent, the same cannot be said of UP’s Empty Repair Charge. As before, Professor Murphy’s economic analogy would have been more relevant if he had assumed a market structure more comparable to the one that actually exists in the freight rail industry: A monopolistic (or oligopolistic) landlord could introduce a new and separate heating charge without an offsetting discount to the base rent, just as a railroad with market power could introduce a separate charge for empty repair movements for tank cars without offsetting declines in the rates for loaded tank car movements.

24. Professor Murphy also attempts to draw an economic analogy to the market for smartphone accessories, focusing on headphones:

[W]hen customers use two distinct products, each one is independently valuable, and there is no fixed ratio of use between the two – say, an iPhone and headphones – inefficiencies will arise from charging for one product but treating the other as free (all buyers of an iPhone may want headphones, but some will replace headphones more than others before purchasing a new phone). If the user will face no marginal cost from consuming the second product, she will tend to overconsume that product (for example, she would be less inclined to care for her headphones if she always could get free

40. Murphy VS at 11.

replacements). The ability to price separately allows the parties a mechanism to reduce or eliminate such distortions.⁴¹

25. As before, Professor Murphy ignores that the market for smartphone accessories is likely significantly more competitive than the freight rail market: Consumers purchasing headphones can select among a wide range of alternative suppliers, many of which manufacture low-cost headphones compatible with the iPhone (as well as other smartphones). As before, Professor Murphy's economic analogy would have been more informative if he had assumed a market structure more comparable to that of the freight rail industry. For example, if a monopolistic smartphone supplier decided to make its handsets incompatible with headphones sold by its competitors, it could likely raise the price of headphones substantially above competitive levels. Facing few alternatives, consumers would likely have to accept the price increase.

B. Professor Murphy Ignores That Firms with Significant Market Power Can Extract Economic Surplus from Their Customers Through Pricing Structures Such as UP's Empty Repair Charge

26. Economists recognize that firms with market power can extract economic surplus from their customers by requiring that they purchase one product (the "tied product") at a supracompetitive price as a precondition for purchasing another product (the "tying product").⁴² Although customers incur economic harm when they pay inflated prices on the tied product, they are obliged to do so because the alternative would be to lose access to the tying product, which would be even more harmful. These pricing mechanisms can allow firms with market power to extract more surplus from their customers than they could otherwise.

41. Murphy VS at 12.

42. See, e.g., Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory* 123 HARVARD LAW REVIEW 397 – 481 (2009); see also Patrick Greenlee, David Reitman, & David Sibley, *An Antitrust Analysis of Bundled Loyalty Discounts*, 26 INTERNATIONAL JOURNAL OF INDUSTRIAL ORGANIZATION 1132 – 1152 (2008); Kevin Caves & Hal Singer, *Assessing Bundled and Share-Based Loyalty Rebates: Application to the Pharmaceutical Industry* 8(4) JOURNAL OF COMPETITION LAW & ECONOMICS 889-913 (2012).

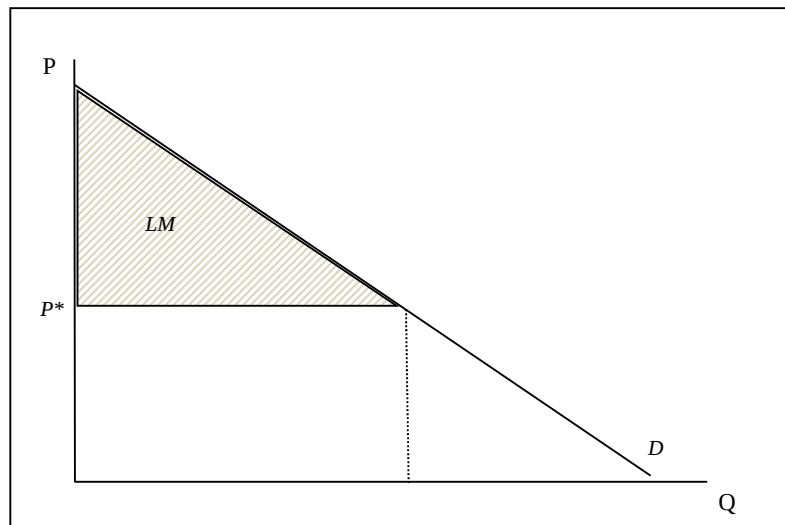
27. UP's Empty Repair Charge fits within this economic framework. Empty repair movements can be thought of as the tied product, while loaded movements are the tying product: Because a shipper cannot make loaded movements without also making empty repair movements, a shipper that makes loaded movements on UP's network will frequently have no choice but to make the corresponding empty repair movements on UP's network as well.⁴³ Such a shipper would not be able to avoid paying UP's Empty Repair Charge without cancelling all of (or a large portion of) its movements on UP's network, and moving its traffic via another railroad (or intermodal alternative). The economic harm to the shipper from such a cancellation is likely prohibitive, implying that the shipper would rationally submit to the price hike imposed by the Empty Repair Charge.

28. Viewed through this economic lens, the Empty Repair Charge can be seen as a mechanism for UP to extract more economic surplus from shippers than it could simply by increasing the rate for loaded movements. This pricing strategy would not necessarily require that UP lower its rate for loaded movements at all, particularly when the economic harm to shippers from cancelling loaded movements on UP's network is sufficiently large, compared with the economic harm from the Empty Repair Charge. As long as this is the case, UP can charge a profit-maximizing rate for its Empty Repair Charge, without having to reduce its rates for loaded movements below the profit-maximizing level.

29. To see this, let *LM* represent the economic benefit (surplus) that a shipper derives from making loaded movements on UP's network, when UP charges the profit-maximizing rate for loaded movements. As illustrated below, a railroad with market power leaves some economic

43. *See Gen. Amer. Transp. Corp. v. Ind. Harbor Belt R.R. Co.*, 3 I.C.C.2d 599, 609 (1987) ("Operationally, switching for repairs clearly is distinct from line-haul service, but it is also true that repair movements are necessary for the movement of freight in line-haul service. Line-haul transportation cannot be performed without the use of rail cars, and rail cars cannot be operated over their useful lifespans without periodic maintenance.")

surplus to its shipper customer, even when charging the profit-maximizing monopoly price, P^* , provided that the railroad faces a downward-sloping shipper demand curve:



30. Let EM represent the economic benefit that the shipper would derive from *avoiding* UP's Empty Repair Charge. Even assuming (very conservatively) that the shipper could make all of its empty repair moves on another railroad at no cost, EM cannot exceed the total Empty Repair Charge revenue that UP earns from the shipper. Thus, if the shipper were to cancel all of (or a large portion of) its loaded movements on UP's network in response to the Empty Repair Charge, it would incur economic harm of LM , and would enjoy economic benefits of (at most) EM . Therefore, shippers will rationally accept the Empty Repair Charge whenever:

$$LM > EM$$

Put differently, UP will have no incentive to lower its rates on loaded movements to compensate for its Empty Repair Charge whenever shippers' economic surplus from loaded movements exceeds the total Empty Repair Charge revenues paid by the shipper to UP. That UP's rates on loaded movements have not declined (and that its own economist opines that he would not have expected such a decline) implies that this condition is likely satisfied. Moreover, that UP's

revenue from loaded movements {{ [REDACTED] }}. ⁴⁴

C. UP Faces Clear Economic Incentives Not to Embed Compensation for Its Empty Repair Charge into Its Zero Mileage Rates, As Professor Murphy and Mr. Hirst Recognize

31. As noted above, Professor Murphy recognizes that UP likely did not embed compensation for its Empty Repair Charge into its ZMRs (stating explicitly that “[c]omplainants *wrongly expected offsetting declines* in Union Pacific’s rates for loaded tank car moves once UP began imposing Item 55-C charges for empty repair moves.”⁴⁵) In addition, as explained below, Mr. Hirst states that UP structures its rates to ensure that it does not incorporate such offsetting discounts, relative to its desired price for loaded movements. As a profit-maximizing firm with market power, UP faces clear incentives to execute a profitable price increase *without* offsetting it elsewhere. On the other hand, if shippers had access to more competitive alternatives, in order to prevent shippers from defecting in response to the Empty Repair Charge, UP might have been obliged to substantially discount its rates for loaded movements, to reduce the Empty Repair Charge, or both. (This explains why, in competitive rental markets, landlords that charge separately for heat are obliged to lower the base rent, as Professor Murphy concedes).⁴⁶ Here, there is no evidence of any decline in rates for loaded movements, let alone a decline sufficient to offset the effects of the Empty Repair Charge.

44. Verified Statement of Michael R. Baranowski at 2, Table 1. Showing that {{ [REDACTED] }}

45. Murphy VS at 13 n. 25 (emphasis added).

46. See Part I.A.2 above.

II. MR. HIRST FAILS TO ESTABLISH THAT UP'S ZERO MILEAGE RATES PROVIDE COMPENSATION FOR UP'S EMPTY REPAIR CHARGE

32. Mr. Hirst describes the process that UP uses to calculate ZMRs and full-mileage rates. According to Mr. Hirst, Union Pacific sets full-mileage rates by adding expected allowance payments to market-based zero-mileage rates:

In both cases, we start the same way – by assessing the market rate for the requested rail transportation – but developing full-mileage rates requires us to undertake an additional analysis: we must estimate our likely mileage allowance payments, so we can build them into the rate and try to ensure we are not ultimately charging (or receiving) more (or less) than the market rate for transportation.⁴⁷

33. To illustrate, Mr. Hirst offers a hypothetical example in which UP seeks to charge a price of \$1,000 per car. According to Mr. Hirst, UP would structure its rates such that the net price per car would be \$1,000, regardless of whether the customer requested a ZMR or a full-mileage rate:⁴⁸

MR. HIRST'S ILLUSTRATIVE CALCULATION

Customer payment to UP under full-mileage rate:	\$1,200
Less UP mileage allowance payment to Customer:	(\$ 200)
Customer net payment to UP:	\$1,000

34. Mr. Hirst's calculation above illustrates the logic of why UP lacks economic incentives to embed compensation for its Empty Repair Charge into its ZMRs. Mr. Hirst confirms (consistent with Professor Murphy's opinions, and my analysis in Part I.B above) that UP explicitly structures its ZMRs so as to ensure that UP achieves its profit-maximizing price, without providing any real discounts relative to that price. This implies that UP charges shippers the same profit-maximizing price for loaded movements, regardless of the revenue it earns from

47. Hirst VS at 2.

48. Hirst VS at 2.

the Empty Repair Charge. It therefore does not make economic sense to claim that shippers receive compensation for the Empty Repair Charge through UP's ZMRs.⁴⁹

III. ASSESSMENT OF PROFESSOR MURPHY'S EFFICIENCY RATIONALES FOR UP'S EMPTY REPAIR CHARGE

35. Professor Murphy claims that the Empty Repair Charge will tend to reduce inefficiencies by incentivizing shippers to take into account the cost of empty repair movements.⁵⁰ As explained below, Professor Murphy ignores the fact that the Empty Repair Charge as implemented by UP is *not* structured to incentivize the efficiencies he claims for broad ranges of empty repair movements. Moreover, Professor Murphy's efficiency rationales assume that the Empty Repair Charge is the result of competitive forces, and ignore the likelihood that it reflects the exercise of market power.

A. Professor Murphy Ignores That the Empty Repair Charge Is Not Structured To Incentivize The Efficiencies He Claims For Broad Ranges of Movements

36. Professor Murphy asserts that "shippers appear to fail to make efficient choices when selecting where to send tank cars for repairs or cleaning,"⁵¹ and that shippers "will tend to overconsume the transportation services needed to reach more distant, alternative shops if there is no explicit cost for transportation."⁵² These claimed inefficiencies involve instances in which empty repair movements are longer than they have to be:

(1) tank cars returned to the origin before being moved to a shop; (2) tank cars moved to a distant shop rather than a shop that is closer to the origin of the next loaded move; (3) tank cars being moved empty twice – once for cleaning and a second time for repair

49. Mr. Hirst's calculation also illustrates why the "differential" between UP's ZMRs and its (hypothetical) full-mileage rates is not economically meaningful. In Mr. Hirst's calculation, there is no differential—on net, all shippers simply pay exactly the same profit-maximizing price of \$1,000. In contrast, the rate differential contemplated by *LOSAC* has economic content: If shippers are offered the choice between (1) supplying their own tank cars; or (2) using railroad-supplied tank cars, a shipper would rationally select option (1) only if it provides real compensation in the form of an economically significant discount.

50. Murphy VS at 11.

51. Murphy VS at 11-12.

52. Murphy VS at 13.

and/or inspection – without an effort to combine the moves into a single move; and (4) using fixed rather than mobile repair facilities.⁵³

37. Professor Murphy concedes that, even without the Empty Repair Charge, shippers “might also tend to minimize transportation costs incurred by UP.”⁵⁴ Nevertheless, Professor Murphy opines that the Empty Repair Charge will tend to reduce these inefficiencies by incentivizing shippers to choose shorter empty repair movements than they would otherwise.⁵⁵ But even a cursory review of the way in which the Empty Repair Charge is structured indicates a lack of the “price signals”⁵⁶ that Professor Murphy claims would engender greater efficiency. For example, the Empty Repair Charge introduced in 2015 levies a *flat fee* of \$1,317 per car for movements from 1 – 250 miles. A shipper that undertakes an empty repair movement of one mile therefore incurs *exactly the same* Empty Repair Charge as a shipper that undertakes an empty repair movement of 250 miles. The Empty Repair charge therefore provides no incentive for shippers to economize on empty repair movements of 250 miles or less. Shippers that select shorter empty repair movements of 250 miles or less are not rewarded with a lower Empty Repair Charge.

38. Similarly, the 2015 Empty Repair Charge levies a flat fee of \$1,477 per car for empty repair movements of 251 – 500 miles. A shipper that undertakes an empty repair movement of 251 miles therefore incurs exactly the same Empty Repair Charge as a shipper that undertakes an empty repair movement of 500 miles. The Empty Repair charge therefore provides no incentive for shippers to economize on empty repair movements from 251 – 500 miles. As

53. Murphy VS at 12.

54. Murphy VS at 13.

55. Murphy VS at 15-16.

56 Murphy VS at 4.

before, shippers that select shorter empty repair movements from 251 – 500 miles are not rewarded with a lower Empty Repair Charge.

39. Moreover, the two Empty Repair Charge fees for movements of 1 – 250 miles and 251 – 500 miles are not significantly different, further dampening incentives to economize on the distance of empty repair movements. For example, an empty repair movement of ten miles incurs an Empty Repair Charge of \$1,317 per car, while an empty repair movement of 500 miles incurs an Empty Repair Charge of \$1,477 per car. The 10 mile movement costs only about 11 percent less than the 500 mile movement, despite being only 1/50th of the distance.

40. Therefore, for broad ranges of empty repair movements, the Empty Repair Charge is simply not structured to engender the type of efficiencies claimed by Professor Murphy. However, the structure of Empty Repair Charge makes more economic sense when viewed through the lens of market power and surplus extraction reviewed in Part I.B above. Specifically, if UP's profit-maximizing price for an empty repair movement of 500 miles or less were in the range of \$1,300 - \$1,500 for 2015, then this would imply that the Empty Repair Charge was structured to ensure that all shippers that make empty repair movements of *any* distance pay the profit-maximizing price, and cannot avoid it by selecting shorter empty repair movements. Thus, for broad ranges of empty repair movements, the structure of the Empty Repair Charge suggests that a profit-maximizing entity faces no strong incentive to offer a substantially lower price to shippers that make shorter empty repair movements, regardless of any efficiencies this might engender.

B. Professor Murphy's Efficiency Rationales Ignore the Likelihood that the Empty Repair Charge Reflects the Exercise of Market Power

41. Like the rest of his economic analysis, Professor Murphy's claimed efficiency justifications for the Empty Repair Charge assume that it is the result of competitive market

forces.⁵⁷ For Professor Murphy, the Empty Repair Charge requires shippers to “incur[] costs to monitor and quantify the use of other resources,”⁵⁸ which is “precisely the type of efficient actions that competitive markets induce.”⁵⁹ I agree with Professor Murphy that imposing the Empty Repair Charge will likely result in at least some reduction in empty repair movements on UP’s network. However, this does not necessarily imply that economic efficiency will be enhanced, as Professor Murphy assumes. The economically efficient Empty Repair Charge would reflect the marginal cost to UP of performing an empty repair movement. This would ensure that empty repair movements would occur when and only when the economic benefit to the shipper of the empty repair movement is greater than or equal to the cost to UP of performing the movement.

42. However, Professor Murphy does not claim that the Empty Repair Charge reflects marginal cost pricing, nor does he provide any evidence to this effect. As explained above, the Empty Repair Charge likely reflects the exercise of market power. This implies that UP would maximize profits by selecting an Empty Repair charge that exceeds the marginal cost to UP of performing an empty repair. All else equal, the greater is UP’s market power, the more the Empty Repair Charge will exceed marginal cost. And the more the Empty Repair Charge exceeds marginal cost, the greater will be the economic inefficiency resulting from the Empty Repair Charge. This implies that there is no guarantee that the imposition of the Empty Repair charge enhances economic efficiency.

43. To see this, let *DWL* (shown in the larger shaded triangle below) represent the economic inefficiency (deadweight loss) resulting from setting the price (*P*) of an empty repair

57. Murphy VS at 15, n. 26.

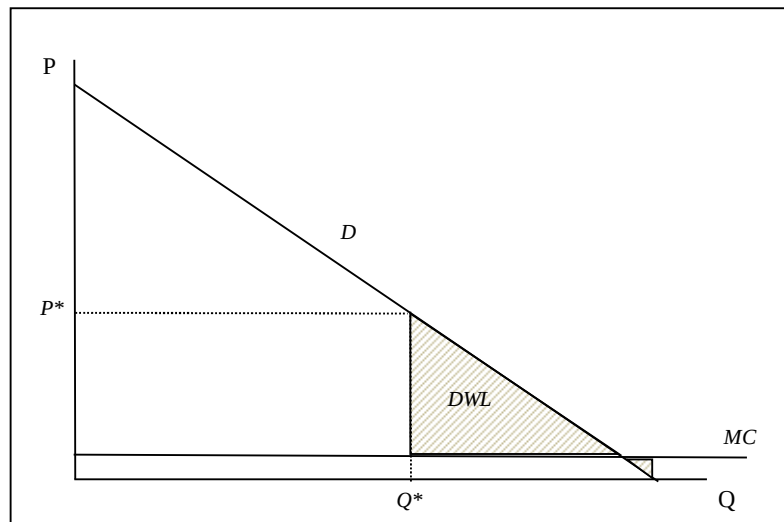
58. *Id.*

59. *Id.*

movement above marginal cost (MC). This represents the economic harm that results when empty repair movements do not occur on UP's network, despite the fact that the cost to UP of performing the movement is less than the benefit to the shipper.

44. The smaller shaded triangle represents the economic efficiency that Professor Murphy emphasizes would prevail in the absence of the Empty Repair Charge. This represents the economic harm that results when empty repair movements do occur on UP's network, despite the fact that the cost to UP of performing the movement is greater than the benefit to the shipper.

45. As illustrated below, if the Empty Repair Charge is sufficiently above marginal cost, it can easily be the case that the economic inefficiency caused by the Empty Repair Charge (the large shaded triangle) exceeds any economic inefficiency eliminated by the Empty Repair Charge (the small shaded triangle).



CONCLUSIONS

46. For the foregoing reasons, I conclude that Professor Murphy and Mr. Hirst fail to demonstrate that UP's ZMRs provide compensation for its Empty Repair Charge. In addition, I conclude that Professor Murphy's efficiency-based rationales for the Empty Repair Charge are deficient in light of the way in which the Empty Repair Charge is structured, and in light of the likelihood that the Empty Repair Charge likely reflects the exercise of UP's market power as opposed to marginal cost pricing.

♦ ♦ ♦

APPENDIX: CURRICULUM VITAE OF KEVIN W. CAVES



Curriculum Vitae of Kevin W. Caves

Econ One Research
Suite 510 805 15th St.,
N.W. Washington, D.C.
20005
Phone:
202.312.3066
kcaves@econone.
com

Education

- Ph.D. Economics, University of California at Los Angeles, December 2005
Fields of Study: Industrial Organization, Applied
Econometrics
- M.A. Economics, University of California at Los Angeles, May 2002
- B.A. *Magna cum laude*, Departmental Honors in Economics, Haverford
College, May 1998

Current Position

Senior Economist, Econ One Research, September 2018 to Present

Employment History

- Vice President, Economists Incorporated, November 2016 to August 2018
- Senior Economist, Economists Incorporated, January 2014 to November 2016
- Director, Navigant Economics, March 2011 to December 2013
- Associate Director, Navigant Economics, February 2010 to March 2011
- Vice President, Empiris LLC, September 2008 to February 2010

Senior Economist, Criterion Economics LLC, October 2006 to September 2008

Senior Consultant, Deloitte & Touche LLP, September 2005 to October 2006

Teaching Fellow, Department of Economics, UCLA, January 2002 to June 2004

Assistant Economist, Federal Reserve Bank of New York, August 1998 to June 2000

Publications and Research Papers

[*Applied Econometrics: When Can an Omitted Variable Invalidate a Regression?*](#), ANTITRUST SOURCE (December 2017), co-authored with Hal J. Singer.

[*Identification Properties of Recent Production Function Estimators*](#), 83(6) ECONOMETRICA 2411-2451 (November 2015), co-authored with Daniel Akerberg and Garth Frazer. (Econometric techniques subsequently [integrated into STATA](#)).

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STB Ex Parte No. 711 (Sub No. 1), Reciprocal Switching, [*Reply Verified Statement of Kevin W. Caves, PhD On Behalf of The Shipper Coalition for Railroad Competition*](#), Surface Transportation Board (January 9, 2017).

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In the Matter of 2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, (MB Docket Nos. 14-50, 09-182), Expert Report of Kevin W. Caves and Hal J. Singer: [*"An Economic Analysis of the FCC's Eight Voices Rule,"*](#) Federal Communications Commission (July 2016).

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[*Mobile Wireless Performance in the EU & the US*](#) (prepared with support from GSMA, co-authored with Erik Bohlin and Jeffrey A. Eisenach, May 2013).

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The Impact of Liberalizing Price Controls on Local Telephone Service: An Empirical Analysis (prepared with support from Verizon Communications, co-authored with Jeffrey A. Eisenach, February 2012).

Bundles in the Pharmaceutical Industry: A Case Study of Pediatric Vaccines (prepared with support from Novartis, co-authored with Hal J. Singer, July 2011).

Evaluating the Cost-Effectiveness of RUS Broadband Subsidies: Three Case Studies (prepared with support from The National Cable & Telecommunications Association, co-authored with Jeffrey A. Eisenach, April 2011).

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Retransmission Consent and Economic Welfare: A Reply to Compass-Lexecon (prepared with support from The National Association of Broadcasters, co-authored with Jeffrey A. Eisenach, April 2010).

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The Benefits and Costs of I-File (prepared with support from The Computer & Communications Industry Association, co-authored with Jeffrey A. Eisenach & Robert E. Litan, April 2008).

The Effects of Providing Universal Service Subsidies to Wireless Carriers (prepared with support from Verizon Communications, co-authored with Jeffrey A. Eisenach, June 2007).

Speaking Engagements

[*Competition and Monopsony In Labor Markets: Theory, Evidence, and Antitrust Implications*](#), New York State Bar Association, Antitrust Law Section, New York, NY, (April 23, 2014).

Econometric Tests of Common Impact, Covington & Burling LLP, Washington, DC., (May 23, 2013).

[*Vertical Integration in Cable Networks: A Study of Regional Sports Networks*](#), Federal Communications Commission (May 21, 2013).

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Regression Methods: Theory and Applications, Antitrust Practice Group, Cohen Milstein Sellers & Toll PLLC, Washington, DC., (June 4, 2012).

Using Regression in Antitrust Cases, University of Pennsylvania Law School, Philadelphia, PA., (April 12, 2012).

[*Interview with IT Business Edge on Rural Utilities Service Broadband Subsidies*](#) (May 17, 2011).

Reviewer

International Journal of the Economics of Business

Journal of Transportation Law, Logistics and Policy
(Editorial Advisory Board)

Research in Transportation Economics

Review of Network Economics

Honors and Awards

Howard Fellowship for Excellency in Teaching, University of California at Los Angeles, Spring 2005.

Graduate Fellowship, University of California at Los Angeles, 2000 – 2004.

Departmental Honors in Economics, Haverford College, May 1998.
Phi Beta Kappa Society, elected May 1998.

VERIFICATION

I, Kevin W. Caves, verify under penalty of perjury that the foregoing is true and correct.

Further, I certify that I am qualified and authorized to file this statement.

Executed on May 30, 2019

Kevin Caves

Kevin W. Caves

Rebuttal Verified Statement
of
Thomas D. Crowley

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

Docket No. NOR 42144

NORTH AMERICA FREIGHT CAR ASSOCIATION; AMERICAN FUEL &
PETROCHEMICALS MANUFACTURERS; THE CHLORINE INSTITUTE; THE
FERTILIZER INSTITUTE; AMERICAN CHEMISTRY COUNCIL; ETHANOL PRODUCTS,
LLC D/B/A POET ETHANOL PRODUCTS; POET NUTRITION, INC.; AND CARGILL
INCORPORATED v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42150

VALERO MARKETING AND SUPPLY COMPANY
AND VALERO RAIL PARTNERS, LLC v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42152

TESORO REFINING & MARKETING COMPANY LLC;
TESORO GREAT PLAINS GATHERING & MARKETING, LLC;
AND DAKOTA PRAIRIE REFINING, LLC v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42153

ARKEMA INC. v. UNION PACIFIC RAILROAD COMPANY

REBUTTAL VERIFIED STATEMENT OF THOMAS D. CROWLEY

President

L. E. PEABODY & ASSOCIATES, INC.

On Behalf Of

Complainants

Due Date: May 31, 2019

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TABLE OF EXHIBITS

Exhibit No.	Exhibit Description
(1)	(2)
2 ¹	United States Class III Railroads That Participated in Movements to Tank Car Repair Facilities - 2015 and 2016

¹ Exhibit No. 1 was included in my Opening Verified Statement, filed on February 22, 2019.

I. INTRODUCTION²

My name is Thomas D. Crowley and I am an economist and President of the economic consulting firm of L. E. Peabody & Associates, Inc., a Firm specializing in solving economic, financial, transportation, marketing, accounting, and fuel supply problems. I am the same Thomas D. Crowley that presented an Opening Verified Statement (“OVS”) as part of this proceeding on February 22, 2019. A copy of my credentials was included as Exhibit No. 1 to my OVS.

I have been asked by the Complainants³ in these consolidated proceedings to address certain portions of Union Pacific Railroad Company’s (“UP”) Reply Evidence filed on April 26, 2019. Specifically, I was asked to address the Verified Statement filed by Mr. Michael R. Baranowski (“Baranowski Reply VS”). Mr. Baranowski asserts that UP handles a disproportionate share of empty tank car movements to and from repair facilities and often does not participate in revenue-generating movements for those tank cars.⁴ Mr. Baranowski also asserts that movements under Item 55-C of UP Tariff 6004-C (“55-C”) vary considerably among Individual Complainants.⁵

I reviewed Mr. Baranowski’s VS and his analyses and conclude that his assertions regarding UP’s handling of a disproportionate share of empty tank car moves to repair facilities are erroneous. In actuality, when Mr. Baranowski’s analyses are corrected to take into consideration the relative size of each Class I railroad and to use the proper measuring metric, I

² Throughout this document, text in double braces (i.e., {{...}}) is HIGHLY CONFIDENTIAL pursuant to the amended protective order issued in the consolidated proceedings on October 20, 2017.

³ The Complainants in Docket NOR 42144 are the North America Freight Car Association; the American Fuel & Petrochemicals Manufacturers; The Chlorine Institute, Inc.; The Fertilizer Institute; the American Chemistry Council; Ethanol Products, LLC d/b/a POET Ethanol Products; POET Nutrition, Inc.; and Cargill Incorporated. The Complainants in Docket NOR 42150 are Valero Marketing and Supply Company and Valero Rail Partners, LLC. The Complainants in Docket NOR 42152 are Tesoro Refining & Marketing Company, LLC; Tesoro Great Plains Gathering & Marketing LLC; and Dakota Prairie Refining, LLC. The Complainant in Docket NOR 42153 is Arkema, Inc.

⁴ See, Baranowski Reply VS at page 1.

⁵ *Id.*

found that UP's handling of empty tank car movements to repair facilities were well in line with those of other Class I railroads.

I address Mr. Baranowski's assertions below under the following topical headings:

- II. Background of Mr. Baranowski's Analyses
- III. UP Does Not Bear a Disproportionate Share of Repair Shop Movements
- IV. Empty Tank Car Shopping Practices of Individual Complainants

II. BACKGROUND OF MR. BARANOWSKI'S ANALYSES

Mr. Baranowski stated that he relied upon three (3) primary sources produced in discovery for his analyses. First, he relied upon UP produced waybill-related traffic and revenue data that provides information on all tank car movements, loaded and empty, on UP's system between 2010 and 2017.⁶ Mr. Baranowski used this UP waybill data primarily to develop his analyses of 55-C movements.⁷ Second, Mr. Baranowski used certain railroad event data maintained by Railinc for the tank cars owned by GATX Corporation, Union Tank Car Company, Trinity Industries and American Railcar Industries.⁸ Mr. Baranowski used the Railinc data to identify loaded and empty tank car movements on UP, the other six (6) Class I railroads, i.e., BNSF Railway Company ("BNSF"), Canadian Pacific Railway ("CP"), Kansas City Southern Railway ("KCS"), CSX Transportation ("CSXT"), Norfolk Southern Railway ("NS") and Canadian National Railway ("CN"), and on Class II and Class III railroads. He also used the Railinc data to estimate the loaded and empty miles each tank car travels and to identify where tank cars were interchanged to repair facilities located on the United States rail network. Third, Mr. Baranowski used data obtained from Arkema, Cargill, Tesoro, Valero, POET Ethanol and POET Nutrition ("Individual Complainants") related to each company's tank car fleet. Mr. Baranowski used this data to identify the Individual Complainants' 55-C and other tank car movements.

⁶ See, Baranowski Reply VS at page 2.

⁷ The number of 55-C movements and revenues that Mr. Baranowski includes in his Reply VS vary slightly from the number of 55-C movements and revenues included in my OVS and associated workpapers. This difference stems from Mr. Baranowski's data processing methodology which removed some records from his database. The impact of the difference is less than 0.1 percent and has no direct impact on the result of my OVS analyses or Mr. Baranowski's Reply VS analyses.

⁸ See, Baranowski Reply VS at page 2.

The majority of Mr. Baranowski's analyses rely upon the Railinc data provided in discovery.⁹ While the Railinc data provides information on where and when a tank car moved, it does not calculate the tank car miles along the route. Mr. Baranowski instead estimated the tank car miles based on the car event information included in the Railinc event data and using another data source. Mr. Baranowski developed his mileage estimates by extracting Standard Point Locator Codes ("SPLC") from the Railinc event data and calculated the distance between each arrival and/or departure SPCL shown along a tank car's route of movement using Trimble MAPS PC*Miler/Rail ("PC*Miler") software. He then inserted the mileage estimates into his database to develop his analyses. As I discuss further below, Mr. Baranowski's mileage estimates and shop location information are riddled with errors that result in overstatements in movement miles and railroads serving tank car repair facilities and bring into doubt any conclusions on which his mileage estimates are based.

Mr. Baranowski includes a summary of the detail provided in the Railinc data for a UP tank car movement to a repair facility at Hearne, TX in Table 3 of his VS.¹⁰ A review of the data underlying Mr. Baranowski's example and the example itself shows why Mr. Baranowski's overall conclusion that UP bears a disproportionate burden is overstated. I explain the reasoning for this conclusion below.

**A. MR. BARANOWSKI'S EVENT
MILES ARE OVERSTATED**

As indicated above, Mr. Baranowski relied upon Railinc event data to estimate tank car movement miles. Railinc is a wholly-owned, for-profit subsidiary of the Association of American Railroads ("AAR") and is the primary repository of rail information in the United

⁹ See, Baranowski Reply VS at page 4 "[a]s such, I relied on Railinc data for much of my analysis of UP's relative share of empty repair moves."

¹⁰ *Id.*

States.¹¹ One of the primary data types Railinc provides to its customers is rail asset tracking and tracing information. To gather information for railcars moving across several railroads, Railinc receives railcar information from railroads as the railcars move across the North American rail network.

The TeleRail Automated Information Network (TRAIN II) System is the application through which the interchange and movement of railroad rolling stock within the United States, Canada, and Mexico is reported to Railinc and analyzed for a variety of industry uses. ... The TRAIN II System provides physical location information of rail equipment based on event, waybill, trip plan, and interchange data reported by North American railroads. This reporting enhances railroad planning and operational requirements, and equipment inventory awareness for private equipment owners, and is an informational tool for railroad customers.¹²

Based on the statement above, the railcar movement and event data received by Railinc is only as accurate as that provided by the supplying railroads.

Accurate railcar information is a key for making the Railinc event data a useful and reliable tool to railroads and shippers. Inaccurate information can lead to faulty decisions and conclusions. This point was highlighted by Railinc leadership at a recent industry conference. Mr. Jim Pinson, Railinc's Manager of Car Audit Accounting, demonstrated during his presentation at a 2013 Association of Car Accounting and Car Service Officers ("ACACSO") conference that missing or inaccurately sequenced data can lead to inaccurate car location information. More importantly, Mr. Pinson stated that inaccurate information can lead to overstated mileages by calculating miles between incorrect locations.¹³

I reviewed the Railinc data underlying the tank car movement example Mr. Baranowski included in Table 3 of his VS and found numerous instances where the Railinc data overstate the

¹¹ See, <https://www.railinc.com/rportal/company-overview>.

¹² See, "Guide for Railroads," January 2018 at page 31. A copy of the guide may be found on Railinc's website at <https://www.railinc.com/rportal/guide-for-railroads>.

¹³ See, "Event Reporting," Jim Pinson, ASCACSO, November 14, 2013 at page 15. A copy of Mr. Pinson's presentation can be found at <http://www.acacso.org/presentations/>.

tank car miles for the loaded and empty movements included in his example due to faulty or inaccurate information. For example, Mr. Baranowski's workpapers show numerous instances where his mileage calculation process calculated rail miles for railcar events that occur out of sequence.¹⁴ In addition, Mr. Baranowski's estimate of miles between specific adjacent stations are in some cases significantly overstated.¹⁵ While it is not possible to tell which event movements are correct and which are not from the data provided, my review does indicate that Mr. Baranowski's mileages are likely to be significantly overstated.¹⁶

**B. MR. BARANOWSKI'S
CALCULATION OF THE NUMBER
OF RAILROADS INTERCHANGING
TANK CARS TO SHOP LOCATIONS
IS INCORRECT**

In addition to the flaws in his Railinc mileage calculations, Mr. Baranowski's identification of which railroads serve tank car repair facilities is also deeply flawed. Mr. Baranowski identified, from Railinc data, the destination SPLC where a railroad interchanged a tank car to a repair facility and the railroad performing the interchange to the shop location.¹⁷ Mr. Baranowski's workpapers show {{[REDACTED]}} Class III and {{[REDACTED]}} Class II railroads interchanging tank cars to shop locations.¹⁸ However, these counts are not correct.

Mr. Baranowski used Railinc data to identify the SPLC and railroads interchanging railcars to repair shop locations. In many instances the railroads that Mr. Baranowski identified

¹⁴ See, e-workpaper "Railinc Example (LEPA).xlsx," tab "CGTX015850 Events No Filter," rows 505, 506, 576, 577, 675, 676, 678, 680, 681 and 682.

¹⁵ For example, Mr. Baranowski's workpapers show the rail miles between Winslow, TX and Alvarado, TX equal {{[REDACTED]}} miles when in actuality they are 29.2 miles apart. He also shows Alvarado, TX to Wrenn, TX to be {{[REDACTED]}} miles apart when in actuality they are separated by 20.1 miles. He made similar errors in his calculation of the mileage between Ennis, TX and Corsicana, TX ({{[REDACTED]}} estimated versus 21.5 miles actual) and between Corsicana, TX and Agnus, TX ({{[REDACTED]}} estimated miles versus 6.2 miles actual).

¹⁶ Throughout this Rebuttal VS, I discuss analyses that I developed using Mr. Baranowski's mileage estimates. My use of his mileage statistics for this Rebuttal does not mean I endorse his mileage estimates or analyses, but simply that many of Mr. Baranowski's conclusions can be shown to be erroneous using his own flawed data.

¹⁷ See, Baranowski e-workpaper "Shop Locations.xlsx," tabs "All Moves to Shops" and "Moves to Shortline Shops."

¹⁸ See, Rebuttal e-workpaper "Shop Locations (LEPA Final).xlsx," tab "Moves to Shortline Shops," Columns T to AH.

as the delivering carrier to a repair shop do not serve the identified destination SPLC. For example, Mr. Baranowski's workpapers show the following railroads serving repair facilities at Neodesha, Kansas:¹⁹

- {{[REDACTED]}}

Of the {{[REDACTED]}} railroads listed above, only one (1), the South Kansas & Oklahoma Railroad ("SKOR"), serves the SPLC for Neodesha, KS (SPLC 587670).

In another instance, Mr. Baranowski identified {{[REDACTED]}} Class III railroads serving Youngstown, OH (SPLC 344200), including:

- {{[REDACTED]}}

¹⁹ *Id.*

Of these {{[REDACTED]}} railroads only two (2), The Warren & Trumbull Railroad Company (“WTRM”) and The Youngstown Belt Railroad Company (“YB”), are listed as serving Youngstown, OH.

This error was not limited to the two (2) location examples listed above. In total, Mr. Baranowski incorrectly identified seven (7) different locations as being served by railroads that did not serve his identified destination SPLC locations.²⁰

C. THE RAILROADS ARE IN CONTROL OF TANK CAR MILES

Many of the analyses that Mr. Baranowski performed to support his conclusion that UP handled a disproportionate number of empty railcar movements to repair facilities relied upon his estimates of railcar miles.²¹ Even if the movement miles calculated are accurate, which is not the case as discussed above, actual tank car miles incurred by a piece of equipment are dictated by the railroad handling the movement. Simply stated, a shipper will indicate the origin and destination of a movement, but the railroad will dictate how the tank car moves over its network.²²

The tank car movement example Mr. Baranowski included in Table 3 of his Reply VS shows an empty tank car moving on UP from interchange with CSXT at New Orleans, LA to a repair facility at Hearne, TX before moving back to New Orleans, LA. PC*Miler shows that the practical routing on UP between New Orleans, LA and Hearne, TX equals 482 miles. Mr. Baranowski’s workpapers and his Table 3 example show the empty tank car traveling {{[REDACTED]}} miles from New Orleans, LA to Hearne, TX and {{[REDACTED]}} miles from Hearne, TX back to New Orleans, LA.

²⁰ *Id.*

²¹ *See*, Baranowski Reply VS at pages 6 to 8 and 10.

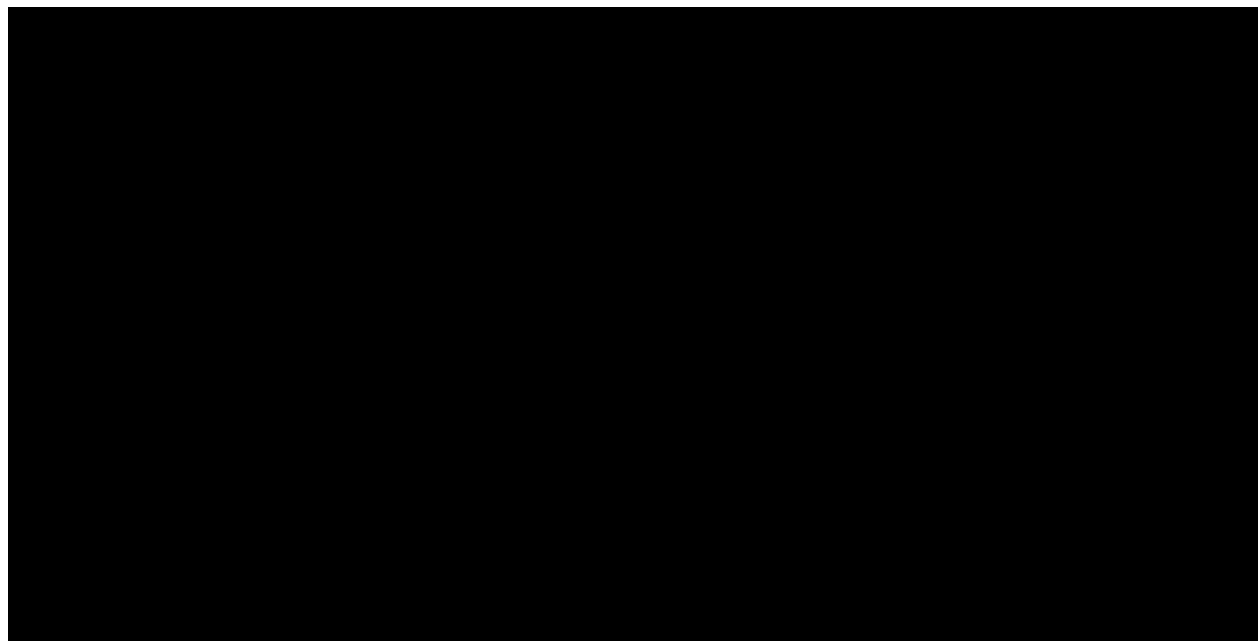
²² There may be instances where a specific car routing is dictated by a transportation contract. However, in most cases, the routing of a movement is left up to the railroad.

The {{[REDACTED]}} miles from New Orleans, LA to Hearne, TX is explained by reviewing the Railinc event data for this movement. Instead of transporting the empty tank car directly from New Orleans, LA to Hearne, TX, UP made the decision to transport the empty tank car to {{[REDACTED]}}, which is significantly north of Hearne, TX, before bringing the tank car back south to the Herne repair facility.

Figure 1 below shows the direct routing from New Orleans, LA to Hearne, TX (blue line) and the routing from New Orleans, LA to Hearne, TX incurred by the empty tank car in Mr. Baranowski's example {{[REDACTED]}}.

Figure 1

Map of UP Rail Movements from New Orleans, LA to Hearne, TX{{[REDACTED]}}



}}

As shown in Figure 1 above, the routing that UP chose for this movement based on its own operating convenience or necessity added a significant number of miles to the empty movement.

The unstated assumption of Mr. Baranowski's analyses that rely upon a comparison of tank car miles across railroads is that the railroads are transporting railcars in the shortest, most direct routes possible. Mr. Baranowski's example shows that this is clearly not the situation since UP's transportation of the empty tank car to Hearne, TX exceeds the direct routing by {{[REDACTED]}} miles or {{[REDACTED]}} percent.²³ Arguing that UP is absorbing a disproportionate share of tank car miles to repair facilities when UP is in complete control of the actual miles incurred, would require UP to use the most direct routes possible.

²³ Mr. Baranowski's routing equals {{[REDACTED]}} compared to the practical routing of 964 miles (482 x two directions). {{[REDACTED]}}

III. UP DOES NOT BEAR A DISPROPORTIONATE SHARE OF REPAIR SHOP MOVEMENTS

Mr. Baranowski also asserts that his analysis of UP tank car movements and revenue data and Railinc tank car movement data shows that UP handles a disproportionate share of empty tank car movements to and from repair facilities.²⁴ Mr. Baranowski's assertion is based on comparing UP and other Class I railroads' handling of loaded and empty tank cars, and on comparing UP's handling of empty tank cars to repair facilities to UP's handling of tank cars in other revenue and non-revenue movements.

The majority of Mr. Baranowski's analyses compare UP to the other six (6) Class I railroads.²⁵ Implicit in these comparisons and analyses is an assumption that all Class I railroads are equal in all regards. This assumption is incorrect and leads to faulty conclusions.

For a comparison to be valid, the objects being compared must be homogenous in nature. If the objects are not homogenous in the aspects being measured, then the comparison is fundamentally flawed and can lead to incorrect conclusions. In other words, unless the objects being measured are the same relevant factors, the comparison turns into the classic "apples to oranges" analysis where two (2) items cannot properly be compared. Valid comparisons require commensurate quantities. Gross Domestic Product ("GDP") is a monetary measure of the market value of all the final goods and services produced in a period of time and is common way to measure wealth across different political entities.²⁶ Comparing aggregate GDP between two (2) states in the United States may show the relative size of each state's economy, but it does not necessarily indicate whether individuals in a state are on average as wealthy as they are in another state. This is because analyzing aggregate values does not take into consideration

²⁴ See, Baranowski Reply VS at page 5.

²⁵ It appears that Mr. Baranowski limited his analyses to the United States operations for CN, CP and KCS. I also limit my analyses to these carriers' United States operations.

²⁶ See, <https://www.investopedia.com/terms/w/wealth.asp>.

differences in relative population sizes. For example, studies show California's GDP of \$2.9 trillion in 2018 was over 700 times as large as Wyoming's GDP of \$39.4 billion.²⁷ Hence, California has more economic wealth than Wyoming, but it would not be accurate to say the average person in California has more wealth than that of someone from Wyoming simply based on aggregate values. In fact, when differences in population are taken into consideration, Wyoming's GDP of \$66,766 per capita exceeds California's GDP per capita of \$65,160. The only way to truly compare the average wealth per person is to place the statistics on the same relative basis.

Many of Mr. Baranowski's comparisons and analyses involve comparing aggregate UP statistics against aggregate statistics for one or all of the other six (6) Class I railroads. He uses these aggregate analyses to conclude that UP incurs a disproportionate burden of transporting empty tank cars to repair facilities as compared to the other Class I railroads. However, one cannot properly compare statistics in many cases across the carriers without taking into consideration each carrier's relative size and position. To appropriately compare tank car statistics across the Class I carriers, one must take into consideration the differences in relative size of the Class I railroads. While UP, CP and KCS are Class I railroads based on their annual freight revenues, UP is over nine (9) times larger than KCS in terms of route miles²⁸ and eight (8) times larger than CP in terms of loaded railcars carried.²⁹ Mr. Baranowski's simple comparisons of aggregate tank car statistics between UP and the other Class I railroads leads to his faulty conclusion that UP is absorbing a disproportionate share of the burden incurred in moving empty tank cars to repair facilities.

²⁷ See, <https://www.statista.com/statistics/248023/us-gross-domestic-product-gdp-by-state/>.

²⁸ $32,070 \text{ miles} \div 3,392 \text{ route miles} = 9.4$. Source: UP and KCS 2018 Report Forms R-1, Schedule 700, Line 57, Column (c).

²⁹ $8,412,239 \text{ railcars} \div 986,997 \text{ railcars} = 8.5$. Source: UP and CP 2016 QCS.

**A. THE NUMBER OF REPAIR SHOPS
ON UP LINES IS NOT
DISPROPORTIONATE**

Mr. Baranowski uses Railinc data provided in discovery to identify tank car repair locations within the continental United States served directly by Class I railroads.³⁰ Mr. Baranowski shows in Table 4 that UP directly serves {{[REDACTED]}} tank car repair facilities within the United States, which is a larger number than the other Class I railroads. Because UP has more shops on its lines than other Class I railroads, Mr. Baranowski concludes that the concentration of shops on UP translates into UP bearing more of the operational burden of empty tank car movements than other Class I railroads.

Mr. Baranowski's conclusion is erroneous because he does not take into consideration UP's relative size. UP's network encompasses over 32,070 route miles spread over twenty-five (25) states.³¹ By comparison, CP's network encompasses only 4,840 route miles in the United States or over almost eight (8) times less than that of UP. Even though UP is over eight (8) times the size of CP, UP only has approximately {{[REDACTED]}} times the number of repair locations on its network.

To gauge the relative burden of the number of tank car repair shops on a network, I looked at the relative number of shops on each Class I railroad and on the aggregate number of Class III railroads based on the number of shop locations per thousand route miles as shown in Table 1 below.

³⁰ See, Baranowski Reply VS at pages 5 -6. Railinc event data identifies an interchange SPLC between a railroad and a "SHOP" in its equipment event data. Mr. Baranowski implicitly assumes that each identified SPLC has only one (1) repair shop.

³¹ UP 2016 Annual Report Form R-1, Schedule 702.

Table 1 Number of Repair Facilities Per Thousand Route Miles of Class I and Class III Railroads	
Railroad	Repair Shops Per Thousand Route Miles
(1)	(2)
1. UP	{{[REDACTED]}}
2. BNSF	{{[REDACTED]}}
3. CSXT	{{[REDACTED]}}
4. NS	{{[REDACTED]}}
5. CP	{{[REDACTED]}}
6. CN	{{[REDACTED]}}
7. KCS	{{[REDACTED]}}
8. Class III	{{[REDACTED]}}
Source: e-workpaper "Shop Locations (LEPA Final).xlsx," tab "Tables."	

As shown in Table 1 above, when evaluated by the number of tank car repair facilities per thousand miles of line operated, UP's burden is significantly less than {{[REDACTED]}} and in-line with most of the other large railroads. {{[REDACTED]}} network supports {{[REDACTED]}} tank car repair facilities for each thousand miles of line on its network. In comparison, UP's over 32,000 route miles only needs to support {{[REDACTED]}} shops per thousand route miles. Moreover, UP's number of repair facilities per thousand route miles is substantially less than that of the Class III railroads in the United States in aggregate. Clearly, UP's burden is less than the much smaller {{[REDACTED]}}, and significantly less than Class III railroads.

Mr. Baranowski also considered additional shops accessible to each Class I railroad by the Class I railroad delivering the tank car to a short line railroad that serves the shop.³² Mr. Baranowski's workpapers indicate that UP interchanged tank cars to short line railroads that delivered to {{[REDACTED]}} additional tank car repair facilities.³³ However, the much smaller {{[REDACTED]}}

³² See, Baranowski Reply VS at page 6, note 6.

³³ See, Baranowski e-workpaper "Shop locations.xlsx," tab "Tables."

interchanged with short line railroads that delivered to {{[REDACTED]}} tank car repair facilities.³⁴ As shown in Table 2 below, UP's relative burden was equal to or significantly less than all but one Class I railroad {{[REDACTED]}} on short line connections.

Table 2 Number of Repair Facilities on Short Line Railroads Per Thousand Route Miles of Class I Railroads	
Railroad	Repair Shops Per Thousand Route Miles
(1)	(2)
1. UP	{{[REDACTED]}}
2. BNSF	{{[REDACTED]}}
3. CSXT	{{[REDACTED]}}
4. NS	{{[REDACTED]}}
5. CP	{{[REDACTED]}}
6. CN	{{[REDACTED]}}
7. KCS	{{[REDACTED]}}
Source: e-workpaper "Shop Locations (LEPA Final).xlsx," tab "Tables."	

As shown in Table 2 above, UP indirectly supported {{[REDACTED]}} tank car repair facilities per thousand route miles through short line railroad connections, while CN, KCS and CP supported {{[REDACTED]}}. It is not possible to conclude that UP supported a disproportionate number of tank car repair facilities when UP's size is taken into consideration.

**B. UP DOES NOT MOVE TANK
CARS A DISPROPORTIONATE
NUMBER OF MILES**

Mr. Baranowski alleges that UP incurs a disproportionate number of empty miles moving tank cars to, from and between repair facilities.³⁵ Mr. Baranowski's analysis shows that UP incurred approximately {{[REDACTED]}} percent more empty miles than CSXT, which Mr. Baranowski

³⁴ *Id.*

³⁵ See, Baranowski Reply VS at pages 6-7.

says incurred the second highest number of empty tank car miles to repair facilities.³⁶ Mr. Baranowski also alleges that the operational burdens of empty shop movements on UP are not only greater than the burdens on other railroads, but also are disproportionately greater.³⁷ He makes this allegation based on his analysis of the alleged relative percentage of loaded tank car miles to empty miles to repair shops among the Class I railroads as shown in Table 6 of his Reply VS.

As with his analysis of the number of tank car repair facilities discussed above, Mr. Baranowski failed to take into consideration the relative size of UP compared to the other Class I railroads when claiming UP encounters a disproportionate number of empty miles to repair facilities. UP may incur more empty miles to repair facilities in aggregate, but in comparison to its relative share of loaded and empty tank car miles it does not move a disproportionate number of empty tank car miles.

Each Class I railroad includes the number of loaded and empty car miles by railcar type and railcar ownership in its Annual Report Form R-1 to the STB (“R-1”), Schedule 755. I extracted the number of loaded and empty railcar miles for privately owned tank cars from each Class I railroad’s 2016 Schedule 755 and compared these loaded and empty miles to the number of empty tank car miles Mr. Baranowski claims each railroad incurred in moving tank cars to repair facilities (“Shop Miles”).

I utilized loaded and empty car miles as reported in each railroad’s R-1 Schedule 755 instead of Mr. Baranowski’s total empty tank car mileage statistics because the data included in the R-1’s are more reliable statistics than Mr. Baranowski’s mileage estimates. As discussed above, Mr. Baranowski’s mileage estimates are riddled with errors from apparent inaccuracies in

³⁶ *Id.*

³⁷ *See*, Baranowski Reply VS at page 7.

the Railinc event data and issues with mileage calculations using the PC*Miler. In contrast, the information that the Class I railroads include in their R-1's is audited and tested for accuracy by outside independent parties,³⁸ and verified by oath by a Class I railroad officer and president.³⁹

As shown in Table 3 below, UP's share of Shop Miles is not disproportionate to other railroads' empty tank car miles based on reported R-1 Schedule 755 data.

Railroad	Empty Shop Miles	Total Empty Tank Car Miles	Shop Miles as a Percentage of Total Empty Miles 1/
(1)	(2)	(3)	(4)
1. UP	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
2. BNSF	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
3. CSXT	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
4. NS	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
5. KCS	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
6. CN	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
7. CP	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}

Source: "Railinc Tables (LEPA Final).xlsx," tab "Percentage of Miles."
1/ Column (2) ÷ Column (3) x 100.

Table 3 above shows that Mr. Baranowski's calculation of Shop Miles reflects approximately {{[REDACTED]}} percent of UP's total empty tank car miles for private tank cars as reported by UP in Schedule 755 of its R-1. While at the upper end of the range for Class I

³⁸ See, Reply Comments of the Union Pacific Railroad Company, Ex Parte No. 706, *Reporting Requirements For Positive Train Control Expenses and Investments*, submitted January 12, 2012 at pages 4-5, "As provided in *Certification of Railroad Annual Report R-1* by Independent Accountant, 1 I.C.C.2d 902 (1985), the R-1 is subject to review by Agreed Upon Procedures established by the Board and independent public accountants. Independent public accountants review the R-1 in accordance with attestation standards established by the American Institute of Certified Public Accountants, and issue a report, subject to review and approval by the Board."

³⁹ See, UP 2016 R-1 at page 109.

railroads, UP's percentage is equal to that of {{[REDACTED]}} and only slightly higher than {{[REDACTED]}}.

Comparing Mr. Baranowski's calculation of Shop Miles to each railroad's reported car miles for loaded tank cars from R-1 Schedule 755 produces similar results. Table 4 below compares the empty shop miles calculated by Mr. Baranowski to the loaded tank car miles reported by the Class I railroads in Schedule 755 of their R-1.

Railroad	Empty Shop Miles	Total Loaded Tank Car Miles	Shop Miles as a Percentage of Loaded Empty Miles 1/
(1)	(2)	(3)	(4)
1. UP	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
2. BNSF	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
3. CSXT	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
4. NS	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
5. KCS	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
6. CN	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
7. CP	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}

Source: "Railinc Tables (LEPA Final).xlsx," tab "Percentage of Miles."
1/ Column (2) ÷ Column (3) x 100.

Table 4 above shows that UP's percentage of empty shop miles to total loaded miles is only slightly higher than {{[REDACTED]}} percentage. It is clear that UP does not incur a disproportionate share of Shop Miles to tank car repair facilities relative to its total loaded and empty tank car miles based on the relative size of the other Class I railroads.

Mr. Baranowski attempts to show that UP incurs a disproportionate number of Shop Miles relative to the other Class I railroads by calculating the difference between what he claims is UP's percentage of loaded miles for all Class I railroads to UP's percentage of Shop Miles for

all Class I railroads as shown in Table 6 of his Reply VS. The issue with Mr. Baranowski's analysis is that it does not take into consideration the relative size of each of the railroads, but instead assumes an empty mile on one railroad is the same as an empty mile on another railroad. One cannot infer a disproportionate burden between railroads without taking into account each railroad's relative size.

The statistics I develop in Tables 3 and 4 above take into consideration each railroad's relative burden to transport tank cars to repair facilities based on the railroad's size, while Mr. Baranowski's Table 6 analysis does not take into consideration railroad size. The relative size of each railroad is an essential component of any analysis looking at proportionate (or disproportionate) shares.

C. UP DOES NOT PARTICIPATE IN A DISPROPORTIONATE NUMBER OF MOVEMENTS TO TANK CAR REPAIR FACILITIES

Mr. Baranowski indicates that UP participates as an originating, terminating or overhead carrier in {{█}} percent of all movements to, from and between repair facilities.⁴⁰ Mr. Baranowski developed this specific tank car movement percentage by counting the number of times UP was included in the routing of an empty tank car movement to, from or between repair facilities indicated in the Railinc data.⁴¹ While Mr. Baranowski counted the number of times UP participated in a movement, he did not count the number of times other Class I railroads were also involved in a movement to a repair facility.⁴² Counting the number of repair shop movements each Class I railroad participated in across the size of each carrier's network shows

⁴⁰ See, Baranowski Reply VS at page 7.

⁴¹ See, Baranowski e-workpaper "Railinc Table.xlsx," tab "Shop Switches and Handling," cell D2.

⁴² Mr. Baranowski's methodology counted the number of times each railroad participated in any part of a movement to the repair facility, and not whether a railroad terminated a repair shop movement. Therefore, if Railinc data showed two (2) railroads participating in a repair shop movement, then Mr. Baranowski's methodology would show both carriers participating in the single movement.

that UP did not participate in a disproportionate number of movements to tank car repair facilities.

Mr. Baranowski's workpapers indicate that UP participated in {{[REDACTED]}} repair shop movements in 2016.⁴³ However, Mr. Baranowski did not calculate the number of times other Class I railroads participated in shop movements. I expanded Mr. Baranowski's analysis to count the number of times each Class I railroad participated in a repair shop movement.⁴⁴ Additionally, as I explained above, looking at raw aggregate statics does not tell the whole story as aggregate values do not take into consideration each railroad's relative size. To normalize the number of repair shop movements across the railroads, I calculated the number of empty repair shop movements each railroad participated in per route mile operated. As shown in Table 5 below, UP's repair shop movements are not disproportionate when size is taken into consideration.

Table 5 <u>Class I Movements to Repair Facilities Per Route Mile - 2016</u>	
Railroad	Number of Rail Movements to Repair Facilities per Route Mile
(1)	(2)
1. UP	{{[REDACTED]}}
2. BNSF	{{[REDACTED]}}
3. CSXT	{{[REDACTED]}}
4. NS	{{[REDACTED]}}
5. CP	{{[REDACTED]}}
6. CN	{{[REDACTED]}}
7. KCS	{{[REDACTED]}}
Source: e-workpaper "Railinc Tables (LEPA Final).xlsx," tab "Results From R."	

⁴³ See, Baranowski e-workpaper "Railinc Table.xlsx," tab "Shop Switches and Handling," cell D4.

⁴⁴ See, Rebuttal e-workpaper "Railinc Table (LEPA Final).xlsx," tab "Results From R," row 78.

As shown in Table 5 above, UP participates in {{[REDACTED]}} empty repair shop movements per route mile on its network. In contrast, {{[REDACTED]}}, smaller railroads than the UP, have higher ratios of empty repair shop movements per route mile. UP is far from moving a disproportionate number of empty railcars to repair facilities when the size of each Class I railroad is taken into consideration.

**D. UP DOES NOT
DISPROPORTIONATELY
PARTICIPATE IN MOVEMENTS
TO REPAIR SHOPS**

Mr. Baranowski states that UP often participates in only the empty movement to a repair facility but does not participate in the prior or subsequent loaded movements in which railroads earn revenue. He asserts that this causes UP to bear the burden of moving tank cars to and from repair facilities without participating in the revenue movement in many instances. Overall, Mr. Baranowski claims that UP did not participate in {{[REDACTED]}} percent of the loaded movements before or after shop visits.⁴⁵

Mr. Baranowski again does not look at the complete picture. Mr. Baranowski's analysis focuses exclusively on UP and fails to consider the number of times the other Class I railroads transport empty tank cars to repair facilities and do not participate in the loaded movements prior or subsequently to the repair shop movement. Moreover, Mr. Baranowski does not take into consideration the number of times smaller Class II and Class III railroads transport an empty tank car to a shop, but do not participate in an associated loaded movement.

I extended Mr. Baranowski's analysis to all the Class I railroads, plus aggregate Class II and Class III railroads, with the results shown in Table 6 below.⁴⁶

⁴⁵ See, Baranowski Reply VS at pages 8-9.

⁴⁶ The majority of Mr. Baranowski's analyses used only 2016 data from Railinc. However, his analysis of loaded tank car movements before and after movements to repair facilities combined 2015 and 2016 data. I also used 2015 and

Table 6 Percentage of Repair Shop Movements Where the Class I Railroad Did Not Participate in A Prior or Subsequent Loaded Movement – 2015 and 2016	
Railroad	Percentage
(1)	(2)
1. UP	{{[REDACTED]}}
2. BNSF	{{[REDACTED]}}
3. CSXT	{{[REDACTED]}}
4. NS	{{[REDACTED]}}
5. CP	{{[REDACTED]}}
6. CN	{{[REDACTED]}}
7. KCS	{{[REDACTED]}}
8. Class II	{{[REDACTED]}}
9. Class III	{{[REDACTED]}}
Source: e-workpaper “Railinc Tables (LEPA Final).xlsx,” tab “Non-Class I Carriers”	

Table 6 above shows the percentage of movements in which each Class I railroad and the aggregate Class II and Class III railroads did not participate in a loaded movement prior or subsequent to an empty movement to a repair facility. UP’s {{[REDACTED]}} percent is within the range of all other railroads and below the {{[REDACTED]}} percent incurred by {{[REDACTED]}}.

More importantly, UP’s percentage is lower than much smaller Class II and Class III railroads. As shown in Table 6 above, Class II railroads in aggregate did not participate in {{[REDACTED]}} percent of loaded moves prior or subsequent to an empty repair shop movement. Smaller Class III carriers incur an even greater burden by not participating in {{[REDACTED]}} percent of loaded moves before or after an empty shop movement.

2016 data in my extension of Mr. Baranowski’s analysis. In addition, Mr. Baranowski used three (3) different software programs, SQL Server, R and Python, to develop his statistics. We could not reconstruct Mr. Baranowski’s exact figures with the data he provided in his workpapers and the software packages he claimed to use. We were able to reproduce a majority of his analysis using SQL Server programing, which produces results within one (1) percent of Mr. Baranowski’s results.

To demonstrate further the burden some Class III carriers absorb from empty repair shop movements, I included, as Exhibit No. 2⁴⁷ to this Rebuttal VS, an analysis that shows two (2) different categories of Class III railroads and the burden they carry from repair shop movements. The first category shown on Exhibit No. 2, Line 1 through Line 4 includes those United States Class III railroads that participated in at least {{[REDACTED]}} movements to repair facilities but did not participate in at least {{[REDACTED]}} percent of the loaded movements before or after the shop movement.⁴⁸ The second category shown in Exhibit No. 2, Line 5 through Line 11 includes those United States Class III railroads that participated in at least {{[REDACTED]}} movements to repair facilities but did not participate in at least {{[REDACTED]}} percent of the loaded movements before or after the shop movement. Both categories show several small Class III railroads carrying a much greater burden than UP, including moving hundreds of tank cars to repair shops and not being involved in any loaded movements before or after the repair movement.

Table 6 above and Exhibit No. 2 clearly demonstrate that many other railroads, primarily smaller Class II and Class III carriers, carry a much larger burden than UP allegedly carries. Mr. Baranowski failed to prove that UP incurs a disproportionate burden compared to the other railroads.

**E. UP DOES NOT ENCOUNTER A
DISPROPORTIONATE NUMBER OF
55-C MOVEMENTS**

Mr. Baranowski claims that UP bears a disproportionate burden from 55-C tank car movements because the only revenue it receives in approximately {{[REDACTED]}} of these tank car movements comes from 55-C tariff charges.⁴⁹ Stated differently, Mr. Baranowski claims that 55-

⁴⁷ Exhibit No. 1 was included in my OVS.

⁴⁸ I excluded Class III railroads that are owned by a single Class I railroad or are jointly owned by more than one (1) Class I railroad from this analysis.

⁴⁹ See, Baranowski Reply VS at page 9.

C charges are the only source of revenues during the year for over {{[REDACTED]}} percent of all tank cars UP transports to and from repair facilities.

There are two (2) things wrong with Mr. Baranowski's claim. First, it is not possible to claim that the only revenue UP receives from certain tank car movements comes from 55-C charges because Mr. Baranowski did not consider all sources of UP revenues. One relevant source of revenue for private tank car movements is revenue UP receives from excess empty car miles. Freight Tariff RIC 6007-Series (Tariff), Item 187, in which UP is a participant, allows railroads to receive mileage equalization payments from tank car owners when the aggregate empty mileage accumulated by tank cars during a calendar year exceed the aggregate loaded mileage during the same calendar year by more than six (6) percent. In addition, UP receives revenues from other ancillary services and fees, including but not limited to, demurrage and car storage. It is simply not possible to state that the only revenue UP receives for certain empty railcar movements is from 55-C tariff charges.

Second, Mr. Baranowski's own data shows that the 55-C movements that he claims do not have other revenue moves on UP are relatively small compared to the total revenue generating movements on UP.

Table 7 below compares the number of 55-C movements Mr. Baranowski claims have no other revenue movements on UP to the total number of tank car revenue movements moving on UP for the years 2015 through 2017.

Table 7
**Relative Proportion of UP 55-C Movements
to Loaded Tank Car Revenue Movements - 2016**

Year	55-C Movements with No Other Revenue Movements	Total Tank Car Revenue Movements	Percentage of 55-C Movements with No Other Revenue Movements to Total Tank Car Revenue Movements 1/
(1)	(2)	(3)	(4)
1. 2015	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
2. 2016	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}
3. 2017	{{[REDACTED]}}	{{[REDACTED]}}	{{[REDACTED]}}

Source: "UP Data Tables (LEPA Final).xlsx," tab "Tables."

1/ Column (2) ÷ Column (3) x 100.

As shown in Table 7 above, the number of 55-C tank car movements without any other revenue movements on UP are less than {{[REDACTED]}} percent of the total tank car revenue movements on UP each year from 2015 through 2017.

IV. EMPTY TANK CAR SHOPPING PRACTICES OF INDIVIDUAL COMPLAINANTS

Mr. Baranowski states that UP tank car data suggest that six (6) shippers, i.e., Arkema, Cargill, Poet Ethanol, Poet Nutrition, Tesoro and Valero, have different levels of demand for shop moves and that their shop movements have different characteristics.⁵⁰ He attempts to support his statement in two (2) ways. First, he compares the percentage of 55-C movements to total revenue movements for each of the six (6) shippers identified to all other shippers included in UP data, and concludes that there is considerable variance between the shippers in terms of demand for 55-C movements. Second, he compares the average length of haul for 55-C movements by the identified shippers to all other shippers and, once again, concludes there is significant variance between the shippers, this time in the average length of haul to a repair facility.

I reviewed Mr. Baranowski's analyses and his underlying data. As I explain below, Mr. Baranowski comes to incorrect conclusions based on the amount of data available and how he evaluated the data.

A. MR. BARANWOSKI'S CONCLUSION ON THE NUMBER OF 55-C MOVEMENTS IS ERRONEOUS

Mr. Baranowski utilized UP produced waybill-related traffic and revenue to identify 55-C and other revenue movements on UP for the 2015 through 2017 time period.⁵¹ From his analysis of the UP data, Mr. Baranowski concluded that UP's share of 55-C movements varies significantly among individual complainants. However, the way that Mr. Baranowski structures his analysis and the time period of his analysis do not necessarily support his conclusion.

⁵⁰ See, Baranowski Reply VS at page 9.

⁵¹ See, Baranowski Reply VS at pages 9-10.

Mr. Baranowski compared the number of 55-C movements to other revenue movements for the Individual Complainants and for all other shippers included in UP data.⁵² He concluded that because the percentage of 55-C movements to other revenue movements for Individual Complainants was different over the three (3) year time period that he analyzed, the practices of the individual shippers must significantly vary.

There are two (2) problems with Mr. Baranowski's conclusion. First, by aggregating the 55-C moves over three (3) years, Mr. Baranowski misses that the Individual Complainants' 55-C moves also vary over time. In other words, while one of the Individual Complainants may have had more repair shop movements than the overall average in one year, it may also have had less in another year.

Table 8 below shows the percentages of 55-C movements to total revenue moves for Individual Complainants for 2015, 2016 and 2017.

Table 8 Percentage of UP 55-C Moves to Total Revenue Moves for Individual Complainants – 2015 to 2017			
Shipper	2015	2016	2017
(1)	(2)	(3)	(4)
1. Arkema	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
2. Cargill	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
3. Poet Ethanol	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
4. Poet Nutrition	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
5. Tesoro	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
6. Valero	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
7. Other	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
8. Total	{{ [REDACTED] }}	{{ [REDACTED] }}	{{ [REDACTED] }}
Source: "UP Data Tables (LEPA Final).xlsx," tab "Tables."			

⁵² See, Baranowski Reply VS at page 10.

As shown in Table 8 above, the percentage of each Individual Complainants' 55-C moves to total revenue moves changes over time, except for {{[REDACTED]}}. Mr. Baranowski claimed {{[REDACTED]}} had more shop moves than any other Individual Complainant during the 2015 through 2017 period. However, as shown in Table 8 above, the 2015 number for {{[REDACTED]}} was high, while the 2016 and 2017 {{[REDACTED]}} shipments were much lower.

The second problem with Mr. Baranowski's conclusion is his analysis period may be too short. Mr. Baranowski concluded that individual shop movements are infrequent in any given year, and that {{[REDACTED]}}.⁵³ Mr. Baranowski's analysis of the Individual Complainants' shop moves only covered a three (3) year period. He cannot make any solid conclusions about variability of shipments or individual company demand on such a short-time period.

**B. MR. BARANOWSKI'S
CONCLUSION ON THE 55-C
MOVEMENT MILES IS
INCORRECT**

Mr. Baranowski asserted that the average length of haul for 55-C movements from 2015 through 2017 varied considerably for the Individual Complainants.⁵⁴ For example, he asserts that {{[REDACTED]}} empty shop movements average {{[REDACTED]}} miles, which is {{[REDACTED]}} the average. However, how much a movement varies against the entire population must consider the total range of the mileage values.

An analysis of Mr. Baranowski's 55-C movement data set shows that the minimum UP miles included in the data set was {{[REDACTED]}} and the maximum value was {{[REDACTED]}} miles.⁵⁵

⁵³ See, Baranowski Reply VS at page 5.

⁵⁴ See, Baranowski Reply VS at page 10.

⁵⁵ See, Rebuttal e-workpaper "UP Data Tables (LEPA Final).xlsx," Stats with UP_MILES."

More importantly, Mr. Baranowski's 55-C mileage data set had a standard deviation of {{[REDACTED]}} miles, which is only slightly less than his average movement miles of {{[REDACTED]}} miles.⁵⁶ The standard deviation is a measure that is used to quantify the amount of variation or dispersion of a set of data values. A low standard deviation indicates that the data points tend to be close to the mean of the data while a high standard deviation indicates that the data points are spread out over a wider range of values.

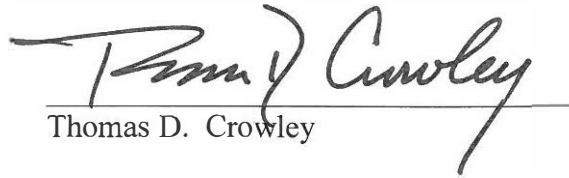
Mr. Baranowski constructed his example in a way that attempts to show that the average length of haul amongst the Individual Complainants is extreme. However, further analysis of Mr. Baranowski's data set shows that all of the Individual Complainant movements lie within one standard-deviation of the average 55-C movement.⁵⁷ When compared to 55-C movement miles in general, none of the Individual Complainants' average 55-C miles are anywhere near extreme.

⁵⁶ *Id.*

⁵⁷ {{[REDACTED]}}.

VERIFICATION

I, Thomas D. Crowley, verify under penalty of perjury that I have read this Rebuttal Verified Statement on behalf of the Complainants, 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

Subscribed and Sworn to before me
this 30th day of May, 2019.


Notary Public



My Commission expires: November 30, 2020

Executed on MAY 30, 2019

Exhibit 2

Highly Confidential

Rebuttal Verified Statement
of
J. Brent Grow

BEFORE THE SURFACE TRANSPORTATION BOARD

Docket No. NOR 42144

NORTH AMERICA FREIGHT CAR ASSOCIATION; AMERICAN FUEL & PETROCHEMICALS MANUFACTURERS; THE CHLORINE INSTITUTE; THE FERTILIZER INSTITUTE; AMERICAN CHEMISTRY COUNCIL; ETHANOL PRODUCTS, LLC D/B/A POET ETHANOL PRODUCTS; POET NUTRITION, INC.; AND CARGILL INCORPORATED v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42150

VALERO MARKETING AND SUPPLY COMPANY
AND VALERO RAIL PARTNERS, LLC v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42152

TESORO REFINING & MARKETING COMPANY LLC;
TESORO GREAT PLAINS GATHERING & MARKETING, LLC;
AND DAKOTA PRAIRIE REFINING, LLC v. UNION PACIFIC RAILROAD COMPANY

Docket No. NOR 42153

ARKEMA INC. v. UNION PACIFIC RAILROAD COMPANY

**REBUTTAL VERIFIED STATEMENT OF
JONATHAN BRENT GROW
OF ARKEMA, INC.¹**

1. I, Jonathan Brent Grow, submit this verified statement in support of the Joint Rebuttal Evidence and Argument of the Complainants in STB Dockets NOR 42144, 42150, 42152, and 42153.

2. I, Jonathan Brent Grow, am the Strategic Purchasing Manager, Transportation, Rail and Barge at Arkema, and have held this position since 2012.

¹ Throughout this document, text in double braces (i.e., {{...}}) is HIGHLY CONFIDENTIAL pursuant to the amended protective order issued in the consolidated proceedings on October 20, 2017, except that Union Pacific may treat it as Confidential.

3. Arkema is seeking damages for empty repair moves occurring from January 1, 2015 through July 31, 2015, only to the extent Union Pacific billed Arkema for these movements pursuant to UP Tariff 6004-C, Item 55-C and the associated rate in Tariff UP 4703-series.

4. Below is a list of empty repair moves from January 1, 2015 through July 31, 2015, for which Arkema is seeking damages. The list includes the Union Pacific invoice number, tank car ship date, car number, and the amount of damages sought. {{ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

}}

5. Arkema continues to seek reparations, with interest, for Item 55-C charges that Arkema has paid for empty repair moves occurring after July 31, 2015, per Arkema's Opening Evidence.

VERIFICATION

I, Jonathan Brent Grow, verify under penalty of perjury that the foregoing is true and correct.

Further, I certify that I am qualified and authorized to file this statement.

Executed on May 31, 2019

/s/ Jonathan Brent Grow
Jonathan Brent Grow

Rebuttal Exhibit 32

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Rebuttal Exhibit 33

Highly Confidential

Rebuttal Exhibit 34

Highly Confidential

Rebuttal Exhibit 35

Highly Confidential

Rebuttal Exhibit 36

1 **A. Yes; and we also utilize mobile repair**
2 **for repairs -- let's say maybe at a consignee that**
3 **would need repairs.**

4 Q. Are there types of work that can't be
5 done at mobile facilities?

6 **A. Yes.**

7 Q. What types of work can't be done at
8 mobile facilities?

9 **A. Certain types of hot work, welding**
10 **work, certain types of jacket removal. It's**
11 **dependent somewhat on the product and the facility.**

12 Q. Are there other types of work that can
13 be done by either?

14 **A. Mobile --**

15 Q. Either mobile or a fixed repair
16 facility.

17 **A. Yes.**

18 Q. How does Arkema decide between using a
19 mobile repair unit or a fixed facility when it
20 has -- when either one can perform the repair?

21 **A. We would greatly prefer to use a mobile**
22 **unit to keep that car rolling and not have to send**
23 **it to a shop, not have to send it to a cleaning**
24 **rack. So if a mobile repair unit can do the**
25 **repairs, that's what we do.**

1 **HM201 inspection dates of the cars.**

2 There's a long list of criteria, yes,
3 **sir, that go into that -- the car market. A lot of**
4 **factors go into that decision.**

5 Q. A lot of factors in trying to decide
6 what's more cost-effective for Arkema?

7 A. **Right.**

8 Q. Whether a conversion is cost-effective
9 as compared to going out and getting a new car?

10 A. **Right.**

11 MR. ROSENTHAL: Let's mark this next
12 document as Exhibit 23.

13 (Grow Exhibit 23, an email
14 communication, 1-6-15, ARK10057130 to 7131,
15 was marked for identification.)

16 BY MR. ROSENTHAL:

17 Q. Take a look at the document that's been
18 marked as Exhibit 23 and tell me whether you
19 recognize it.

20 A. **Yes.**

21 Q. What is that?

22 A. **This is an email that I put out to the**
23 **supply chain groups of various business units to**
24 **familiarize them with the Union Pacific shop tariff**
25 **when it came out.**

1 Q. Did you give these groups some
2 directions or guidance in an attempt to minimize
3 the impact from the UP tariff?

4 A. Yes, we gave them essentially the same
5 instructions that we had worked up with QTS in
6 terms of emphasizing our prior procedures and
7 diverting cars and finding ways to minimize the
8 charges.

9 Q. So there's a paragraph here that says,
10 "To minimize these costs going forward, utilize
11 diversions during empty return moves from
12 customers, consolidate maintenance/cleaning trips,
13 and reduce empty distances through shop selection
14 whenever possible."

15 Is that right?

16 A. Correct, yes.

17 Q. And that's what you're talking about
18 when you say emphasize these methods of reducing
19 costs?

20 A. Correct.

21 Q. Did you think it would help?

22 A. I thought we were already doing a very
23 good job of -- of those procedures. I thought it
24 might help incrementally, but it wasn't really
25 anything different than we were already doing.