

# TRANSPORTATION ECONOMICS

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## WRITTEN STATEMENT OF

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IN

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RAIL FUEL SURCHARGES

### Introduction

Good Afternoon Chairman Buttrey, Vice Chairman Mulvey, and Board staff members.

My name is Mazhar Ali Awan and I am a Managing Director at Transportation Economics, a consulting group that assists electric utilities and other shippers understand how transportation and regulatory issues affect their businesses. Transportation Economics has helped shippers with plant sighting studies, cost analysis for various rail movements, project feasibility analyses, and other types of economic research and forecasting. I have acted in this capacity for nearly one and one-half years; before that I

worked here at the Surface Transportation Board as an economist in the Office of Economics, Environmental Analysis, and Administration.

Transportation Economics welcomes the opportunity to testify this afternoon on the subject of fuel surcharges. This is an important subject and one on which the Board can indeed play a constructive role – as rightly envisioned by Congress.

Before I begin, however, I would like to make perfectly clear that railroads are entitled to recover their fuel expenses. In addition, railroads are entitled to put in place programs that shelter them from the effects of volatile fuel prices. Railroads should be free to bear as much or as little risk as they want with regard to changes in fuel prices.

### **What is an Appropriate Fuel Surcharge?**

So, why are we here? Because shippers feel that the current fuel surcharge policies are abusive. They are not convinced that these policies bear any meaningful relationship to actual fuel expenses and have, instead, become a new revenue source for the carriers. The differences between the carriers and the shippers on this point have become alarmingly large and the Board can play a constructive role by shedding light, rather than heat, on the subject.

Questions that I think need to be addressed include the following: What is a proper fuel surcharge? Under what circumstances would a fuel surcharge become an unreasonable practice? And, what can the Board do to facilitate private-sector initiatives to develop an appropriate fuel surcharge mechanisms?

To handle these questions in order, we must first reach a common understanding on what a fuel surcharge is. According to Webster's Dictionary, a surcharge is an overcharge; an extra fee; an additional tax, cost, or impost.<sup>1</sup> So, a proper fuel surcharge ought to be a mechanism that passes along *additional* expenses associated with *unexpected* changes in fuel costs, both positive and negative.

From this question, it is possible to answer our second question, "Under what circumstances would a fuel surcharge become an unreasonable practice?" Clearly, a mechanism that captures more revenues than the totality of a movement's fuel costs is not a "surcharge." It is unreasonable practice for a carrier to impose a "surcharge" that captures more revenue than the total fuel expenses associated with the movement.

Similarly, it should be considered an unreasonable practice if changes in fuel surcharges yield revenues that exceed the changes in fuel prices. An appropriate fuel surcharge is a "pass-through" mechanism, not a "claw-back" mechanism. A mechanism that captures more revenue than the change in fuel prices is, implicitly and surreptitiously, a rate increase.

An appropriate fuel surcharge should capture the change in fuel prices from *a common starting point*. It makes little sense to ask a shipper who has built a new plant to pay a fuel surcharge of 15 percent. If there have been no prior movements and, thus, no prior

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<sup>1</sup> Webster's Ninth New Collegiate Dictionary, Merriam-Webster, 1983, p. 1187.

changes in fuel prices, then shippers and carriers should negotiate a starting rate and tie fuel surcharges to changes in fuel prices from that point forward.

If fuel surcharges are to be a “pass through” mechanism, then it is important that they bear a relationship to the factors that drive fuel costs. Through the regression studies performed as part of the Uniform Rail Costing System (URCS), the Board has determined that fuel (not surprisingly) is closely linked to gross ton-miles and locomotive running-miles. The longer a movement and the heavier the trailing weight, the more fuel consumption occurs. This result makes intuitive and practical sense.

Yet, in applying fuel surcharges, railroads typically do *not* make adjustments for distance and weight, but instead uniformly apply the surcharge across the all shippers. As a result, the fuel surcharges applied to some shippers – particularly shippers (like chemical producers) whose rates are very high relative to the weight of their product – pay a disproportionate percentage of the fuel surcharges calculated in a way that bears little resemblance to the actual consumption of fuel for their movement.

We welcome BNSF’s shift to a mileage-based fuel surcharge for coal and grain shipments. We believe that the Board should encourage, if not require, that all fuel surcharges be based on the factors that drive fuel consumption. Because they do not bear a meaningful relationship to gross ton-miles and locomotive running-miles, the current fuel surcharges are more accurately thought of as an additional price-discrimination mechanism. Though this shift is a welcomed move, this approach may need to be

tweaked to accomplish more accurate results as some shipper continue to pay more under the new mileage-based fuel surcharge regime.

Finally, while carriers are free to bear as much or as little risk as they want with respect to fuel prices, they should not be allowed to turn to non-contract shippers to cover the costs of fuel associated with long-term contracts that do not possess pass-through mechanisms. This practice must be considered an impermissible cross-subsidy.

### **The Board Should Announce a Statement of Principles**

The Board should announce its views on the general principles that should underlay a fuel surcharge program. In light of the previous discussion, we believe those general principles are easily stated:

- 1) Fuel surcharge programs should quickly, predictably, and transparently pass *changes* in fuel costs along to shippers.
- 2) The fuel surcharge mechanism should bear a close relationship to both distance and tonnages associated with a particular movement.
- 3) A fuel surcharge should never capture more revenue than the fuel costs associated with a particular movement.
- 4) A fuel surcharge should not capture more in revenues than the additional costs associated with higher fuel prices.
- 5) Shippers should not have to "make up the difference," for movements under contract that do not possess a pass-through mechanism.

After announcing these principles, the Board should make itself available to mediate between shippers and carriers on the subject of fuel surcharges and, if both sides are agreeable, the Board should offer binding arbitration to parties.

### **The Board Should Disseminate Fuel Cost Information in its Phase III Program**

In addition, the Board has the power to make a simple and straight-forward change that could greatly reduce the tension between shippers and carriers on the subject of fuel surcharges.

There is a profound information problem at the heart of the fuel surcharge controversy. Railroads know, with reasonable precision, how much fuel is consumed on any given movement; shippers do not. Because of this informational asymmetry, shippers are, quite understandably, suspicious of carrier claims that higher fuel surcharges are warranted. They wonder if such claims are accurate, or simply "cheap talk."

This informational problem poisons the relationship between carriers and shippers; even when carriers are justified in raising their fuel surcharges, shippers are likely to be suspicious. The Board could shed a great deal of light, and lessen the heat, by mitigating this information problem.

The Board's Uniform Rail Costing System (URCS) would be far more useful if fuel expenses were reported as a separate line item in its Phase III program. At present, the Phase III program identifies the variable costs associated with a particular movement, but does not report fuel costs separately. The data required to do this calculation already exists within the Phase II data tables. However, in its current state, shippers must go through the cumbersome Phase II data tables and calculate fuel costs by hand. This is a time-consuming and laborious process, particularly if one is unfamiliar with the Phase II

output. Naturally, there are consultants – like Transportation Economics, Inc. – who can perform the necessary calculations, for a price. But it is probably not wise public policy to empower consultants in this manner.

The Board should modify its Phase III costing program to break-out fuel costs separately. Shippers and carriers can then see, quickly and easily, what URCS calculates for fuel costs. With this information, shippers might find that some surcharges they believe are onerous are, in fact, reasonable. Carriers, on the other hand, might be hard-pressed to explain why, in some cases, their current surcharges collect revenues far in excess of the regulatory calculated cost. By making this information more widely available, all parties will have incentives to craft appropriate and transparent fuel surcharge agreements.

By including fuel costs in its Phase III output, the Board can be sure that it would only have to handle extraordinary cases through the mediation and arbitration process described above. With the information from the Phase III program, shippers and carriers could easily develop equitable fuel surcharges that meet the general principles the Board would announce.

### **Risk, Fuel Surcharges, and Hedging**

In the introduction to this testimony, I argued that carriers should be allowed to bear as much, or as little risk, as they desire. The railroads think so, too, how else can we explain the sophisticated hedging programs they employ to shelter themselves from the volatility of fuel prices? Such programs, however, inevitably raise the expected price of fuel – there

is a cost to be paid for the benefit of smoothing price volatility. In addition, any hedging program carries with it the small, but real risk of a rogue trader.

In light of the aggressive use of fuel surcharges by carriers in recent years, we question if such hedging programs are either needed or desirable. If carriers, through their fuel surcharge programs, pass along the risk of volatile fuel prices to their customers, what further need is there to engage in hedging? This question is not meant merely as an academic exercise. There is a deep contradiction between the need for fuel surcharges and the hedging programs carriers employ. Carriers should be limited to using one or the other.

We recognize that the Board is unlikely, in the context of this proceeding, to prohibit carriers from using hedging programs. Nevertheless, the Board should require carriers to explain their hedging activities and ask them to justify those activities in light of their fuel surcharge programs.

### **Empirical Analysis**

Transportation Economics was asked by High Road Consultants to apply URCS to nearly two dozen movements, to isolate the fuel costs associated with these movements, and to compare these expenses to the fuel surcharges applied to these shippers.<sup>2</sup> To do this we extracted data from the URCS Phase II data tables and developed unit-costs for gross ton-miles, locomotive running-miles and any switching that would be involved for that

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<sup>2</sup> The results are included in the testimony from High Road Consulting. Beyond the exchange of this information, however, we would note that our testimony here is our own and was not prepared on behalf of any shipper or shipper group.

particular movement (both yard and road). In addition, we used the general overhead ratio for operations to account for other fuel expenses that would rightly be attributable to a particular movement. The model we use to determine fuel expense for each movement is shown below:

TOTAL FUEL EXPENSE =

FUEL EXPENSE<sup>ORIGINATING CARRIER</sup> + FUEL EXPENSE<sup>TERMINATING CARRIER</sup>

Where FUEL EXPENSE for each carrier is:

$$\text{FUEL EXPENSE}^i = \sum \{ [\text{GTM} * \text{UC}(\text{GTM})] + [\text{LRM} * \text{UC}(\text{LRM})] + \\ [(\text{SEMR} * \text{UC}(\text{SEMR})) + (\text{SEMY} * \text{UC}(\text{SEMY}))] \} * \text{GOH}$$

|        |                              |
|--------|------------------------------|
| i =    | Railroad / Carrier           |
| GTM =  | Gross Ton-Miles              |
| UC =   | Unit-Cost                    |
| LRM =  | Locomotive Running-Miles     |
| SEMR = | Switch Engine Minutes - Road |
| SEMY = | Switch Engine Minutes - Yard |
| GOH =  | General Overhead Ratio       |

Essentially, we assumed as URCS does that fuel expense was based on trailing weight, number of locomotives used in the movement, and the length of the movement. This makes intuitive sense, in that one would expect longer heavier movements to use more fuel than longer lighter movements.

In our analysis of fuel costs, we found that each of the shippers we studied was paying a fuel surcharge that exceeded the fuel expense developed using URCS Phase II and Phase III data and movement characteristics. In fact, these fuel surcharges often exceeded by several multiples the fuel costs estimated by URCS.

## **Conclusion**

The Board asked in the notice for the hearing that shippers show that railroads were “labeling a rate increase as a fuel surcharge” and to show “when the increase is not directly and closely correlated to increases in the cost of fuel for the particular movement to which the surcharge is applied.” Our empirical research into this inquiry shows that for the movements we analyzed the recovery of fuel expenses was in fact greater than the fuel costs incurred by the respective originating and terminating railroads. The Board also asked how the reporting requirements of the railroads should be adjusted to provide rail customers with better information on a carrier’s fuel costs and the revenues collected through fuel surcharges. The answer to that is: the data already is collected and exists in a usable form within URCS. The Board simply needs to add data output in the Phase III process to show what the fuel cost are for the movement analyzed. This would go a long way in giving shippers the needed information to assess fuel charges made by the railroads as reasonable or unreasonable.

Respectfully Submitted,

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