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Anthony J. LaRocca
202.429.8119
alarocca@steptoe.com

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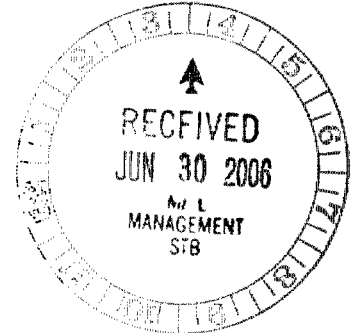
STEPTOE & JOHNSON LLP
ATTORNEYS AT LAW

1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Tel 202.429.3000
Fax 202.429.3902
www.steptoel.com

June 30, 2006

Via HAND DELIVERY

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board
1925 K Street, NW
Washington, DC 20423



Re: Major Issues in Rail Rate Cases, STB Ex Parte No. 657 (Sub-No. 1)
Rebuttal Comments of BNSF Railway Company

Dear Secretary Williams:

Enclosed are the original and twenty copies of the Rebuttal Comments of BNSF Railway Company submitted in response to the Board's Notice of Proposed Rulemaking dated February 27, 2006 in the above-captioned proceeding. Also enclosed are three CDs containing PDF copies of these Rebuttal Comments and three CDs containing electronic versions of BNSF's Rebuttal Comments in Word format. Please note that this filing contains color images.

Please date stamp the extra copy of this letter and return it with our messenger.

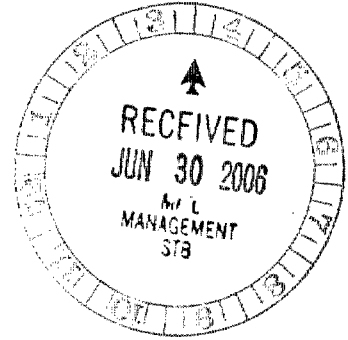
Sincerely,

A handwritten signature in black ink, appearing to read 'Anthony J. LaRocca'.

Anthony J. LaRocca
Counsel for BNSF Railway Company

Enclosures

cc: Parties of Record



**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Ex Parte No. 657 (Sub-No. 1)

MAJOR ISSUES IN RAIL RATE CASES

**REBUTTAL COMMENTS OF
BNSF RAILWAY COMPANY**

Richard E. Weicher
Michael E. Roper
BNSF RAILWAY COMPANY
2500 Lou Menk Drive
Fort Worth, TX 76131
(817) 352-2353

Samuel M. Sipe, Jr.
Anthony J. LaRocca
Linda S. Stein
STEPTOE & JOHNSON LLP
1330 Connecticut Ave, N.W.
Washington, DC 20036
(202) 429-3000

June 30, 2006

ATTORNEYS FOR
BNSF RAILWAY COMPANY

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND SUMMARY OF COMMENTS	1
II. MAXIMUM RATE DETERMINATION	4
A. Shippers No Longer Contend That Railroad Gaming Justifies A Departure From The Percent Reduction Methodology	4
B. The Shippers' Position That Demand-Based Differential Pricing Should Have No Role In Determining Maximum Reasonable Rates Is Contrary To Fundamental Principles In The Guidelines	6
C. Despite Shipper Claims To The Contrary, MCM And MMM Do Not Preserve Railroad Rate Structures	11
D. The Board's Current Maximum Rate Methodology Is Fully Consistent With The Long-Cannon Requirement To Maximize Revenue From Marginal Traffic.	13
III. REVENUE ALLOCATION FOR CROSS-OVER TRAFFIC.....	17
A. There Are Two Valid Alternative Approaches To Calculating Revenues On Cross-Over Traffic Depending On How A SARR Using Cross-Over Traffic Is Viewed.....	17
B. Contrary To The Shippers' Claims, The Avoidable Cost Approach Is An Appropriate Methodology For Allocating Cross-Over Revenues If The SARR Is Viewed As A Partial Market Entrant For Only A Portion Of Through Movements.....	19
1. The Avoidable Cost Approach, Unlike Real World Divisions, Is Consistent With Principles Of Contestability Theory	19
2. The Shippers' Criticisms Of The Avoidable Cost Approach Lack Force	20
C. Contrary To The Shippers' Claims, The ATC Approach Is An Appropriate Methodology For Allocating Cross-Over Revenues If The SARR With Cross-Over Traffic Is Viewed As A Simplification Device That Should Approximate The Results Of A Full SARR	24
1. Contrary To Shippers' Claims, BNSF Has Supported – And Continues To Support -- Adoption Of The ATC Approach.....	26
2. Adoption Of A Cost-Based Approach Like ATC Is Not Impermissibly Arbitrary	27
3. Contrary To Shippers' Claims, The ATC Approach Has Been Demonstrated To Be Superior To The MSP Approach.....	28
4. Western Fuels/Basin's Assertion That It Would Be Unfair To Apply The ATC Method To Pending Cases Lacks Force	31

IV.	INDEXING OPERATING COSTS.....	32
A.	Shippers' Claim That The SARR Is No More Efficient Than Its Real- World Counterparts Is Unsupported And Clearly Wrong	33
B.	Shippers' Contention That Providing Evidence Of Specific Productivity Would Impose An Insurmountable Burden On Complainants Is Meritless	35
V.	USE OF URCS SYSTEM-AVERAGE COSTS IN RAIL RATE CASES	38
VI.	DCF PERIOD	42
VII.	REOPENING AND VACATUR OF RATE PRESCRIPTIONS	43
VIII.	OTHER ISSUES – TESTING FOR CROSS-SUBSIDY	45

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Ex Parte No. 657 (Sub-No. 1)

MAJOR ISSUES IN RAIL RATE CASES

**REBUTTAL COMMENTS OF
BNSF RAILWAY COMPANY**

These are the rebuttal comments of BNSF Railway Company ("BNSF") in Ex Parte No. 657 (Sub-No. 1), *Major Issues in Rail Rate Cases*, filed pursuant to the Board's February 27, 2006 Notice of Proposed Rulemaking ("NPRM"). These comments respond to reply comments filed on May 31, 2006 by several railroads, shippers and shipper associations. BNSF and the other participants in this rulemaking proceeding filed opening comments on May 1, 2006.

I. INTRODUCTION AND SUMMARY OF COMMENTS

This rulemaking proceeding has been a useful exercise. SAC litigation has become increasingly complex and contentious, in large part due to the lack of resolution of certain recurring issues. This rulemaking has allowed the Board to address some of those issues in the full light of the legal and economic principles that underlie the *Guidelines*¹ and in the context of current market conditions, particularly the increasing demand for Powder River Basin ("PRB") coal transportation and the need for expanded rail capacity. This rulemaking has also permitted the Board to explore ways to simplify SAC proceedings without unduly sacrificing the accuracy of SAC results. While BNSF opposes some of the Board's proposals, we applaud the Board for its efforts to bring greater clarity and predictability to the SAC decisional process.

¹ *Coal Rate Guidelines – Nationwide*, 1 I.C.C.2d 520 (1985) ("*Guidelines*").

BNSF urges the Board carefully to adhere to the *Guidelines* in resolving the issues of SAC methodology raised by the Board in the NPRM. The Board did not express in the NPRM any concern about the economic or legal principles underlying the *Guidelines*. Instead, the NPRM sought views of interested parties on how to adapt the principles of the *Guidelines* to several issues of SAC methodology that were not expressly considered in the *Guidelines* but have become important in recent cases and how to ensure that SAC litigation can be simplified in certain areas without undermining basic SAC principles. BNSF has provided an extensive review and analysis of the relevant principles and economic theories that should guide the Board in addressing these issues.

The shippers' comments in this proceeding have been pragmatic and focused on results, not on the guiding principles or the policy objectives underlying the *Guidelines*. While the objective of this proceeding should be to develop workable SAC methodologies that are consistent with the *Guidelines*, the shippers appear interested primarily in improving SAC results. They have resisted the Board's efforts to make SAC litigation more predictable by establishing rules and procedures that build on the principles underlying the *Guidelines*, and they have opposed the Board's simplification proposals. When the shippers do address the economic principles underlying the *Guidelines*, like differential pricing, their comments betray a fundamental hostility towards those principles.

The parties' positions have become well defined through two rounds of comments. While the shippers' comments on reply were relatively superficial, they have made their positions clear on the Board's proposals. It would be an abuse of the Board's procedures in this rulemaking for the shippers to use the rebuttal filing as an opportunity to present new material that could have and should have been presented earlier.

BNSF's position on the Board's proposals is summarized briefly below for the convenience of the Board. The grounds for our positions are set out at length in BNSF's opening, reply and rebuttal comments and the accompanying statements of BNSF's expert witnesses.

- **Maximum Rate Determination:** The Board's proposed departure from the percent reduction methodology is not justified by concerns over possible railroad "gaming" or "manipulation" of the SAC test. Even the shippers have abandoned their claims that a new maximum rate methodology should be adopted to eliminate the possibility of railroad "gaming." Moreover, the Board's alternative proposals are fundamentally inconsistent with the principles of demand-based differential pricing that are at the heart of the *Guidelines*.
- **Revenue Allocation for Cross-Over Traffic:** If a SARR using cross-over traffic is viewed as a new market entrant that handles only part of a through movement, then the Board should apply the principles of contestability to calculate the revenues that would be available to such a partial entrant in a contestable market. If a SARR using cross-over traffic is viewed as a simplification device that should approximate the results of a SAC analysis done without cross-over traffic, which appears to be the Board's position, then the Board should apply the ATC methodology which properly accounts for the effects of density on relative on-SARR and off-SARR costs.
- **Indexing Operating Expenses:** There is no evidentiary support for making *any* productivity adjustment to a SARR's operating costs during the early years of a SARR's existence, so the Board's use of a shortened 10-year DCF period would eliminate the need to make any productivity adjustment to SARR operating costs.
- **URCS System-Average Costs:** BNSF supports the Board's proposal to rely more heavily on system-average URCS costs as a means of simplifying SAC litigation, and it urges the Board to make modest changes to its proposal to balance the benefits of simplification with the need for accurate results in cases where the calculation of variable costs might make a difference in the outcome of the case.
- **DCF Period:** BNSF supports the Board's proposal to shorten the DCF period to 10 years.
- **Standards for Reopening and Vacatur of Rate Prescriptions:** BNSF believes that the Board's proposals for streamlining and simplifying proceedings related to the reopening and vacatur of rate prescriptions are valid and appropriate.

BNSF's specific rebuttal to various reply comments is set out below. BNSF's rebuttal comments are supported by statements by four experts that have previously testified in support of BNSF in this proceeding: Professors Joseph P. Kalt and Robert D. Willig, and Messrs. John C. Klick and Michael R. Baranowski.

II. MAXIMUM RATE DETERMINATION

A. Shippers No Longer Contend That Railroad Gaming Justifies A Departure From The Percent Reduction Methodology

The Board launched its consideration of new methods for calculating maximum reasonable rates based on shipper complaints about railroad "manipulation" or "gaming" of the percent reduction approach. NPRM at 7. Shippers' claims of railroad "gaming" in recent cases have been explicit. In *Xcel*, the complainant accused BNSF of "attempt[ing] in this case to 'game' the percent reduction methodology" by setting artificially high rates and it urged the Board to adopt alternative rate reduction methodologies to address the alleged "gaming."² In *CP&L/Duke*, the complainant argued "that the Board should not continue to use [the percent reduction] approach because it permits a railroad to manipulate the outcome of the regulatory process" by setting "rates at an inordinately high level."³

On opening, BNSF demonstrated that there is no evidence in any case that has come before the Board that railroads have actually sought to manipulate the outcome of SAC

² *Public Service Company of Colorado D/B/A Xcel Energy v. The Burlington Northern & Santa Fe Railway Co.*, STB Docket No. 42057, Complainant's Post-Evidentiary Brief, at 7 (filed Sept. 8, 2003). Notwithstanding that the challenged rates represented a significant increase from the prior rates, the Board concluded that there was no "evidence here that BNSF sought to manipulate the Board's rate review process" and it found that "[a]dherence to the percent reduction methodology to set the maximum SAC rate is therefore reasonable here." *Public Service Company of Colorado D/B/A Xcel Energy v. The Burlington Northern & Santa Fe Railway Co.*, STB Docket No. 42057, slip op. at 38-39 (served June 8, 2004) ("*Xcel*").

³ *Carolina Power & Light Co. v. Norfolk Southern Railway Co.*, STB Docket No. 42072, slip op. at 31 (served Dec. 23, 2003) ("*CP & L/NS*").

proceedings by setting common carrier rates at an unjustifiably high level. *See* BNSF Op. Comments at 42-45. The problem that led the Board to consider alternatives to the percent reduction methodology does not exist. BNSF also showed that if the Board is concerned about the theoretical possibility that gaming could occur, the appropriate action is to develop an objective test for gaming, not to throw out the concept of demand-based differential pricing that underlies the *Guidelines* by adopting a maximum rate methodology that is antithetical to the *Guidelines*.⁴

In their reply round of comments, the Coal Shippers⁵ did not respond to BNSF's argument that there is no evidence that railroads have sought to manipulate SAC outcomes by setting artificial prices. They also ignored BNSF's argument that the Board's proposed alternatives would effectively create an unwarranted, un rebuttable presumption that railroads are attempting to game the SAC procedure whenever they set a rate that might be the subject of a rate reasonableness challenge. Instead, the Coal Shippers on reply abandoned their assertion that railroad "gaming" justifies elimination of the percent reduction method:

It is perhaps unfortunate that a term such as "gaming" has come to be used to frame one of the flaws in the percent reduction method, for it allows the inappropriate introduction of questions of subjective, specific intent or malevolent motivation, and with them an implicit burden of proof which may be impossible to meet. . . . The problem with percent reduction is not that it invites market dominant carriers to act with bad intent.

Coal Shippers Reply Comments at 9.

⁴ *See* Verified Statement of Joseph P. Kalt at 25-34 ("Kalt Op. V.S."); Initial Verified Statement of Robert D. Willig at 25-27 ("Willig Op. V.S."); Verified Statement of Darius W. Gaskins, Jr., at 4-8 ("Gaskins Op. V.S.").

⁵ Joint Reply Comments of Western Coal Traffic League, Concerned Captive Coal Shippers, Western Fuels Association, Inc., Edison Electric Institute, National Rural Electric Cooperative Association, and American Public Power Association ("Coal Shippers Reply Comments"). BNSF refers to this group of shippers in its comments as the "Coal Shippers."

It is now clear that the Coal Shippers' real argument against the percent reduction methodology is not that railroads might manipulate the rate reasonableness process but that any method of determining maximum reasonable rates that is influenced by demand-based prices established by the railroads is impermissible. They state:

The problem simply is that, by applying a method in which the rate chosen by the monopolist dictates the maximum rate level, the Board effectively has ceded its core responsibility under 49 U.S.C. § 10701(d)(1) to the railroads, and does not fulfill its statutory mandate to engage in "meaningful rate regulation."

Coal Shippers Reply Comments at 9 (citation omitted). According to WFA/Basin, allowing a railroad's demand-based rates to influence the level of prescribed rates "is unlawful because Congress has directed that the Board – not the railroad industry – set maximum rates."⁶ The shippers' complaint with the percent reduction methodology is that it preserves the defendant's demand-based rate structure, thus giving railroad defendants influence over the level of a prescribed rate when they set a demand-based rate. The shippers are therefore challenging the fundamental premise of the *Guidelines* that rates should be set in response to a shipper's demand for transportation. If successful, this challenge would effectively repeal the *Guidelines*.

B. The Shippers' Position That Demand-Based Differential Pricing Should Have No Role In Determining Maximum Reasonable Rates Is Contrary To Fundamental Principles In The Guidelines

The Coal Shippers' reply comments are a continuation of their assault on demand-based differential pricing and the economic framework adopted in the *Guidelines*. In its opening

⁶ Additional Reply Comments of Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc., at 3 ("WFA/Basin Reply Comments"). The Coal Shippers repeatedly claim that the common carrier rate set by the railroad "dictates" the outcome of rate proceedings. This argument is silly. It is obviously impossible for a railroad to predict the outcome of rate proceedings with any precision given the many variables involved and the fact that the complaining shipper is allowed great latitude in configuring the SARR and choosing a traffic group.

comments, BNSF explained in detail the statutory, regulatory, and economic factors that led the ICC to adopt differential pricing as the basis for the regulatory standard set out in the *Guidelines*. BNSF Op. Comments at 18-28. Instead of addressing these issues, the shippers turn to rhetoric that demonstrates their fundamental hostility toward demand-based differential pricing. According to the Coal Shippers, it “is proof positive that a railroad is engaging in unrestrained monopoly pricing” when a railroad sets rates based on demand. Coal Shippers Reply Comments at 11. AEP Texas claims that a railroad’s setting of a rate based on perceived demand “essentially is unrestrained monopoly pricing, and tantamount to allowing the railroads to charge whatever the traffic will bear.”⁷

The Coal Shippers’ position is that rates set by railroads in response to observed demand must be taken out of the equation in setting a maximum reasonable rate. Indeed, it is because MCM and MMM sever the link between the demand-based price set by a railroad and the level of any prescribed rate that the Coal Shippers support the Board’s proposals. As the Coal Shippers state, “MCM and MMM are not rate reduction methodologies, as such. Rather, they ‘build’ SAC – based rates from the ground up.” Coal Shippers Reply Comments at 16.⁸ The Coal Shippers are correct that MCM and MMM establish maximum reasonable rates largely without reference to the demand-based rates set by the defendant, and that is precisely why MCM and MMM are inconsistent with the *Guidelines* and the principles underlying the *Guidelines*.

⁷ Reply Comments of AEP Texas North Company, at 6 (“AEP Texas Reply Comments”).

⁸ The Coal Shippers make the obscure claim that MCM and MMM use “the defendant’s rate structure as a measuring tool.” Coal Shippers Reply Comments at 16. But the defendant’s rate structure is relevant to the setting of a rate under MCM/MMM only with respect to the rates that are below the uniform rate-per-ton-mile or revenue-to-variable-cost ratio that MCM/MMM calculates. Otherwise, the defendant’s rate structure is irrelevant to the MCM/MMM calculations. Those methodologies establish the uniform rate-per-ton-mile or revenue-to-variable-cost ratio based on the level of revenues needed to cover SAC costs.

The *Guidelines* are expressly based on a recognition that “the railroad industry necessitates differential pricing of rail services.” *Guidelines* at 526. While “‘Ramsey pricing’ is a widely recognized method of differential pricing, that is, pricing in accordance with demand,” the ICC concluded that the difficulty of calculating Ramsey prices made it necessary to adopt an alternative. *Id.* As Professor Willig explains in his rebuttal verified statement, the alternative set out in the *Guidelines* envisions a three step-process of maximum rate regulation that should produce results that reasonably approximate Ramsey prices.⁹

The first step is for a railroad to set its rates in response to observed demand. Indeed, the *Guidelines* are explicit about the need to rely on a defendant’s perceived market demand: “Under CMP, the carriers are expected to use the market demand which they observed as the basis for their pricing.” *Id.* at 527. The second step is to conduct a SAC analysis that reveals whether the rates set by the railroad in the first instance generate revenues from a group of shippers that share common facilities that exceed the amount needed to cover the forward-looking costs of those facilities. The third step, if required, is to reduce rates in a manner that caps revenues at levels sufficient to cover forward-looking costs while preserving the defendant carrier’s pre-existing rate structure to the maximum extent possible. Once again, the *Guidelines* are clear that the defendant’s demand-based rate structure should be preserved in this third step to the maximum extent possible: “In considering a rate prescription and/or reparations, we will attempt to provide an effective remedy for the complaining shipper, but in a manner that would not introduce further distortions into the carrier’s pricing structure.” *Id.* at 548.

Professors Willig and Kalt explain in their respective rebuttal statements why it is critical to the scheme of the *Guidelines* that railroads be permitted to set prices in response to observed

⁹ See also Verified Statement of John C. Klick at 4-6 (“Klick Op. V.S.”).

demand and that the railroad's rate structure be preserved if rates to a group of shippers are found to exceed the rates necessary to cover SAC costs. Profit-maximizing railroads set their rates in accordance with Ramsey principles. The Guidelines acknowledge this by adopting a presumption that existing rates are at Ramsey optimal levels. *Id.* at 544. Demand-based differential prices can be assumed to reflect the value that each shipper places on the rail services it receives. Therefore, demand-based prices can be assumed to reflect the appropriate mark-up for each shipper, as Ramsey pricing requires. If CMP were to use some other starting point for the rate reduction process, that starting point would not properly reflect the value shippers place on services and the rate reduction would therefore also not reflect these values.

Some of the Coal Shippers' rhetoric suggests not only that rate reductions should not be based on demand-based rates, but that railroads should not be permitted to price in response to demand at all, at least for captive customers. The Coal Shippers argue, for example, that railroads should not be permitted to set a profit-maximizing rate in response to demand because "[t]he governing statute says nothing about a 'profit maximizing rate.'" Coal Shippers Reply Comments at 9-10. Similarly, railroad pricing in response to demand for traffic that does not have another rail alternative "is proof positive that a railroad is engaging in unrestrained monopoly pricing." Coal Shippers Reply Comments at 11. And the Coal Shippers persistently condemn demand-based pricing as "whatever the market will bear."

The Coal Shippers do not propose any alternative to market forces – supply and demand – that would enable railroads to determine what their rates should be. The Coal Shippers may have some notion that for each shipper there exists a "fair" price that is lower than what that shipper's demand would indicate, but any concept of "fair" prices divorced from demand is completely at odds with modern economics. Professor Willig explained in his opening statement

the important role of prices set in response to demand.¹⁰ In particular, they permit the efficient allocation of resources and thereby enhance public welfare.

Holding rates down artificially (and distorting price signals) as the Coal Shippers suggest would have particularly adverse consequences when railroads are experiencing substantial congestion and require additional resources to construct additional infrastructure. The Coal Shippers try to minimize the importance of capacity constraints and congestion in the PRB. Coal Shippers Reply Comments at 6-7. Professor Kalt responds to the shippers' discussion of capacity and congestion in his rebuttal verified statement. He points out that congestion is a real problem in the PRB that should not be exacerbated by adopting regulatory policies that interfere unduly with railroads' ability to make necessary capital expansion. Indeed, should the Board adopt the policies advocated by the Coal Shippers, the result would be a rail infrastructure that is insufficient to fulfill its role in ensuring reliable supply of electricity to the public.

The Coal Shippers grossly misrepresent BNSF's opening evidence, in which BNSF showed how the Board can determine whether a challenged rate is a valid demand-based rate rather than an artificially high rate set by the railroad to manipulate the SAC process. Dr. Gaskins showed that it is possible to evaluate objective evidence relating to a shipper's dispatch alternatives to determine whether a rate set by a railroad is artificially high relative to demand. Instead of addressing Dr. Gaskin's evidence, the Coal Shippers misrepresent BNSF's position as advocating "unrestrained monopoly pricing." Coal Shippers Reply Comments at 11. AEP Texas claims that BNSF's position is "tantamount to allowing the railroads to charge whatever the traffic will bear." AEP Texas Reply Comments at 6. BNSF is not arguing that a rate set based on perceived demand should be "unrestrained" by regulation. A market-based rate may be found

¹⁰ Willig Op. V.S. at 7-11.

to exceed a maximum reasonable level under the SAC test and, if so, it may be reduced to the maximum reasonable level. But if a rate is a valid market-based rate, it would be illogical to assume that the rate was the product of “gaming” for which the railroad should be penalized. Unless the Board finds “gaming” in a particular case, there would be no basis for the Board to discard the percent reduction methodology.¹¹

C. Despite Shipper Claims To The Contrary, MCM And MMM Do Not Preserve Railroad Rate Structures

Although the Coal Shippers continue to urge the Board not to adopt a single maximum rate methodology, they offer testimony by George H. Borts that supports MCM and MMM as consistent with the *Guidelines*.¹² Professor Borts devotes one paragraph in his statement to this topic, and he nowhere attempts to address the detailed analysis of MCM and MMM that BNSF submitted on opening.¹³ BNSF and its witnesses demonstrated that MCM and MMM are inconsistent with the *Guidelines* and Ramsey pricing principles because they do not permit demand-based differential pricing. Among other things, MCM and MMM ignore the demand elasticities of individual shippers, produce results that “flip” the elasticities of individual shippers without any justification,¹⁴ compress and distort the rate structure of the incumbent railroad, raise

¹¹ The Coal Shippers discuss at length *Railroad Exemption – Export Coal*, 367 I.C.C. 570 (1983) and the D.C. Circuit’s decision in that case on appeal, *Coal Exporters Association v. United States*, 745 F.2d 76 (D.C. Cir. 1984). See Coal Shippers Reply Comments at 11-13. The Coal Shippers’ point is that the setting of a rail rate based on demand does not free the rate from regulatory scrutiny. But BNSF has never suggested anything to the contrary. BNSF has not suggested that a rate set based on perceived demand must be free of regulatory scrutiny, just that such a rate cannot rationally be deemed to be the product of “gaming.”

¹² Reply Verified Statement of George H. Borts (“Borts Reply V.S.”).

¹³ See BNSF Op. Comments at 28-40; Kalt Op. V.S. at 16-25; Willig Op. V.S. at 20-27; Klick Op. V.S. at 9-23.

¹⁴ See Kalt Op. V.S. at 21. As Professor Kalt explains the implied elasticities for certain shippers in the Board’s examples are flipped when MCM is applied. Prior to application of

the rates of lower-rated traffic relative to higher-rated traffic, and introduce new sources of bias into the calculation of maximum reasonable rates.

Despite the detailed analysis of MCM and MMM submitted by BNSF, Professor Borts blithely states:

Both methods are consistent with the economic principles that underlie the Guidelines, because they guarantee that rail rates do not generate revenues in excess of SAC, and they allocate SAC among the SARR's shippers in a manner that respects their relative elasticities of demand. Moreover, the allocation procedures under MCM and MMM are sufficiently flexible to preserve the existing structure of the defendant's freight rates, by leaving relatively intact the ranking of shippers from high to low rates per ton-mile.

Borts Reply V.S. at 1-2. Professor Borts claims, without any analysis, that MCM and MMM *do* reflect shipper demand elasticities and *do not* distort the existing structure of the defendant's rates. It is impossible to explore the bases for Professor Borts' claims because there is nothing in his statement beyond these bare claims. But it is possible to show that he is wrong.

The Board's own example in the NPRM show that the rate structure established by the defendant railroad is not preserved after MCM and MMM are applied. Rates that reflect substantial differences in demand elasticity are driven to the same level, while the range between the railroad's highest and lowest rates is compressed.

The effects of MCM and MMM on a railroad's rate structure can be seen even more clearly by extending the Board's example to include more data points. Mr. Klick prepared a more detailed example using the shippers included in the SARR posited by WFA/Basin in the *Laramie River* case. There, complainants assumed that all shippers except the issue traffic were handled by the SARR as cross-over traffic and that the revenues would be based on the MSP

MCM, Complainant implicitly had less elastic demand than Shipper 2; after application of MCM, Complainant implicitly had more elastic demand than Shipper 2.

methodology. BNSF has explained previously that it is important to preserve the defendant's rate structure, which can only be accomplished by reference to through rates. Even if one were to assume, however, that the SARR revenue allocations constitute a meaningful rate structure, it is clear that the rate structure is completely distorted by the application of MCM and MMM.

Mr. Klick plotted the SARR rate for the shippers in the *Laramie River* traffic group prior to application of any rate reduction methodology.¹⁵ He then applied MCM and MMM to the pre-existing SARR rates using WFA/Basin's assumed SAC costs¹⁶ and plotted the resulting distribution of rates.¹⁷ For both MCM and MMM, a comparison of the before and after rate distribution reveals that there is no possible basis to claim that the existing rate structure was preserved by application of MCM and MMM. *See* Klick Reb. V.S., Diagrams 2 and 3. Professor Borts' general and unsubstantiated statements concerning the impact of MCM and MMM on a railroad's existing rate structure are simply wrong.

D. The Board's Current Maximum Rate Methodology Is Fully Consistent With The Long-Cannon Requirement To Maximize Revenue From Marginal Traffic.

The Coal Shippers also argue that MCM and MMM give effect to what they characterize as a Long-Cannon requirement "to consider whether a carrier is maximizing revenues from lower-rated traffic" by leaving untouched the rates on lower-rated traffic and reducing only the rates on higher rated traffic. Coal Shippers Reply Comments at 17-18. In the NPRM, the Board

¹⁵ Mr. Klick's presentation of these examples does not reveal any confidential information related to individual shippers. No shipper is identified and it is not possible to determine the identity of a particular shipper from the data. The examples rely upon data in public filings concerning the SAC costs assumed by WFA/Basin in the *Laramie River* case.

¹⁶ *See* WFA/Basin Rebuttal Nar. at III-H-1 (September 30, 2005).

¹⁷ While BNSF presents this example using the WFA/Basin SAC assumptions, MCM and MMM will have the same impact on any traffic group with a wide diversity of demand-based rates.

made a similar observation and suggested that a requirement to maximize revenues from lower-rated traffic was in conflict with (and trumped) Ramsey pricing principles that would otherwise require an adjustment to all rates, even low-rated traffic, if SAC revenues were found to exceed SAC costs. NPRM at 12.¹⁸ In fact, there is no conflict between Ramsey pricing principles and Long-Cannon requirements. Both Ramsey pricing and the Long-Cannon factors are intended to ensure that a railroad's prices are efficient and that they maximize the contribution from each shipper given the demand elasticity of that shipper.

The Long-Cannon factor at issue, the second, requires the Board to give due consideration to "the amount of traffic which contributes only marginally to fixed costs and the extent to which, if any, rates on such traffic can be changed to maximize revenues from such traffic." 49 U.S.C. § 10701(d)(2)(B).¹⁹ The ICC discussed this Long-Cannon factor in the *Guidelines* in the context of the management efficiency constraint on rates – not as part of the stand-alone cost constraint. However, it is clear that the ICC perceived this Long-Cannon factor to be directed at the same objective as Ramsey pricing – to ensure efficient, demand-based

¹⁸ While the Board seems to perceive a conflict between Ramsey pricing principles and the second Long-Cannon factor, the Coal Shippers apparently disagree. They state that MCM and MMM are consistent with both. The Coal Shippers claim that leaving rates for lower-rated traffic unchanged while reducing rates for higher-rated traffic is somehow consistent with Ramsey principles because "it minimizes disruption of the existing rate structure." Coal Shipper Reply Comments at 18. This is obviously incorrect. As shown in the Klick rebuttal verified statement, there is no conceivable basis to argue that the incumbent's rate structure is relatively unchanged by application of either MCM or MMM. Moreover, Ramsey pricing involves the interrelationship of mark-ups among various shippers, and it is impossible to retain those rate relationships if one rate is changed but another is not. BNSF demonstrated on opening that if a rate reduction is called for, Ramsey pricing principles dictate that rates for all shippers (except for those already priced at marginal cost) should be reduced.

¹⁹ Hence, the statute does not instruct the Board to consider whether revenues are being maximized on traffic at the lower end of the rate spectrum first before considering how much shippers at the upper end of the rate spectrum should be charged. The statute directs the Board to consider a specific sub-group of lower-rated traffic that makes only a marginal contribution to fixed costs. As explained below, Ramsey pricing maximizes revenues from all shippers, and therefore complies with the Long-Cannon revenue maximization requirement.

prices. As the ICC explained in the discussion of the management efficiency constraint, “[u]nder CMP, a carrier must charge its competitive traffic as much of the unattributable costs as the demand will permit.” *Guidelines* at 539. The emphasis is on ensuring that a railroad’s rate structure is efficient: “The second Long-Cannon factor relates to the proper pricing of competitive traffic to maximize the contribution from this traffic.” *Id.* at 541.

In their opening verified statements, Professors Willig and Kalt explained that Ramsey pricing results in the most efficient rate structure.²⁰ Ramsey pricing principles are the formal economic underpinning of the real-world demand-based prices that railroads are permitted (and expected) to set. The second Long-Cannon factor pursues the same Ramsey principles by requiring that even lower-rated traffic contributes to unattributable costs to the extent its demand permits. The Long-Cannon factors do not instruct the Board to promote *higher* than Ramsey optimal prices on low-rated traffic so that high-rated traffic can pay *less* than Ramsey optimal prices. As Professors Kalt and Willig explain further in their rebuttal statements, Ramsey-based prices seek to maximize revenues from *all* traffic based on the relative demand elasticity of *all* shippers, so there is no conflict between Ramsey pricing and Long-Cannon.²¹

The Board’s contrary assumption that the way to maximize revenues from traffic that contributes only marginally to fixed costs is to abandon Ramsey principles with respect to that traffic and leave rates unchanged is both unsupported and incorrect. Depending on the slope of an individual shipper’s demand curve, lower rates should result in additional volumes and

²⁰ See Willig Op. V.S. at 5-16, 22-24; Kalt Op. V.S. at 7-12.

²¹ The ICC concluded that the second Long-Cannon factor addresses the fact that “in the short-run (i.e. given the existing plant), efficient pricing of competitive traffic can range anywhere from directly variable cost to the long-run Ramsey optimal level, depending upon market demand.” *Guidelines* at 541. The objective of the second Long-Cannon factor was to maximize revenue on this traffic up to the Ramsey optimal level, not to set rates for this traffic *above* that level. Because MCM/MMM result in rates on low-rated traffic that exceed Ramsey optimal levels, those maximum rate methodologies actually conflict with Long-Cannon.

associated revenues. The revenues for the additional traffic may well increase the net contribution to fixed costs realized on such traffic.

Nor is there reason to believe that the rates MCM and MMM leave unchanged are the rates that the second Long-Cannon factor suggests should be maximized. The second Long-Cannon factor instructs the Board to focus on traffic that “contributes only marginally to fixed cost.” MCM and MMM, however, do not draw a line between traffic that contributes “marginally” and traffic that makes more than a “marginal” contribution. Indeed, MCM and MMM do not even attempt to measure whether traffic makes more than a marginal contribution to fixed costs. Instead, MCM and MMM establish an arbitrary break point, on a case-by-case basis, between shippers whose per-ton mile rate (MCM) or R/VC (MMM) is at or below the average required for a given SARR and shippers who are above the relevant average.²² In arguing that MCM and MMM promote Long-Cannon objectives, the Board and Coal Shippers are actually creating an irrebutable presumption, without any evidence or analysis, that all shippers whose rates are at or below the average required for a given SARR fall into the category of traffic that “contributes only marginally to fixed cost” and therefore should not have their rates reduced.²³ To the contrary, whether or not a shipper falls into the group that receives no rate reduction in a given case will be highly dependent on the SARR configuration and traffic group chosen by a complainant, as well as the calculated stand-alone costs. The shipper’s

²² As Professor Willig noted in his opening verified statement, it is not appropriate to label the shippers whose rates are unchanged “competitive” and those whose rates are reduced “captive.” Willig Op. V.S. at 20-22. There is clearly no rational basis for concluding that a shipper whose rates are left untouched contributes only “marginally” to fixed costs while other shippers make more than a “marginal” contribution.

²³ Even before the *Guidelines* were issued, the ICC concluded that the impact of Long-Cannon factors can only be assessed based on specific evidence, submitted by a complainant who has a burden of proving that the defendant railroad’s rates are not in compliance with Long-Cannon. See *Arkansas Power & Light Co. – Implementation of Long-Cannon Amendment to the Staggers Rail Act*, 365 I.C.C. 983, 997 (1982).

placement into the group of shippers that receive or do not receive a rate reduction will have nothing to do with any assessment of that shipper's contribution to fixed costs.

The Board's current percent reduction methodology produces rates that reflect the relative demand elasticity of all shippers in the traffic group at issue in a SAC analysis and that maximize the contribution of revenue from those shippers in relation to that demand elasticity. The Board's current methodology produces Ramsey-based prices and it is fully consistent with the efficient-pricing objectives reflected in the Long-Cannon factors. There would be no justification for abandoning it now.

III. REVENUE ALLOCATION FOR CROSS-OVER TRAFFIC

A. There Are Two Valid Alternative Approaches To Calculating Revenues On Cross-Over Traffic Depending On How A SARR Using Cross-Over Traffic Is Viewed

The proper methodology for calculating revenues for cross-over traffic depends on how a SARR that uses cross-over traffic is viewed. Two alternate views of a SARR with cross-over traffic have developed. One view is that the SARR using cross-over traffic is a partial entrant into the market for the through movement that has made a strategic decision to handle only a portion of that movement. This partial entrant view flows from the logic of contestability theory and barrier free entry as explained by BNSF's expert, Professor Kalt. An alternate view of a SARR using cross-over traffic is that the SARR is a simplification device intended to approximate the results of a full SARR that encompasses all the rail lines necessary to serve the residual incumbent's through movements without requiring the complainant to incur the expense and complication of building the network that would be necessary to serve the through movements. This view of the SARR as a simplification device was clearly articulated in the Board's *Xcel* decision, where the Board explained that the "use of cross-over traffic thus provides a reasonable measure of simplification that allows SAC presentations to be more

manageable. Curtailing the geographic scope of the SARR greatly simplifies the operating plans that must be developed, thus limiting the complexity of what is nevertheless still a dauntingly large and detailed task.”²⁴

If the SARR using cross-over traffic is viewed as a partial entrant into the market, then, as Professor Kalt has explained, the appropriate approach for allocating revenue on that cross-over traffic is the avoidable cost approach, which uses the principles of contestability to assess the consequences of the SARR’s partial entry decision.²⁵ The shippers’ principal criticism of the avoidable cost approach is that it was already rejected by the ICC in *Nevada Power II*.²⁶ As explained in BNSF’s previous comments in this rulemaking, the Board should reconsider the *Nevada Power II* holding. The other criticisms raised by the shippers to the avoidable cost approach have no merit.

Alternatively, if the SARR with cross-over traffic is viewed as a simplification device that should approximate the results of a full SAC analysis, the best method identified for allocating revenues for cross-over traffic is the ATC method proposed by the Board. The criticisms of the ATC method made by various parties to this proceeding are not meritorious. Contrary to the shippers’ claims, the evidence in the record establishes that ATC is superior to MSP because it addresses certain flaws inherent in the MSP methodology. Unlike MSP, ATC takes account of both economies of density and the diminishing returns thereto. As a result,

²⁴ *Xcel*, at 16.

²⁵ See Kalt Op. V.S., § IV; Kalt Reply V.S., § IV.A; Kalt Rebuttal V.S., § III and III.A.

²⁶ *Bituminous Coal – Hiawatha, Utah to Moapa, Nevada*, 10 I.C.C. 2d 259 (1994) (“*Nevada Power II*”). The principal substantive comments made by the shippers on reply appear in the Coal Shippers Reply Comments. Their reply comments were incorporated into the separate reply comments of several other shippers. See, e.g. AEP Texas Reply Comments at 1-2; Reply Comments of PPL EnergyPlus, LLC at 1 (“PPL Reply Comments”); WFA/Basin Reply Comments at 1.

under the D.C. Circuit's recent decision upholding the Board in the *Xcel* stand-alone case, a Board decision to reject the ATC model and "to adhere to its MSP model would be on shaky ground indeed." *BNSF Railway Co. v. STB*, 2006 WL 1651041 (D.C. Cir. June 16, 2006) (hereafter "*BNSF Decision*") at 17.

B. Contrary To The Shippers' Claims, The Avoidable Cost Approach Is An Appropriate Methodology For Allocating Cross-Over Revenues If The SARR Is Viewed As A Partial Market Entrant For Only A Portion Of Through Movements

1. The Avoidable Cost Approach, Unlike Real World Divisions, Is Consistent With Principles Of Contestability Theory

If the SARR with cross-over traffic is viewed as a partial SARR that intentionally enters the market to serve only a portion of through movements, then the principles of contestability that underlie the *Guidelines* support adoption of the avoidable cost approach, not real world divisions (or their proxy), as the proper revenue allocation methodology for cross-over traffic. As explained by Professor Kalt in his reply statement at 30-31, real world rail markets are not contestable because they are subject to fixed and sunk costs that constitute barriers to entry. Consequently, the shippers' support for real world divisions (or their purported proxies – MSP/MMP) as a methodology for allocating cross-over revenues is improper since real world divisions reflect the same factors that make real world rail markets *not* contestable. Those factors include "which railroad has the most market power, which railroad has the most irretrievably sunk costs, which railroad has the most credible threat of surmounting entry barriers and building out to replace the counterparty's facilities . . ." *Id.*

In contrast, as explained in detail in the opening testimony of Professor Kalt, under simulated conditions of a contestable market where there are no barriers to entry or exit, the rates that a SARR could expect as a partial entrant into the market would be set by reference to the avoidable costs (both fixed and variable) of the incumbent on the portion of the cross-over route

handled by the SARR.²⁷ As Professor Kalt explained, “[t]he appropriate starting point for determining revenue on cross-over traffic is found in the economics of the competition that would take place between a residual incumbent and a SARR under simulated conditions in which neither is subject to barriers to entry or exit (i.e. conditions of contestability). Such competition yields the straightforward result that prices that the ‘winner’ can charge in a contest in a contestable market will not exceed the avoidable costs of the next best alternative (i.e., the loser). In the SAC context, the next best alternative to the SARR’s carriage of its portion of a cross-over move on its system is the carriage of that same portion of the cross-over move by the incumbent on its system.” *Id.* at 39.

2. The Shippers’ Criticisms Of The Avoidable Cost Approach Lack Force

The shippers’ reply comments focus on criticizing the avoidable cost approach proposed by BNSF. Their criticisms are unavailing.

The primary criticism made by the shippers of Professor Kalt’s contestability pricing approach is that it was already rejected by the Board’s predecessor, the ICC, in the *Nevada Power II* decision. In its opening comments at 52-53, BNSF explained why the Board should reconsider the *Nevada Power II* decision. In their reply comments, the shippers have presented no persuasive arguments to the contrary. Professors Kalt and Willig explain further in their rebuttal statements that while the ICC ruling in *Nevada Power II* was not consistent with the economic principles in the *Guidelines*, much of the ICC’s discussion in that decision supports the contestable pricing approach that Professor Kalt has urged the Board to adopt.²⁸

²⁷ Kalt Op. V.S., § IV.A.

²⁸ Kalt Rebuttal V.S., § III.A; Willig Rebuttal V.S., § III.

The shippers argue that Professor Kalt's avoidable cost approach is inconsistent with the Board's suggestion in *Nevada Power II* that the SARR should be a replacement for, not competitor of, the incumbent carrier. See Coal Shippers Reply Comments at 25, 26. Professor Kalt explains in his rebuttal statement that the avoidable cost approach is not inconsistent with the concept of the SARR as a "replacement for" the residual incumbent as that concept is described in the *Nevada Power II*. In that decision, the ICC described the entrant SARR "as a replacement for that segment of the rail system whose services the entrant would be offering." 10 I.C.C. 2d at 267. By characterizing the SARR as a "replacement," the Board intended to preclude "any post-entry responses by the incumbent" to the SARR's entry into the market. *Id.* The post-entry responses that the ICC was concerned about involved the existence of sunk costs already incurred by the real world incumbent which, as Professor Kalt explains, would "allow a real world incumbent to 'retaliate' in response to the prospect of entry by ignoring sunk fixed costs and reducing its rates all the way down to variable costs." Kalt Rebuttal V.S. at 24. Specifically, in *Nevada Power II*, the ICC described the problem as:

Because of the prevalence of "sunk costs" in railroading, however, post-entry competition between a SARR and an incumbent will not mirror contestable outcomes. That is because an incumbent could remain in the market even if it were to offer rates that do not cover costs that are already sunk. . . . [Accordingly,] a potential entrant will shun a market when price retaliation by the incumbent reduces revenues before the entrant has a chance to recoup its costs.

10 I.C.C. 2d at 266-267. Under the avoidable cost approach, the incumbent has no sunk costs and, therefore, has no incentive to price below the full avoided costs, including fixed and variable costs, to keep the SARR out of the market. Indeed, as long as it can recover its avoidable costs, the incumbent is indifferent between providing the service itself or having the SARR provide the service. Consequently, under the avoidable cost approach, Professor Kalt explains that "the incumbent and its sunk costs are effectively removed from the picture as a

competitor for the service offered by the SARR. For the services offered by the SARR, the SARR is a replacement for the incumbent.” Kalt Rebuttal V.S. at 24.

The avoidable cost approach is also consistent with the ICC’s view, cited with approval by Professor Borts,²⁹ that “a SARR’s interline rail partners [including the residual incumbent, are] additional *customers* of the SARR.” *Nevada Power II*, 10 I.C.C. 2d at 280. The Board has recognized that a SARR will succeed in attracting customers only if it provides comparable service at comparable prices.³⁰ If the residual incumbent is viewed as an additional customer of the SARR, as Professor Willig explains, it “must be left no worse off, from handling cross-over traffic than [it is] today, which means [it] should earn the same contribution from handling those movements in cross-over service as [it does] in the real world today.”³¹ The avoidable cost approach ensures that the residual incumbent’s contribution on each cross-over movement is unaffected by the partial entry of the SARR and, consequently, that the residual incumbent is a willing customer of the SARR. *Id.* at 9; *see also* Willig Op. V.S. at 29.³²

The shippers also reject BNSF’s assertion that the Board should reconsider the *Nevada Power II* decision because the ICC did not know when it issued that decision that shippers would make such extensive use of cross-over traffic. The shippers point out that such traffic constituted 60% of the traffic group in the *Nevada Power* case. Coal Shippers Reply Comments at 29. As an initial matter, the use of cross-over traffic in the *Nevada Power* case arose from unusual

²⁹ Borts Reply V.S. at 8.

³⁰ *See Texas Municipal Power Agency v. The Burlington Northern & Santa Fe Railway Co.*, STB Docket No. 42056, slip op. at 18, note 39 (served March 24, 2003)(“*TMPA*”)(the SARR must be able to provide service that does not increase transportation costs for the shipper or result in longer cycle times).

³¹ Willig Rebuttal V.S. at 8.

³² *See TMPA* at 24 (rerouting of traffic should not make the residual incumbent any worse off).

circumstances. Originally, the complainant proposed a SARR that had no cross-over traffic and a small network.³³ Following UP's production of additional traffic data in response to an ICC order, the complainant expressed a desire to expand its network to include additional traffic and proposed to serve that additional traffic from origin-to-destination. *Nevada Power II*, 10 I.C.C.2d at 263-265 and n. 12. UP opposed the expansion of the rail network and, as a result, the ICC required the complainant to use the original smaller network but allowed Nevada Power to add the supplemental traffic to that network as cross-over traffic. *Id.* Given the history of the *Nevada Power* case, the ICC could not have anticipated the subsequent attempts to use cross-over traffic as the central focus of the SAC presentation. In any event, in the most recent SAC cases filed with the Board, cross-over traffic constitutes 90% or more of the traffic group.³⁴ This is a much more extensive use of cross-over traffic than the ICC saw in *Nevada Power II*.

The shippers take issue with another argument made by BNSF in support of its position that the Board should reconsider *Nevada Power II*. BNSF explained that the ICC was incorrect in concluding in *Nevada Power II* that setting SARR divisions at the incumbent's avoidable costs would allow for only minimal contribution to the SARR's joint and common costs. The shippers claim that the ICC was, in fact, correct. Coal Shippers Reply Comments at 25, 30. As an initial matter, criticizing a revenue allocation method on the basis that it allocates too little revenue to

³³ *Bituminous Coal – Hiawatha, Utah to Moapa, Nevada*, 6 I.C.C. 2d 1, 45 (1989) ("*Nevada Power I*").

³⁴ *Xcel*, slip op. at 13 (cross-over traffic constitutes over 90% of SARR traffic group); *Duke Energy Corporation v. CSX Transportation, Inc.*, STB Docket No. 42070, slip op. at 19 (served Feb. 4, 2004) ("*Duke/CSX*") (cross-over traffic constitutes almost 90% of SARR traffic group); *Otter Tail Power Company v. BNSF Railway Company*, STB Docket No. 42071, Supplemental Evidence of BNSF Railway Co., at III.A-1 (filed March 1, 2005) (of 205 million tons transported by SARR in base year, all but issue traffic is cross-over); *Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc. v. BNSF Railway Company*, STB Docket No. 42088, BNSF Reply Nar. at III.A-1 (filed July 20, 2005) (cross-over traffic constitutes 96% of SARR volume in 2005).

the SARR begs the real question of how much revenue the SARR is entitled to. In any event, the only evidence relied on by the shippers to support their position is UP's statement in the *Nevada Power II* case that the ECP approach would result in minimal contribution to joint and common costs. However, UP's concession in a case decided 12 years ago is inconsistent with BNSF's showing on opening that an URCS-based measure of avoidable cost provides for substantial contribution to joint and common costs since it includes significant road property costs. See BNSF Op. Comments at 52; Kalt Op. V.S. at 47. The shippers make no effort to refute this showing. Moreover, if the SARR is more efficient than the residual incumbent, its costs should be lower than those of the incumbent and, consequently, setting the SARR's cross-over revenues at the level of the incumbent's avoidable costs should result in substantial contribution to the SARR's joint and common costs. Further, if the complainant believes the SARR does not obtain enough revenue for cross-over traffic under the avoidable cost approach, the complainant always has the option of constructing the SARR to encompass the entire through movement(s) and, thereby, obtaining the entire contribution for the movement(s). See Kalt Op. V.S. at 42.

C. Contrary To The Shippers' Claims, The ATC Approach Is An Appropriate Methodology For Allocating Cross-Over Revenues If The SARR With Cross-Over Traffic Is Viewed As A Simplification Device That Should Approximate The Results Of A Full SARR

Apart from the critique of UP's position in the *Nevada Power II* decision, the Board has not analyzed cross-over traffic with specific reference to contestable market principles. Instead, the Board has explained that cross-over traffic is a simplification device intended to approximate the results of a full SARR encompassing the lines necessary to serve the residual incumbent's through movements, without requiring the complainant to incur the expense of building the network that would be necessary to serve the through movements. Specifically, in the NPRM, the Board explained that "[i]n allowing the use of cross-over traffic, we seek to make the

analysis more manageable without introducing bias. Thus, the goal in allocating revenue from cross-over traffic should be to ensure that a simplified SAC analysis using cross-over traffic will approximate a full SAC analysis, which provides origin-to-destination service for the entire traffic group.” *NPRM* at 17; *see also*, *Otter Tail Power Company v. BNSF Railway Company*, STB Docket No. 42071, slip op. at 14 (served Jan. 27, 2006).³⁵

Viewing the SARR using cross-over traffic as a simplification device for approximating the results of a “full” SARR led the Board to conclude that cross-over traffic revenues should be based on an allocation of through revenues in proportion to on-SARR and off-SARR costs. As the Board explained in *Duke/NS*, the cross-over revenue allocation “should reflect, to the extent practicable, the defendant carrier’s relative costs of providing service over the two line segments.”³⁶ The rationale is that the through revenues on a movement are available to cover the costs of both the on-SARR and off-SARR segments of the through movement. If the average costs on one portion of the movement are higher than the other, a cost-based methodology would ensure that a higher percentage of the through revenues are available to cover those higher costs. For reasons described by the Board and in BNSF’s comments in this proceeding, ATC is a superior cost-based methodology to MSP.

³⁵ Mr. Nelson, an expert submitting testimony on behalf of Arkansas Electric Cooperative Corp., criticizes the avoidable cost approach as being inconsistent with Board’s stated expectation that cross-over revenue allocation methodology should approximate the results of a full SAC analysis. Reply Testimony of Michael A. Nelson on Behalf of Arkansas Electric Cooperative Corp., at 11 (“AECC Reply Comments”). Mr. Nelson’s criticism is beside the point. The appropriate methodology for allocating cross-over revenues depends upon one’s view of the purpose of cross-over traffic. If the purpose is to simplify the evidentiary submission and replicate the results of a full SAC, then ATC is a proper methodology, as discussed below. If the purpose is to allow the SARR partial entry into the market for through movements, then such partial entry would occur in a contestable market, and as Professor Kalt explains, the appropriate approach for allocating revenue on that cross-over traffic is the avoidable cost approach.

³⁶ *Duke Energy Corporation v. Norfolk Southern Railway Company*, STB Docket No. 42069, slip op. at 20 (served Nov. 6, 2003)(“*Duke/NS*”).

The various parties' criticisms on reply of the cost-based revenue allocation approach proposed by the Board lack merit. First, the assertion that no party supports the ATC approach is simply wrong – BNSF has expressed support for this approach since its opening comments, and other railroads have commented that this approach is better than the MSP approach. Second, the assertion that ATC is fatally flawed because it involves the inherently arbitrary allocation of fixed costs is incorrect. Finally, the shippers assertion that neither the Board nor any other party has demonstrated that the ATC methodology is superior to the MSP/MMP methodologies is flatly inconsistent with the evidence in the record. The Board and the D.C. Circuit have recognized that the MSP/MMP methodologies have serious limitations because they fail to take account of economies of density and the diminishing returns thereto. The ATC approach is far superior to MSP/MMP because it does not have this limitation.

1. Contrary To Shippers' Claims, BNSF Has Supported – And Continues To Support -- Adoption Of The ATC Approach

Professor Borts erroneously claims that “all of the participants appear to agree that ATC is an inferior method of allocating cross-over traffic revenue between the SARR and the incumbent railroad.” Borts Reply V.S. at 5. The Coal Shippers similarly claim that the railroads offer, “at best, only tepid support for ATC.” Coal Shippers Reply Comments at 23.

These comments mischaracterize BNSF's position with respect to ATC. The comments submitted by BNSF in this proceeding make clear that BNSF believes that ATC is a valid cost-based approach that is consistent with the Board's simplification rationale for the use of cross-over traffic in a SAC analysis. In its opening comments, BNSF stated that as an alternative to the avoidable cost approach, BNSF “supports the Board's proposal to use the ATC approach as a much better alternative to the Board's current MSP approach.” BNSF Op. Comments at 53; *see also* Klick Op. V.S., § IV; Willig Op. V.S., § IV. In its reply comments, BNSF (and its experts)

reiterated that the Board should adopt the ATC approach if it decides not to adopt the avoidable cost approach because ATC is superior to the MSP method. BNSF Reply Comments at 17; Kalt Reply V.S. at 5; Klick Reply V.S. at 21-22.

Other railroads also expressed the view that the ATC approach is superior to the MSP/MMP approaches. *See, e.g.* Joint Reply Comments of Norfolk Southern Railway Co. and CSX Transportation, Inc., at 12 (“NS/CSX Reply Comments”) (“As CSXT/NS discussed in their opening comments, the ATC represents an improvement over the Board’s existing method for allocating cross-over traffic revenues.”)

2. Adoption Of A Cost-Based Approach Like ATC Is Not Impermissibly Arbitrary

In their reply comments, the Coal Shippers claim that the Board cannot adopt the ATC approach because it involves the “arbitrary” attempt to “allocate a defendant carrier’s total system costs to a particular shipper’s traffic.” Coal Shippers Reply Comments at 22. UP similarly claims that “ATC requires an allocation of a rail carrier’s fixed costs to specific movements” and that “the *Guidelines* recognize that “[a]ny means of allocating these costs among shippers other than actual demand is arbitrary.” Reply Submission of Union Pacific Railroad Company, at 17 (“UP Reply Comments”).

The Coal Shippers and UP mischaracterize the objective of the ATC methodology. BNSF agrees that it is arbitrary to establish rates for a group of shippers by assigning each of the shippers the responsibility for certain joint and common costs on any basis other than demand.³⁷ But ATC does not establish *rates* for particular shippers based upon an allocation of joint and common costs to those shippers and, consequently, the criticism raised by the shippers and UP

³⁷ At pages 38-39 of Professor Kalt’s opening statement, cited by UP on reply (at 18), Professor Kalt made this same point; namely, that it is inappropriate to identify *rates* that particular shippers would accept in a contestable market based on an allocation of costs.

does not apply. Rather the ATC methodology takes the existing through revenue which was established based upon demand, and allocates that through revenue between the SARR and residual incumbent based upon the relative average costs, including fixed costs, of the incumbent's respective line segments used to provide the through transportation.

While it may not be possible to precisely identify the fixed costs associated with particular line segments and, as a result, there is some element of imprecision in the allocation, the average total cost approach, with the fixed cost allocation, results in a reasonable approximation of the relative average costs incurred over the respective on-SARR and off-SARR line segments. In fact, outside the SAC context, the ICC had a well-established practice of dividing the revenues between carriers that provide a through movement in interline service based upon those carriers' relative costs, including their fixed costs. *See* BNSF Reply Comments at 25. This cost-based approach to determining revenue divisions continued for decades and was not struck down on the basis that it involved the "inherently arbitrary" allocation of fixed costs to rail carriers' respective line segments. *Id.*

3. Contrary To Shippers' Claims, The ATC Approach Has Been Demonstrated To Be Superior To The MSP Approach

The shippers claim, without any citation, that the Board has the burden of establishing that any new cross-over traffic revenue allocation methodology is superior to the MSP methodology used by the Board in recent cases and further claim that the Board has failed to meet its burden. The shippers' claim is not supported as a legal or factual matter. The Board (and BNSF) have demonstrated that the ATC approach is clearly superior to the MSP approach because it does not have the acknowledged limitations inherent in the MSP approach.

In deciding to depart from its previous rules and practices, relevant precedent does not require the agency to establish that the new rule or practice is superior to the existing rule or

practice. The case law requires the agency to supply a reasoned explanation for settling on the new rule or practice. *See, e.g., ATSF Ry. Co. v. Wichita Bd. of Trade*, 412 U.S. 800, 808 (1973) (“the agency [has a] duty to explain its departure from prior norms. . . . Whatever the ground for the departure from prior norms, however, it must be clearly set forth so that the reviewing court may understand the basis of the agency’s action and so may judge the consistency of that action with the agency’s mandate.”); *JSG Trading Corp. v. USDA*, 176 F.3d 536, 544 (D.C. Cir. 1999) (“Although the agency was not strictly bound to follow the test for commercial bribery applied in prior cases, it was obligated to articulate a principled rationale for departing from that test.”).

The Board has recognized in several recent cases that the MSP methodology is flawed, explaining that the methodology does not take account of economies of density. *See, e.g. Xcel*, slip op. at 19. BNSF has shown that the MSP methodology has other flaws that have been manipulated by the shippers to bias the SAC results in their favor. For example, the 100-mile origination credit used in the MSP approach provides the shipper with an extraordinarily generous amount of revenue that far exceeds the cost of originating unit train traffic and, as a result, complainants load their SARRS with short-haul cross-over traffic to distort the SAC results. As shown in Mr. Klick’s rebuttal statement, the complainants in the pending *Laramie River* case used the MSP approach to generate SARR revenues on cross-over movements as high as 173 mills per ton-mile, a level that far exceeds any mills per ton-mile rate generated by any BNSF through coal movement. Klick Rebuttal V.S. at 16 n.12.

The Board provided a reasonable explanation for adopting the ATC approach as a replacement for the flawed MSP approach in the NPRM. The Board explained that the MSP approach is problematic because it “fails to take into account the defining characteristic of the railroad industry – economies of scale, scope and density.” *NPRM* at 18. The Board proposed

ATC as an alternative to MSP because “[w]hile [ATC] is similar to DARA, it does not suffer from the deficiency that led to the Board’s rejection of DARA [*i.e.* DARA’s failure to take account of diminishing economies of density]. Thus, this approach should address the railroads’ legitimate concerns about the need to take into account economies of density when allocating revenue from cross-over traffic.” *Id.* at 19.

Mr. Klick confirmed the Board’s conclusion that the ATC model takes account of both economies of density and of the diminishing returns thereto in his statements.³⁸ As Mr. Klick further explains in his rebuttal statement at 13, ATC takes account of the diminishing returns on the economies of density because “as densities increase, the [average fixed cost] AFC per unit of volume component of ATC declines, while the [average variable cost] AVC per unit of volume component remains the same. . . . As a result, even when the relationship between on-SARR and off-SARR densities remains in proportion, substantially higher densities on-SARR and off-SARR mean that the proportion of total cost that is represented by the “Fixed Costs Per Ton” – the AFC component of ATC where economies of density are reflected – becomes smaller and smaller, and the revenues allocated to the lighter-density segment become smaller and smaller.”

The D.C. Circuit’s recent decision affirming the Board’s action in *Xcel* confirms that the Board should adopt ATC in place of MSP and that the Board’s failure to do so “would be on shaky ground indeed.” In that decision, the D.C. Circuit acknowledged that the concerns with the MSP methodology were legitimate. *BNSF Decision* at 16-18. The D.C. Circuit concluded that “[w]ere the Board presented with a [cross-over traffic revenue allocation] model that took account both of the economies of density and of the diminishing returns thereto, a decision to

³⁸ Klick Reply V.S. at 18-20; Klick Rebuttal V.S. at 11-14.

adhere to its MSP model would be on shaky ground indeed.” *Id.* at 18. Since ATC addresses the recognized limitations with MSP, the Board can no longer adhere to the MSP methodology.

4. Western Fuels/Basin’s Assertion That It Would Be Unfair To Apply The ATC Method To Pending Cases Lacks Force

In their reply comments, WFA/Basin reiterate their assertion that if the Board adopts ATC in this rulemaking, it would be “fundamentally unfair” to apply it in their pending case. WFA/Basin Reply Comments at 6. However, as explained above, the Board would be on “shaky ground” if it applied the MSP rather than the ATC methodology in the pending WFA/Basin case because the ATC approach, unlike MSP, takes account “both of the economies of density and of the diminishing returns thereto.” *BNSF Decision* at 18.

As explained in BNSF’s reply evidence, it would not be “fundamentally unfair” to apply the ATC methodology in the pending WFA/Basin SAC case. In developing the SARR, WFA/Basin took a risk by using the MSP approach to allocate revenues on cross-over traffic in its opening evidence submitted on April 19, 2005. WFA/Basin relied on this methodology despite having notice that the Board (1) had no single, preferred methodology for allocating revenues on cross-over traffic, (2) was concerned about the MSP methodology’s failure to take account of relative densities, and (3) was willing to consider the adoption of a methodology that properly took account of economies of densities.³⁹ It would not be fundamentally unfair to apply

³⁹ See, e.g. *PPL Montana, LLC v. The Burlington Northern & Santa Fe Railway Co.*, STB Docket No. 42054, slip op. at 7, n.14 (served Aug. 20, 2002) (“*PPL I*”) (“[w]e have not adopted a single preferred procedure for developing revenue divisions on cross-over traffic.”); *TMPA*, slip op. at 31, n.75 (same); *Duke/NS*, slip op. at 22 (“There may be merit to allocating revenues based on the relative variable cost and average fixed cost to haul the traffic over each segment of the move, if those costs can be fairly approximated. . . . In the absence of a better supported method, the Board is left to continue to apply a mileage-based approach, which clearly bears some relationship to the relative total costs NS incurs to provide service over each segment.”); *Duke Energy Corp. v. CSX Transportation, Inc.*, STB Docket No. 42070, slip op. at 20 (served Feb. 3, 2004) (“*Duke/CSX*”) (“The Board has not foreclosed an approach that would incorporate relative densities, as densities could affect the defendant carrier’s relative cost of providing

a revenue allocation methodology that WFA/Basin were on notice the Board might apply, particularly since Western Fuels/Basin have had a full opportunity to comment on the ATC approach in this rulemaking proceeding.

IV. INDEXING OPERATING COSTS

Nearly all commenters oppose the Board's proposal to index operating costs using a hybrid RCAF-U/RCAF-A index that implements the RCAF-A in 5% increments over a twenty year period, starting in year two. The shippers claim that this proposal understates productivity gains from technology improvements, early retirement of assets, and labor productivity, which, they allege, would be as readily available to SARRs as to real-world railroads. They propose a 50/50 mix in year one increasing to 100% RCAF-A in year ten. Railroads take the position that the SARR would not experience any productivity in its initial years because the SARR starts out with operations that are already far more efficient than real-world railroads.⁴⁰ Given the extremely favorable starting point of the SARR relative to real-world railroads, no productivity

service over the relevant segments"); *Xcel*, slip op. at 19 ("There may be merit to allocating revenues based on the relative variable cost and average fixed cost incurred to haul the traffic over each segment of the move, if those can be fairly approximated. However, absent evidence on the accuracy of such an alternative procedure, the Board will not depart here from its precedent").

⁴⁰ On opening and reply, the railroads explained (1) that many sources of industry productivity would not be available to the SARR; (2) that the SARR's operating expenses in year one already capture labor and technology productivity that real-world railroads would not achieve for years; (3) that allowing the SARR to start out more efficient than real-world railroads and then share the benefits of future industry productivity reflected in the RCAF-A would double count SARR productivity; and (4) that productivity from new future technologies require costly investments not included in SAC costs and not economical for the SARR to implement in the early years of its operations. See BNSF Opening Comments at 55-59 and Verified Statement of Michael R. Baranowski at 5-10 ("Baranowski Opening V.S."); BNSF Reply Comments at 33-39 and Baranowski Reply V.S. at 3-14; Opening Submission of Union Pacific Railroad Co. at 31-35 ("UP Opening Comments") and Verified Statement of Thomas C. Haley ("Haley Opening V.S."); UP Reply Comments at 24-38 and Reply Verified Statement of John H. Rebensdorf ("Rebensdorf Reply V.S."); NS/CSXT Reply Comments at 14-17; and Reply Comments of Canadian Pacific Railway at 2-5 ("CP Reply Comments").

should be assumed during the first ten years of SARR operations unless specific evidence on the source and timing of productivity improvements is presented to support a productivity adjustment.

On Reply, shippers focus on two points: (1) they dispute the railroads' assertion that SARRs start out far more efficient than their real-world counterparts, and (2) they allege that requiring evidence on specific productivity imposes an insurmountable burden on complainants. Each of these arguments is discussed below.

A. Shippers' Claim That The SARR Is No More Efficient Than Its Real-World Counterparts Is Unsupported And Clearly Wrong

Shippers claim that the Board often "constrains" the SARR to mimic incumbent operating plans (Coal Shippers Reply Comments at 34), thereby imposing on the SARR the inefficiencies that exist in the real world. They point to examples where the Board has rejected complainants' operating plans as "infeasible" and instead accepted the railroads' operating plans. But the operating plan that the Board accepts is not the operating plan of a real-world incumbent facing real-world uncertainties ranging from unexpected weather conditions (such as floods and hurricanes) to unanticipated surges in demand (such as those experienced in the last two years) – uncertainties that the SARR will never face. Rather, it is an operating plan prepared specifically for a hypothetical railroad based on ideal parameters and circumstances assumed for the SARR. Thus, even when the Board accepts the railroad's evidence in a SAC case, it is not imposing on the SARR the inefficiencies of either the incumbent or the rail industry.⁴¹

⁴¹ Other examples of less efficient SARR operations cited by shippers have already been refuted in the railroads' opening and reply comments. For example, the claim that the SARR is "forced to bear" substantial over capacity because it is configured to handle the peak year (Coal Shippers Reply Comments at 40) was addressed by BNSF witness Baranowski, who pointed out that the equipment and other operating costs developed on the basis of the peak year are ratcheted down in the DCF each year to meet the actual tonnages for that year, resulting in the

The shippers' contention that they are not entitled to assume superior operating efficiencies is easily refuted by comparison of SARR operating expenses with those of real-world railroads. In his rebuttal verified statement attached to these comments, BNSF witness Michael R. Baranowski analyzes the operating costs of the SARRs in the two most recently decided western rate cases and demonstrates that for both overall operating costs per ton-mile and for individual components of the total operating expenses, the SARRs in those cases exhibit far superior efficiency over real-world railroads.

Most of the superior efficiency that the SARR achieves comes from the fact that the SARR is a theoretical, efficient railroad whose operations are based on favorable assumptions and model results rather than real-world uncertainties and operating set backs that inevitably affect real-world railroads. For example, it may be theoretically possible for crew personnel to achieve 270 starts per year, but no large railroad has ever achieved such an extraordinary level of crew productivity in the real world. Similarly, the RTC model consistently produces SARR train transit times that real-world railroads cannot maintain over long periods of time due to myriad real-world operating conditions that cannot feasibly be reflected in an idealized computer model.

The result is that a SARR is entitled from day one of operations to benefit from efficiencies that real-world railroads must work over years to obtain. The future productivity benefits that real-world railroads may achieve through this hard work are already reflected in the SARR's superior efficiency. It would double-count the impact of productivity to reflect it once in the SARR's low initial operating costs and then again in declining operating costs in future years of the SARR's operations. No productivity gains should be assumed for the SARR during its early years of operations.

efficiencies of the peak year being passed on to all other years as well. Baranowski Op. V.S. at 5, n.6.

B. Shippers' Contention That Providing Evidence Of Specific Productivity Would Impose An Insurmountable Burden On Complainants Is Meritless

The shippers on reply restate the argument made by their experts on opening that identifying specific sources of productivity is a "virtually impossible task." Coal Shippers Reply Comments at 43. BNSF witness Dr. Martin N. Baily refuted that argument in his verified statement attached to BNSF's Reply Comments. He explained that it is not only possible to examine real evidence to assess the possibility of SARR productivity, but that looking at specific sources of potential productivity improvement and determining whether they would or would not affect a SARR is the only valid approach to addressing the issue. Reply Verified Statement of Martin N. Baily, at 5 ("Baily Reply V.S.").

The shippers contend that requiring them to provide specific evidence of improvements that would yield productivity gains for the SARR imposes a "heightened standard of proof" on complainants as it is difficult to demonstrate future events regarding productivity improvements. Coal Shippers Reply Comments at 42. It is certainly true that one can never predict the future with accuracy and it is therefore generally appropriate to rely on neutral indices to predict future trends. There are two neutral indices available to predict future operating cost inflation – the RCAF-U and the RCAF-A – and between those two indices the far superior one is the RCAF-U. If a new index is to be used, there must be an evidentiary basis for it. The shippers' proposed 50/50 split is totally arbitrary as is the Board's proposed phase-in of productivity beginning as early as year two of the DCF. There is absolutely no support for any operating cost index that assumes that a SARR would experience measurable productivity in the early years of its existence. It would hardly be a "heightened standard of proof" to require that a departure from existing indices be based on evidence rather than rank speculation.

It also may be true that at some point in the future the SARR will experience productivity and eventually achieve the same level of productivity as real-world railroads. But that would not justify use of an index that assumes productivity in the early years of the DCF. The railroads have shown that given the SAC assumption that the SARR is the most efficient railroad feasible from day one of its existence, and that the resulting starting point for the SARR is far above the efficiency level of the railroad industry, there is no ground for assuming that the SARR will achieve productivity in the first ten years of its operations. If the Board shortens the DCF period to 10 years, there would be no basis or need for any speculative forecasting of future productivity. Employing a 10-year DCF period with no productivity is consistent with the unique configuration and operations of the SARR and imposes no “heightened” burden whatsoever on complainants.

Even if the Board uses a DCF period longer than ten years, it is possible to develop a productivity adjustment that is based on evidence, not speculation. BNSF’s witness Mr. Baranowski carried out a detailed review of individual SARR operating cost categories to identify areas where future productivity might become available to the SARR after year 10 of its life, and he developed an index that reflects this review of evidence. Baranowski Op. V.S. at 20-21. It is clearly not an unreasonable burden to expect shippers to rely on evidence rather than speculation to support their claim that a SARR would experience more productivity than that reflected in Mr. Baranowski’s index or that a SARR would experience that productivity before year 10.

The shippers’ further argument that if such a “heightened burden” is imposed on them, the railroads should also be required to provide specific evidence “as to the future escalation of each rate paid to a SARR by its customers” is a red herring. First of all, the revenue stream at

issue in a SAC case is the stream of revenues that would be available to the incumbent since it is the reasonableness of the incumbent's revenues that is being tested in a SAC case.⁴² The Board's practices regarding revenue indices are not at issue here. Second, the shippers' proposal is off base because it impermissibly shifts the burden of proof. The defendant railroads have no burden of persuasion on any issue – only a burden of production. As the D.C. Circuit noted in the *BNSF Decision*, slip op. at 19-20, there is no basis for requiring the railroads to prove anything – it is incumbent upon the complainant to make its case on all issues. Thus, on the issue of productivity, the burden of persuasion is properly placed on the complainants. Requiring shippers to provide evidence of expected productivity before allowing them to reduce operating costs is fully consistent with complainants' burden of proof in SAC cases.

Another red herring is the Coal Shippers' argument with respect to BNSF witness Baranowski's contention that a productivity adjustment to operating costs would require similar treatment for capital assets. As a threshold matter, since shippers have not shown that a productivity adjustment to operating cost is necessary or merited, there is no reason to even address the implications of such an adjustment on the assets. If the Board adopts the 10-year DCF period with no productivity, as it should, there would be no need to increase the complexity of the SAC analysis as it relates to either the future adjustment of operating costs or asset replacement costs. But even if there were, the Coal Shippers' witness Mr. Crowley is wrong in saying that Mr. Baranowski's proposed index is impermissible because it raises the cost of capital. As Mr. Baranowski points out in his rebuttal statement, the adjustment he proposes is not directed at increasing the cost of capital; rather, it makes an inflation assumption that is more

⁴² As discussed elsewhere, the use of cross-over traffic complicates the analysis because there are no revenues for a portion of a through movement.

consistent with inflation in the economy as a whole and thereby improves the precision of the cost of capital assumption.

In short, because a SARR begins operations from day one at a level of efficiency far superior to that of the industry, the Board should presume that a SARR experiences no productivity for the first ten years of the DCF period, *unless* complainants provide evidence of specific productivity improvements the SARR would experience, together with evidence of the timing, costs and benefits of such improvements. Thus, the adoption of a 10-year DCF period would allow the Board to avoid further contention over this issue in most cases. If a longer DCF period is used, BNSF has proposed an evidence-based alternative that allows the Board to address future productivity gains in years 11 and beyond for categories of operating costs where the SARR has a reasonable prospect of achieving productivity in future years.

V. USE OF URCS SYSTEM-AVERAGE COSTS IN RAIL RATE CASES

Shippers urge the Board to abandon its proposal for the use of unadjusted system-average URCS costs on grounds that no commenting party supports it. In fact, most of the railroads, including BNSF, strongly support the Board's proposal to rely more heavily on system-average URCS costs as a means of simplifying SAC litigation. BNSF merely urges the Board to make modest changes in an effort to balance the important benefits of simplification with the need for accurate results in cases where the calculation of variable costs would make a difference in the outcome of the case. In contrast, the shippers ask the Board to disregard altogether the benefits of simplification and to return to business as usual. But simplification is possible without unduly sacrificing accuracy.

Under the Board's proposal, variable costs would be calculated for purposes of determining the jurisdictional threshold using a straight URCS Phase III run based on the nine

movement-specific operating characteristics listed in the NPRM.⁴³ The Board's proposal is based on the sound conclusion that there is generally little benefit and substantial costs involved in the litigation over movement-specific adjustments. The Board recognizes that some of the most hotly contested movement-specific adjustments proposed by the parties in the past have not been theoretically sound, particularly with respect to the treatment of URCS variability percentages. The Board's proposal would simplify SAC litigation by doing away altogether with movement-specific adjustments.

BNSF and most of the other railroad comments support the thrust of the Board's proposal, which is to eliminate unnecessary and time consuming litigation over issues that rarely should affect the outcome of a SAC case. But the railroads believe that the objective of simplification can be achieved with modest changes that will enhance the accuracy of the URCS calculations. Each of the railroads has proposed difference mechanisms or procedures for accomplishing a more refined balance between simplifications and accuracy, but their proposals all fall within two broad categories.

The first mechanism primarily involves expanding the use of movement-specific operating data inputs.⁴⁴ The Board proposed using just nine inputs in generating URCS system-average costs. The asserted basis for expanding the list of inputs is that other inputs such as number of locomotives, tare weights and empty miles can also be used without increasing the

⁴³ The Board proposes to use the following nine inputs: "(1) the railroad; (2) loaded miles (which should include loop track miles); (3) shipment type (local, originated delivered, bridge, received terminated); (4) number of freight cars; (5) tons per car; (6) commodity (for loss and damage expense only); (7) type of movement (single, unit, multiple); (8) car ownership (railroad or private), and (9) type of car." NPRM at 26 n. 30.

⁴⁴ UP, CP, NS and CSX propose that the movement-specific operating inputs should be expanded to include the number of locomotives, tare weights and empty miles and that movement-specific car ownership costs should be used. CSX and NS propose also including mine loading times.

complexity or contentiousness of litigation over URCS costs. These data are readily accessible and generally agreed upon by the parties. Use of these additional operating inputs clearly produce more accurate costing results. Moreover, since these data do not affect the URCS service unit costs, the Board's valid concerns regarding the relationship between unit costs and the proper variability percentage and piecemeal adjustments would not be implicated by these changes to service units.

The Coal Shippers criticize the railroads' proposals to include other movement specific operating inputs in calculating URCS system-average costs as self-serving and unfair. In fact, the use of some of these operating inputs may well favor coal shippers. For example, some shippers' coal moves in newer aluminum equipment that has lighter tare weight than is assumed by URCS, and the use of actual tare weights will produce lower costs. The proposal to include tare weights, number of locomotives, and empty miles in the system-average cost calculation is not the result of cherry picking. Rather, these are inputs for which data are readily available and they are inputs on which the parties to a rate case typically agree, often without any assistance from the Board. Use of these inputs produces more accurate estimation of variable costs without adding to the burden of litigation. The fact that using these movement-specific inputs could reflect the higher actual variable costs is not a legitimate basis for refusing to consider them.

BNSF and other railroads include payments by the defendant railroad to third party transportation providers as an additional operating characteristic that should be considered. The Coal Shippers acknowledge that such payments may be properly included in the variable costs determination, but they object to a blanket rule that would include all third party charges in the

calculation variable costs.⁴⁵ The Coal Shippers raise two concerns. First, they claim that a railroad might enter into sham transactions with third parties in order to inflate artificially the railroad's variable costs in a rate case and to shield that portion of the rate from challenge. This is not a legitimate concern. It is implausible that a railroad would attempt to manipulate the terms of an important commercial transaction based on the possibility that a shipper whose transportation involves use of a third party might one day bring a rate case and that variable costs might have some bearing on the results of that case. Second, the Coal Shippers claim that some payments to third party transportation providers, such as payments for providing a portion of the line-haul move, should be treated as a deduction from revenue rather than as a variable cost. BNSF has explained previously that the treatment of such costs as revenue deductions has been soundly rejected by the case law.

A second mechanism to increase the accuracy of the variable cost estimation while preserving the benefits of simplification is to consider movement-specific adjustments after the SAC analysis and only if necessary. NS/CSX and BNSF have proposed variations on this general approach. These proposals would save the Board and parties from having to expend considerable time, effort, and expense in litigating issues that often turn out to be totally irrelevant to the outcome of the rate case. Litigation over movement-specific adjustments would only take place in cases where it is clear from the SAC results that it may have an impact on the level of a prescribed rate.

The Coal Shippers object to these proposals on the grounds that they will result in undue delay in the resolution of rate cases. While some extension of proceedings is possible in some cases, the impact should be slight and the impact would be partially offset by more efficient

⁴⁵ See Coal Shippers Reply Comments at 55.

proceedings focused only on SAC issues. In addition, the jurisdictional threshold generally should not impact the outcome of a rate case and therefore in most cases there will be no need to consider movement-specific adjustments to variable costs. The Coal Shippers also overstate the potential delays that would result from a post-SAC variable cost proceeding. As BNSF explained previously, such a proceeding would be limited in scope and could be handled expediently. There should also be a high burden to meet before any movement-specific adjustments could even be considered. Under BNSF's proposal, the Board would consider only those movement-specific adjustments that are shown by clear and convincing evidence to be justified and that would affect the level of the prescribed rate.⁴⁶

While the Board and the Railroads seek to balance simplification and accuracy, the Coal Shippers would completely ignore the objective of simplification. In fact, their response to the Board's proposals is to seek to further expand and complicate litigation over movement-specific adjustments. The Coal Shippers are unabashedly focused on producing more favorable variable cost estimates without addressing the concerns that has led the Board to explore changes to current procedures. The Coal Shippers' proposals should be rejected.

VI. DCF PERIOD

All commenters generally support the Board's proposal to reduce the DCF period to ten years in future SAC cases. Both shippers and railroads recognize that the shorter period would reduce reliance on speculative forecasts. Indeed, use of a 10-year DCF eliminates the need to speculate over future productivity of a SARR since it is highly unlikely that a SARR would experience any productivity during the first 10 years of its life. Moreover, the use of a 10-year

⁴⁶ CSX, NS and CP also propose allowing limited movement-specific adjustments subject to a heightened standard.

DCF reduces the impact of speculation over traffic and revenue trends that are difficult to predict beyond ten years.

The Board should not even consider the shippers' additional proposal to extend the rate prescription indefinitely beyond the DCF period. That proposal is directly contrary to a major objective of the Board, which is to eliminate the need to reopen rate reasonableness proceedings to address obsolete forecasts by having rate prescriptions automatically terminate at the end of a shortened DCF period.

The shippers' proposed adjustment to the debt amortization methodology also has no place in this proceeding. The Board's NPRM asked only for changes in the DCF spreadsheets that would need to be made to accommodate the shorter DCF period, and the change in the DCF period does not require any adjustment in the treatment of debt in the DCF analysis. The only changes *necessitated* by the reduced DCF period are the mathematical changes to the DCF spreadsheets identified by BNSF witness Baranowski in his opening verified statement. Baranowski Op. V.S. at 22.

VII. REOPENING AND VACATUR OF RATE PRESCRIPTIONS

The shippers have added nothing new on reply to their opening comments on the Board's proposed procedures for reopening and vacating rate prescriptions. On opening, the shippers explained why they opposed the Board's proposals for streamlining and simplifying the proceeding. On reply, BNSF and other railroads explained that the Board's proposals are valid and appropriate, and that the shippers' allegations that the proposals impose greater burdens on the shippers than on railroads are without merit. BNSF Reply Comments at 53-54. BNSF also explained that shipper allegations that the proposed procedures were inconsistent with governing

law were based on a misreading of the Court's ruling in *Arizona Grocery*.⁴⁷ BNSF Reply Comments at 53.

On reply, AEP Texas addressed BNSF's position on opening that the Board's statement of legal principles in the NPRM confirms that the Rawhide rate prescription remains in effect. AEP Texas referred the Board to its prior filings in Docket No. 41191, in which it argued that the D.C. Circuit did not have the authority to reinstate the pre-existing rate prescription. But as BNSF explained when AEP Texas first made that argument, the D.C. Circuit did not reinstate the rate prescription, it *vacated* the Board's unlawful order vacating the rate prescription. *See* BNSF Motion to Dismiss (May 18, 2005) and BNSF Reply to AEP Texas' Petition on Remand (May 26, 2005). As AEP Texas itself advised the Board, when an order is vacated, it is as though the order never existed. BNSF does not dispute that the authority to address the continued viability of the Rawhide rate prescription was thereby returned to the Board when the Board's prior order was vacated. The court did not instruct the Board how to proceed in light of the vacatur. The court did not need to issue such instructions. The Board is obligated to act in accordance with existing law, and well established legal principles limit the Board's options.

Indeed, the Board's NPRM correctly states the governing law: (a) a rate prescription can be lifted or eliminated only after the rate prescription has been properly reopened; (b) the lifting or elimination of the rate prescription can only have prospective effect from the date of the reopening; and (c) the reopening can occur only when "new evidence has persuaded the Board that reopening the case is warranted." NPRM at 38. In the case of the Rawhide rate prescription, the Board has never even considered new evidence that might persuade it that a reopening is warranted. The validity of the Rawhide rate prescription is beyond any challenge

⁴⁷ *Arizona Grocery Co. v. Atchison, Topeka and Santa Fe Rwy. Co.*; 284 U.S. 370, 389 (1932).

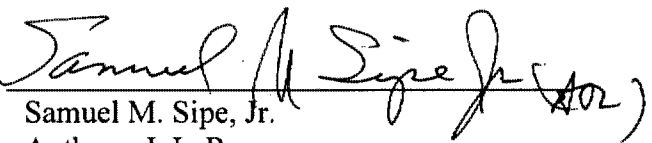
until such evidence is reviewed and the Board issues a decision finding that the evidence justifies a reopening. Moreover, if such a finding is made, it can have only prospective effect. Under these clear legal principles, reiterated in the NPRM, the Rawhide rate prescription remains in effect.

VIII. OTHER ISSUES – TESTING FOR CROSS-SUBSIDY

In their reply comments, WFA/Basin briefly address the cross-subsidy issue as it applies to the Laramie River case. In his rebuttal verified statement, Mr. Klick addresses WFA/Basin's mischaracterization of the manner in which BNSF applied the cross-subsidy test in that case. Contrary to WFA/Basin's claim, BNSF simply proposed a mechanical approach that ensures that both the threshold cross-subsidy test and the cross-subsidy test that would need to be applied at the rate reduction stage are complied with as the SAC test is performed.

Respectfully submitted

Richard E. Weicher
Michael E. Roper
BNSF RAILWAY COMPANY
2500 Lou Menk Drive
Fort Worth, TX 76131
(817) 352-2353

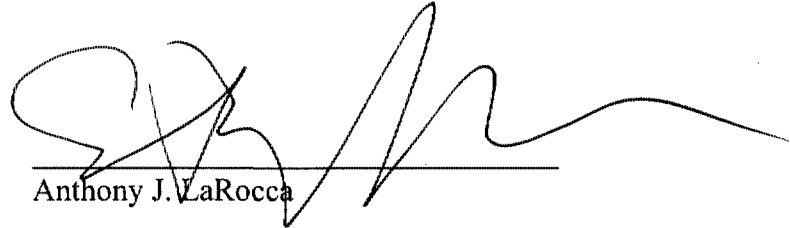
By: 
Samuel M. Sipe, Jr.
Anthony J. LaRocca
Linda S. Stein
STEPTOE & JOHNSON LLP
1330 Connecticut Avenue, N.W.
Washington, DC 20036
(202) 429-3000

June 30, 2006

ATTORNEYS FOR
BNSF RAILWAY COMPANY

CERTIFICATE OF SERVICE

I, Anthony J. LaRocca, hereby certify that on June 30, 2006, I caused a copy of BNSF Railway Company's Rebuttal Comments to be served by first-class mail or a more expeditious method of delivery upon all persons who have filed a notice of intent to participate in STB Ex Parte No. 657 (Sub-No. 1).



Anthony J. LaRocca

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

**Ex Parte No. 657 (Sub-No. 1)
MAJOR ISSUES IN RAIL RATE CASES**

**Verified Rebuttal Statement of
Joseph P. Kalt, Ph.D.
On Behalf of BNSF Railway Company**

June 30, 2006

**Verified Rebuttal Statement of
JOSEPH P. KALT, PH.D.
On Behalf of BNSF Railway Company
Ex Parte No. 657 (Sub-No. 1)
Major Issues in Rail Rate Cases**

I. INTRODUCTION

My name is Joseph P. Kalt. I am the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government, Harvard University. The Kennedy School is Harvard's graduate school of public policy and public administration. In addition to my work at the Kennedy School, I am also a Senior Economist at Lexecon, an economics consulting firm and a division of FTI Consulting. I hold B.A., M.A., and Ph.D. degrees in economics and am a specialist in the economics of competition, antitrust, and regulation, with particular emphasis on the energy, natural resource, and transportation sectors. Throughout my professional career I have conducted research, published, taught, and testified extensively on the economics of competition and regulation, with a particular emphasis on regulated industries. I have studied extensively the economics and regulation of the railroad industry and have presented expert testimony before the Surface Transportation Board (STB or Board) on numerous occasions, most recently in *Western Fuels*.¹

I previously filed a Verified Statement (May 1, 2006; Opening V.S.) and a Verified Reply Statement (May 31, 2006; Reply V.S.) in this proceeding, *EP 657: Major Issues in Rail Rate Cases (EP 657)*. In this Verified Rebuttal Statement, I have been asked by BNSF Railway Company (BNSF) to comment specifically on the reply submissions of the Western Coal Traffic League, *et al.* (WCTL); AEP Texas North Company (AEPTX); Western Fuels Association, Inc., and Basin Electric Cooperative, Inc. (WFA); Arkansas Electric Cooperative Corporation (AECC); Union Pacific Railroad Company (UP); and PPL EnergyPlus, LLC (PPL). In each case, I consider the economic and policy implications of these submissions' analyses and recommendations relative to

two primary issues raised by the Board in *EP 657*: (1) the appropriate rate prescription methodology, and (2) the appropriate principles of revenue allocation for cross-over traffic under the Stand-Alone Cost (SAC) test for rate reasonableness originally set forth in the *Coal Rate Guidelines (Guidelines)*.²

II. RATE REDUCTION METHODOLOGY

In my Opening and Reply Verified statements, I have examined the economic and public interest implications of the wide variety of methodologies for reducing rates on issue traffic if a proper SAC analysis finds that those rates as set by the railroad, together with the rates and revenues on non-issue traffic, result in more total revenue than a stand-alone railroad (SARR) would need to cover its costs in a contestable market. These methodologies are becoming an “alphabet soup” in this proceeding, ranging from the Board’s extant Percentage Reduction Methodology (PRM), to the Maximum Contribution (MCM) and Maximum Markup (MMM) Methodologies set out for comment by the Board upon launching this rulemaking, to AEPTX’s proposed General Percentage Reduction Method (GPRM), to WFA’s so-called Reasonable Allocation Method (RAM), to WFA’s in-the-alternative Reduced Mark-Up Method. These methodologies are “on the table” in this proceeding most fundamentally because the Board is concerned that the Percentage Reduction Methodology it has been using may be subject to “gaming” by railroads.³

¹ Docket 42088, *Western Fuels Association, Inc., & Basin Electric Power Cooperative v. The Burlington Northern Santa Fe Railway Company*.

² *Coal Rate Guidelines*, Nationwide, 1 ICC 2d 520C (August 8, 1985) (hereinafter “*Guidelines*”).

³ “Gaming” as used by the Board in *Ex Parte No. 657 (Sub-No. 1)*, *Major Issues in Rail Rate Cases*; Docket No 41191, *West Texas Utilities Company v. BNSF Railway Company*; STB Docket 41191 (Sub-No. 1), *AEP Texas North Company v. BNSF Railway Company*; STB Docket No. 42088, *Western Fuels Association, Inc., & Basin Electric Power Cooperative v. BNSF Railway Company*; STB Docket No. 42095, *Kansas City Power and Light Company v. Union Pacific Railroad Company* (hereinafter “*EP 657: Major Issues in Rail Rate Cases*” and “*EP 657*”), Decision (February 27, 2006), at 7-8, would entail the setting by a railroad of a rate designed not to maximize the railroad’s profits but to result, after reduction via a SAC case, in a regulated maximum rate that is consistent with profit maximization. See Verified Statement of Joseph P. Kalt, on behalf of BNSF Railway Company, *EP 657* (hereinafter “*Kalt Opening*”), at 15, and Verified Reply Statement of Joseph P. Kalt, on behalf of BNSF Railway Company, *EP 657* (hereinafter “*Kalt Reply*”).

As I have discussed in my prior Verified Statements, principles of sound regulatory policy indicate that the issue of gaming is properly handled as an evidentiary matter, rather than discarding the pricing freedom of railroads to, in the first instance, establish rates that are consistent with market demand and then rolling those rates back through SAC analysis if they are found to be excessive in the SAC sense. Professor Willig, Dr. Gaskins, and I set out a framework by which the Board, as a regulatory finder-of-fact, can assess whether a challenged rate has been gamed or, alternatively, whether it reflects a commercially viable rate established in accord with the market demand for rail services. I also critically examined all of the rate reduction methodologies.

I concluded in my prior Verified Statements that the applicable economics indicate that the alternatives to PRM are flawed in fundamental ways such that the Board's extant Percentage Reduction Methodology is the most appropriate from a public policy perspective. Methodologies such as MCM, MMM, and RAM suffer from their use of a bottoms-up approach which inappropriately disregards the challenged rate actually set by the railroad by effectively presuming carriers to be "guilty" of "gaming". This presumption of "guilt" would be irrebuttable, despite no findings by the Board in any case to date of gaming and without providing carriers even the opportunity going forward to demonstrate innocence in the face of charges of gaming. The approach of these methodologies would not only have the Board abandon its capacities to examine and understand relevant evidence re: gaming. It is also starkly inconsistent with the principles of demand-based, Ramsey pricing that are correctly recognized as being the path to serving the public interest in rail rate regulation.⁴ Meanwhile, GPRM and WFA's Reduced Mark-Up Method alternative are flawed most fundamentally by their attempt to invoke something the *Coal Rate Guidelines* correctly recognized was decidedly infeasible: the estimation of the economic marginal costs and demand elasticities upon which explicit Ramsey ratemaking would have to rely.⁵

⁴ See Kalt Opening at 17-19 and Kalt Reply at 2, 9-10.

⁵ See Kalt Opening at 10 and Kalt Reply at 10-27.

II.A “Gaming” and Who “Dictates” Rates in SAC Proceedings

Review of the reply round of comments and statements in this proceeding by shippers does not result in any reversals of the foregoing findings. Shippers assert that allowing the railroads to defend their challenged rates as commercially viable (and not the product of “gaming” of the regulatory process) amounts to allowing the railroads to “dictate the maximum rate,”⁶ is “tantamount to deregulation,”⁷ and is equivalent to “unrestrained monopoly pricing”⁸ and “charging whatever the traffic will bear.”⁹ These strident claims, however, serve only as misleading polemics. The railroads and the law recognize that the actual rates a railroad can charge are subject to regulatory capping via the *Coal Rate Guidelines*. If a challenged rate is found through proper SAC analysis to be in excess of the SAC standards, it is reduced according to the principles of Constrained Market Pricing (CMP) set out in the *Guidelines*, and the railroad cannot actually charge more than the prescribed rate.

As I have set out in my prior statements, if the Board, exercising the appropriate powers of a regulatory body specialized to a particular industry, determines that the facts demonstrate that a particular challenged rate in a particular case has, indeed, been “gamed,” then that rate ought to, indeed, be discarded – with the “gaming” railroad suffering the consequences.¹⁰ On the other hand, if a challenged rate is, indeed, what the traffic will bear, *but is too high by SAC standards*, then that rate is taken away from the railroad and the Board prescribes an appropriately lower rate in conformance with CMP principles. In the end, it is the *Board*, exercising its due knowledge, expertise, and powers that dictates maximum rates via SAC analysis.

⁶ Additional Reply Comments of Western Fuels Association, Inc., and Basin Electric Power Cooperative, Inc., *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter “WFA Reply”), at 3; Reply Comments of AEP Texas North Company, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter “AEPTX Reply”), at 6; Reply Comments of PPL EnergyPlus, LLC, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter “PPL Reply”), at 2.

⁷ PPL Reply at 7.

⁸ Joint Reply Comments of Western Coal Traffic League, Concerned Captive Shippers, Western Fuels Association, Inc., Edison Electric Institute, National Rural Electric Cooperative Association and American Public Power Association, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter “WCTL Reply”), at 11.

⁹ AEPTX Reply at 6.

While shippers in this proceeding use terms such as “whatever the traffic will bear” and “unrestrained monopoly pricing” as slurs, they only have substance as slurs if the *outcomes* of SAC cases are rates that are “unrestrained,” “whatever the traffic will bear,” or “tantamount to deregulation” when the criteria for rate reduction under the Staggers Act (Act) and the *Guidelines* have been met – i.e., when a challenged rate is set under conditions of market dominance, exceeds 180% of variable cost, and exceeds the rate that a SARR could charge in a contestable market. If a challenged rate is not reduced when the criteria for rate reduction under the Act and the *Guidelines* have been met, the Board is failing in its responsibilities under the Act and the *Guidelines*. Indeed, in its economic essentials, the brilliance of the Staggers Act, and the key to its success in bringing the railroad industry back from the brink of failing the nation, lie in the facts that: (1) it recognizes that differential pricing in accord with demand conditions is absolutely necessary for a network industry such as railroading; (2) it provides pricing freedom for railroads so that they can go out and price at what traffic will bear (after all, demand-based “what the traffic will bear” pricing is what well-run firms in a market economy do); but (3) then the Act says, in effect, the nation will use regulation to roll back those prices in certain circumstances.

Specifically, we use regulation to roll back unrestrained, whatever-the-traffic-will-bear rates when a railroad’s unrestrained pricing takes place in settings of market dominance, and challenged rates are greater than 180% of variable cost and greater than the prices a SARR could charge in a contestable market. When rolled back through proper application of the principles of Constrained Market Pricing under the *Guidelines*, *regulated* maximum Ramsey prices are lower, overall, than those that the traffic would bear. The regulatory framework of the Act and the *Guidelines* represents a conscious balance between capturing the power of market forces to set prices and direct the allocation of resources, on the one hand, and capping and restraining the ability of railroads to exercise market power when they are market dominant. If proper application of the Act and the *Guidelines* finds that a carrier’s challenged unregulated, what-the-traffic-will-bear rates violate the Act and the *Guidelines*, the carrier’s rates should be

¹⁰ See Kalt Opening at 25-34 and Kalt Reply at 12, n. 23.

regulated and rolled back. If, on the other hand, proper application of the Act and the *Guidelines* finds that a carrier's challenged unregulated, what-the-traffic-will-bear rates do not violate the Act and the *Guidelines*, the carrier's challenged rates should not be regulated and should not be rolled back. That is the whole idea behind maximum rate regulation under the Act and the *Guidelines*.

Economically, rate reduction under the *Guidelines* is appropriately based on the premise that any prescribed rate reduction emanating from a SAC analysis should be applied to the carrier's challenged "what-the-traffic-will-bear" rates. The reason for this, as I have discussed at length in my Opening V.S. and Reply V.S.,¹¹ is that such unregulated, "what-the-traffic-will-bear" rates are "demand-based" in precisely the sense the *Guidelines* recognize is critical to rational rate regulation.¹² Profit maximization by the rational unregulated railroad confronting shippers across its system with differential demand elasticities results in "what-the-traffic-will-bear" rates which accord in structure with the Ramsey pricing rules.¹³ That is, its unregulated, "what-the-traffic-will-bear" rates embody relative percentage mark-ups above marginal costs across shippers that are inversely proportional to shippers' demand elasticities. The proper goal of rate reduction under the *Guidelines* is to respect the structure of demand-based rates, while rolling them back such that the aggregate revenues of the SARR operating under such rolled-back rates are no greater than the SARR needs to break even and stand alone as a successful and efficient competitor in a contestable market.

At their core, shippers' seem to be concerned that the SAC framework under the Act and the *Guidelines* is too "lenient" – from their perspectives as shippers – with respect to when maximum rate regulation can kick in (i.e., in market dominant situations where challenged rates exceed the 180% standard) and the manner in which excessive rates are rolled back (via the economics of contestability and stand-alone cost analysis). This is understandable: The private self-interest of a shipper prefers lower to higher rates

¹¹ See Kalt Opening at 7-10, 13-14 and Kalt Reply 7-10.

¹² *Guidelines* at 526-527.

¹³ The Ramsey rules are set out in my Reply Verified Statement. Kalt Reply at 9.

whether there is market dominance or not, whether rates are far above variable costs or not, and whether rates are above SAC rates or not.

On the other hand, there is an upper limit to the rate preferred by a railroad: the profit-maximizing rate. For any given demand elasticity on issue traffic, profit maximization entails finding the balance point between rising rates (which tend to raise profits) and corresponding losses of volume (which tend to reduce profits). Finding this balance point is what we count on unregulated firms in a market economy to do. As Prof. Willig and I have explained,¹⁴ this yields the Board a cogent framework for dealing with its concerns about the prospect of “gaming” in SAC cases. A rate above the profit maximization balance point sacrifices too much volume and is not in a railroad’s interest. The very essence of “gaming” of the *Guidelines*’ rate reduction process would entail a railroad setting an initial rate higher than the profit-maximizing level it really wants, and then counting on the Board to reduce that rate to the profit-maximizing level. If railroads are truly gaming the regulatory process and “dictating” the outcomes of SAC cases, as the polemics of shippers in this proceeding would have it, we would not witness the vociferousness and expenses that railroads routinely put into defending their challenged rates in SAC cases. Nor would carriers appeal SAC cases when they lose before the Board.

In short, railroads wouldn’t fight so hard at the Board and they wouldn’t appeal when they lose at the Board if the Board’s extant approaches in SAC cases – including PRM and use of the challenged rate in PRM calculations – yielded “unconstrained monopoly pricing” that is “tantamount to deregulation.” If the railroads were gaming the SAC process and “dictating” these as the results, we would expect to see them gently acquiescing to the Board in SAC cases and secretly thanking the Board for rolling “gamed” rates back to profit-maximizing levels.

¹⁴ See Kalt Opening at 25-34; Verified Statement of Robert D. Willig, on behalf of BNSF Railway Company, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter “Willig Opening”), at 25-27.

II.B Rate Reduction, Ramsey Pricing, and the Long-Cannon Factors

As noted, a cornerstone of rational rail rate regulation is demand-based, differential pricing. A network industry such as railroading cannot be revenue adequate and survive over the long run without it. In endorsing the application of the Ramsey pricing principles to rate regulation, the *Guidelines* embrace this long-known economic result. In effect, however, shippers in this proceeding are now urging that an interpretation of the so-called Long-Cannon factors should trump Ramsey principles.¹⁵ Moreover, the Board in *EP 657* appears to be concerned that there is inconsistency between the Long-Cannon factors and Ramsey pricing.¹⁶ Yet, the *Guidelines* were adopted in the presence of the Long-Cannon factors, and the *Guidelines* embraced the Ramsey pricing principles. This was and is sound policy. There is no contradiction between the Long-Cannon factors and Ramsey principles.

The Long-Cannon factors provide, in pertinent part:¹⁷

- (d)(1) If the Board determines, under section 10707 of this title, that a rail carrier has market dominance over the transportation to which a particular rate applies, the rate established by such carrier for such transportation must be reasonable.
- (2) In determining whether a rate established by a rail carrier is reasonable for purposes of this section, the Board shall give due consideration to -
 - (A) the amount of traffic which is transported at revenues which do not contribute to going concern value and the efforts made to minimize such traffic;
 - (B) the amount of traffic which contributes only marginally to fixed costs and the extent to which, if any, rates on such traffic can be changed to maximize the revenues from such traffic; and
 - (C) the carrier's mix of rail traffic to determine whether one commodity is paying an unreasonable share of the carrier's overall revenues...

Unless shippers are maintaining that the Long-Cannon factors direct the nation's railroad ratemaking policy and the implementation of that policy by the Board to eschew

¹⁵ See, for example, WCTL Reply at 17-18.

¹⁶ *EP 657: Major Issues in Rail Rate Cases* at 12.

¹⁷ 49 U.S.C. 10701(d)(2).

the public interest, the *Guidelines* recognition of the propriety of establishing rates in accord with Ramsey principles is the implementation of Long-Cannon phrases such as “due consideration” and “unreasonable share” of a carrier’s overall revenues. In fact, such considerations are embedded in the *Guidelines*, which note that: “under CMP, a carrier must charge as much of the unattributable costs as demand will permit.”¹⁸

Concepts such as “due consideration,” “unreasonable share,” and “as much as demand will permit” are subject to ambiguity (e.g., all demands are a function of price, so that interpreting “as much as demand will permit” necessarily means balancing higher prices against lost volumes and, thus, taking elasticities into account). Ramsey pricing principles give effect to these Long-Cannon factors and address the Long-Cannon challenge of balancing by answering questions such as “What is an unreasonable share?” against a standard of the *public* interest¹⁹ – i.e., the national *public* interest in a healthy and efficient economy that maximizes the benefits to the nation’s citizens that can be garnered from our scarce resources. As I and Professor Willing have discussed at length in this proceeding,²⁰ and as countless economics textbooks and lectures explain,²¹ for any given revenue target, including the target of revenue adequacy of a carrier, the Ramsey prices are the explicit mathematical derivation of the set of prices which distribute the coverage of different shippers to that revenue target such that the economic contribution of the railroad sector to the overall economic well-being of the nation’s public is maximized. Ramsey pricing is pricing in accord with and pursuit of the overall public interest.

¹⁸ *Guidelines* at 539.

¹⁹ This is actually the explicit standard by which the mathematics of the Ramsey principles derive allocations of shares of responsibility for cost coverage across customer types. See Ramsey, Frank, “A Contribution to the Theory of Taxation,” *Economic Journal*, March 1927.

²⁰ See Kalt Opening at 7-10 and Kalt Reply at 8-10. See also, Willig Opening at 6-8 and 11-16, and Willig Reply.

²¹ See, for example, Viscusi, W. Kip, *Economics of Regulation and Antitrust*, 2nd ed. (Cambridge: MIT Press, 1995), at 393.

The attempt now by at least certain coal shippers²² to imply that the Board should eschew the Ramsey principles not only is an assertion that the Board should eschew promotion of the public interest, but that responsibilities for overall revenue recovery should be tilted in these shippers' favor at the expense of other ratepayers. In SAC analysis, application of Ramsey principles embraces the reasonableness principle, evoked by Long-Cannon, of maximizing the contributions by all shippers of the SARR's stand-alone costs in the manner that simultaneously accords with the overall public interest. While the Long-Cannon factors arose in a context in which the nation's railroad policy was trying to emerge from a history in which byzantine ratemaking and political regimes had pushed railroads far away from rational profit maximization and embedded rampant anti-Ramsey cross-subsidization in favor of certain shippers and traffic, we are now in an era in which railroads are able to maximize their profits with demand-based pricing subject to the Staggers Act and the *Guidelines*. As explained, the very essence of profit maximization via demand-based pricing is a Ramsey structure to rates (see above) and, certainly, such pricing in accord with Ramsey principles is free of the kind of irrational cross-subsidization and "favoritism" that the Long-Cannon factors sought to ferret out of the nation's rail pricing. There is no contradiction between those factors and Ramsey pricing under the *Guidelines*. Both appropriately seek that set of prices that maximizes the revenue contributions across the multiplicity of shippers such that railroads can cover their costs and such that those contributions balance the interests of shippers in accord with the overall public interest.

In summary, the Ramsey principles answer the implied Long-Cannon question of how to reasonably balance the interests of varying shippers by asking which allocation of revenue contributions maximizes the overall well-being of the public. Specifically, when shippers differ in their demand elasticities, the Ramsey principles tell us that "some...differentially higher rates...[are] necessary to ensure a financially sound carrier"²³ if we want that carrier's rates across all shippers to maximize the overall public interest. And the Ramsey principles derive explicit formulae which make revenue

²² See, e.g., PPL Reply at 3-4.

²³ *Guidelines* at 535-36.

contributions inversely proportional to shippers' demand elasticities. Shippers here advocate (and the MMM, MCM, and RAM methodologies entail²⁴) non-Ramsey pricing: In their version of "maximizing" revenue contributions of lower-rated traffic, the public interest principles of Ramsey pricing are ignored, and Long-Cannon concepts of "unreasonable share" are decidedly *not* given "due consideration" in the sense of applying criteria of the public interest. Indeed, shippers' position amounts to advocating a SAC rate reduction process that uses unrestrained monopoly price discrimination against lower-rated traffic to take advantage of any and all, no matter how weak or strong, market power a carrier may have vis-à-vis non-issue shippers. Such pricing is how revenue contributions from any shipper are mathematically maximized in a framework that ignores the public interest. Under shippers' framework (and approaches such as MCM, MMM, and RAM) the revenue contributions of non-issue shippers are to be maximized before turning to higher-rated, less elastic-demand issue traffic for revenue recovery.²⁵ Again, it is understandable that the "issue shippers" who show up in the figurative and/or actual hearing rooms of SAC cases want to lower their revenue contributions. The problem is that the way that goal is being played out in this proceeding, such shippers are asking the Board to eschew the interests of both other shippers and the overall public.

II.C Ramsey Principles and Rate Reduction Methodologies

As I have discussed at length in my prior verified statements, economically sound regulatory policy does not approach rate reduction in SAC analyses by some stepwise allocation of revenue recovery to one group of shippers up to some assumed maximum, followed by allocation of remaining revenues to a next group of shippers, and so on seriatim. In fact, methodologies such as MCM, MMM, and RAM fail as sound policy for precisely this reason.²⁶ Rather, the Ramsey principles indicate that any proper rate reduction methodology has the effect of modeling the competition of the contestable market of the *Guidelines* as putting all rates – for issue and non-issue traffic – under

²⁴ See Kalt Opening at 16-24 and Kalt Reply at 23-28.

²⁵ As I pointed out in my Reply Verified Statement, this is quite explicitly the position taken by WCTL and its expert, Prof. Borts. See Kalt Reply at 33-34.

downward pressure if applying extant incumbent rates on the SARR's traffic exceeds the SARR's break-even costs (including a reasonable profit to cover the cost of capital). The Board's existing Percentage Reduction Methodology (PRM) embodies this key result of Ramsey pricing.

In its Reply, AEPTX criticizes PRM on the grounds that the Ramsey pricing principles derive prices based on percentage mark-ups over marginal cost (i.e., price minus marginal cost expressed as a percentage of price) being inversely proportional to shippers' demand elasticities,²⁷ rather than the levels of prices themselves being inversely proportional to demand elasticities.²⁸ AEPTX asserts that its proposed GPRM methodology is superior because it applies any rate reduction implied by excess SARR revenues in a SAC analysis to a carrier's percentage mark-ups,²⁹ and AEPTX writes its GPRM formula as applying to mark-ups of rates above marginal costs.³⁰ The problem is that none of the proposed or extant reduction methodologies makes reference to *true* marginal costs.

Writing down a hypothetical formula invoking true economic marginal costs and asserting, as AEPTX does,³¹ that true marginal costs can be fruitfully proxied by accounting measures of variable costs does not rescue GPRM. Mere assertion does not make it so. As I have discussed at length in my Reply V.S.³² and as the *Guidelines* explicitly recognize (*Guidelines* at 532, n. 31):

Ramsey pricing requires the use of *economic* costs rather than accounting costs. Although Rail Form A or URCS might be useful as a rough indicator of economic costs, we recognize that local factors and circumstances may cause the economic costs to differ greatly from

²⁶ See Kalt Opening at 18-23 and Kalt Reply at 24-27.

²⁷ See Kalt Reply at 9 for the formula.

²⁸ AEPTX Reply at 3.

²⁹ AEPTX Reply at 4.

³⁰ Opening Comments of AEP Texas North Company, *Ex Parte* No. 657 (Sub-No. 1), *Major Issues in Rail Rate Cases*, at 10-11.

³¹ As discussed in my Reply V.S., WFA's in-the-alternative Reduced Mark-Up Methodology suffers from all of the same infirmities and infeasibilities. See Kalt Reply at 26-27.

³² Kalt Reply at 15-17.

accounting estimates. Such local factors might include, for example, where the movement is a backhaul or off-peak movement or whether the facilities are congested.

While the semantics of “marginal” and “variable” costs might suggest to the uninformed that measuring one (variable cost) would reasonably proxy the other (marginal cost), such semantics obscure reality. As the *Guidelines* stress, accurately measuring economic marginal cost implies such an “overwhelming” amount of data and sophisticated analysis as to be infeasible for universal application.³³

I stressed in my Reply V.S. that the distinction between true economic marginal cost (upon which Ramsey pricing depends) and accounting measures of variable costs is not a mere quibble. It is fundamental. The reasons bear reiteration: As a general matter, accounting costs do not capture marginal cost, even if accounting techniques can measure unit variable cost. Instead, marginal cost is the province of careful and sophisticated statistical estimation techniques of the “burdensome” kind suggested in the *Guidelines*. Accounting measures of variable cost do not and commonly cannot recognize the kind of “local factors and circumstances” the *Guidelines* correctly identify as influencing economic marginal cost. Such factors include movement-specific contractual terms, movement- and/or contractually specific risks, movement-specific handling and logistics necessities, and degrees of congestion encountered in serving particular movements and/or line segments. Thus, for example, a rail carrier would be expected to incur higher marginal costs to serve customers with whom it has agreed to particular performance standards or particular handling and logistics techniques. Similarly, where non-performance or operational risks are differentially present, a carrier can be expected to take actions and incur costs that minimize those risks and add to the marginal cost of service.

Of particular relevance to today’s coal transportation sector, true economic marginal costs of serving particular shippers are subject to costs attributable to system congestion. In key respects, these costs are inherently outside of the scope of accounting measures of cost. Congestion occasions the need for carriers to incur costs to relieve that

congestion and, during periods of congestion, ration away that congestion by making decisions on where to allocate resources and whom to serve (or whom to serve first or with the highest quality). Indeed, basic economic principles recognize that under conditions of congestion, one of the components of true economic marginal cost is the cost of having to “bump” certain customers off the system (or “bump” them to the back of the queue in terms of service timing and quality).³⁴ This forgone service (or quality of service) is a cost of serving those who do not get “bumped” – because the forgone service reflects society’s having to forgo the value of the service that is adversely affected by congestion.

Such costs are not recorded on any firm’s accounting books. We do know, however, that congested transportation systems can drive marginal costs orders of magnitude above accounting measures of variable cost. This can be seen when transportation systems become congested and maximum prices are not regulated. The case of congested natural gas pipelines serving California in 2000-01 is well documented: In the face of congestion in the transportation system for natural gas, market prices for gas rose with marginal costs to dramatic heights – as much as 1000% or more above accounting measures of variable costs.³⁵ When true marginal costs rise relative to unit variable costs, it is a sign that more capacity is needed in a market; failing to allow prices to reflect marginal costs in such situations exacerbates shortages and harms the public.³⁶ Failure to act in accord with these most basic of economic realities was spurred by terms of political office that always seemed shorter than when problems of discouraged

³³ *Guidelines* at 532, n.31.

³⁴ See, Kahn, Alfred E., *The Economics of Regulation: Principles and Institutions* (Cambridge: MIT Press, 1988), at 87-89.

³⁵ See, e.g., Kalt, Joseph P., *Statement before U.S. House of Representatives Committee on Government Reform, Subcommittee for Energy Policy, Natural Resources and Regulatory Affairs, Hearings Regarding Natural Gas Capacity, Infrastructure Constraints, and Promotion of Healthy Natural Gas Markets, Especially in California*, October 16, 2001.

³⁶ The fact that congestion resulting from tight supply relative to demand puts sharp upward pressure on true marginal cost underscores why assertions that we can tell a rate increase is not commercially reasonable merely by looking at its size (e.g., *per* PPL Reply at 6 and WFA Reply at 4; see, also, Additional Opening Comments of Western Fuels Association, Inc., and Basin Electric Power Cooperative, Inc., *Ex Parte* No. 657 (Sub-No. 1), *Major Issues in Rail Rate Cases*, at 5) are unsupportable distractions from proper analysis.

investment and distorted price signals would appear. In the end, however, scoffing at the need for economically rational pricing and appropriate investment proved too easy and left California with too little transportation capacity and a civic and economic crisis that played a key role in the public's mid-term removal from office of Governor Gray Davis.

WCTL cites a study released in January 2003 by the American Association of State Highway and Transportation Officials (AASHTO) asserting that the study did not see problems of congestion in rail transportation of coal when the study was released.³⁷ Regardless of what that trade association may have seen as of January 2003, the evidence of congestion adversely affecting coal transportation has been strong since at least mid-2003. In fact, the cited AASHTO study draws its conclusion based primarily on the 2000 TRANSEARCH database. Yet, conditions in the Power River Basin (PRB) have clearly changed since the period from which data used in the AASHTO report are drawn. As previously noted, for example, BNSF Executive Vice President John Lanigan testified in April 2005 in *EP 657* that the number of coal trainsets hauling PRB coal increased *over 40%* from January 2003 to December 2004.³⁸

Similarly in the case of the UP, Thomas Haley, Assistant Vice President- Network and Capital Planning, has documented in this proceeding the very rapid growth and consequent rapid increase in congestion on the UP system. Mr. Haley notes that: "Since the summer of 2003, UP has set all-time records in every month, except months in which extraordinary natural disasters [such as hurricane Katrina] shut down key parts of UP's network."³⁹ Mr. Haley reports that the UP system's congestion threshold of approximately 180,000 carloads per week had only previously been reached during peak fall periods, "but in 2003 traffic levels surged above that level and have stayed there ever since," except when extraordinary events have interrupted UP.⁴⁰ Mr. Haley goes on to

³⁷ WCTL Reply at 6-7.

³⁸ The average trainsets increased from 270 in January 2003 to 390 in December 2004, a 44% increase. Statement of John Lanigan, on behalf of BNSF Railway Company, *Ex Parte 657, Rail Rate Challenges Under the Stand Alone Cost Methodology*, at 2 and exhibit 7.

³⁹ Verified Statement of Thomas C. Haley, on behalf of The Union Pacific Railroad, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter "Haley Opening"), at 2.

⁴⁰ Haley Opening at 2.

describe quite specifically the congestion being confronted in the movement of PRB coal and accurately describes the economics of why such congestion implies high and rising marginal cost of providing PRB coal transportation: “with excess capacity long-since exhausted and demand growing, coal must compete with other commodities for scarce capacity.”⁴¹

As noted, high and rising marginal costs signal the need for new capacity. Adding capacity in the rail sector is hardly instantaneous, given the difficulties of acquiring capital, construction lead times, risks that delay decisions, and the like. In fact, the AASHTO report itself recognizes the rail industry’s financial challenges. It finds that the rail industry has not been earning a rate of return sufficient to cover its cost of capital and that most of the benefits accruing from increases in productivity have been passed through to shippers in the form of rate cuts, thus reducing the amount of capital available for the railroads to invest. In the words of the AASHTO report, these factors are “forcing [railroads] to borrow money to maintain or expand infrastructure, or to defer maintenance and improvements.”⁴² The AASHTO report recognizes that the capital-intensive rail industry is not earning enough revenue to maintain and expand its infrastructure.⁴³ Moreover, the AASHTO report notes that if the PRB corridor simply follows the “no-growth” scenario (i.e., invests at the minimum level to just maintain current operations) railroads will be unable to handle the growing demand and volumes will be diverted to highways.⁴⁴ Artificial or inappropriate caps on rates for unit train operations, caps not cognizant of the true economic marginal cost, would clearly have negative effects on the railroads’ ability to even maintain current levels of investment, much less finance capacity expansion.

⁴¹ Haley Opening at 12.

⁴² The study was published in January 2003 and is entitled *Transportation – Invest in America, Freight Rail Bottom Line Report* (hereinafter “AASHTO Report”), at 95.

⁴³ AASHTO Report at 36.

⁴⁴ AASHTO Report at 70-71.

As detailed extensively in my Rebuttal Verified Statement in the *Western Fuels* case,⁴⁵ assertions that no capacity tightness exists or will exist in the PRB are contrary to conclusions widely held by the industry, the press, the STB, the financial community, and the Department of Energy. I noted in my Reply V.S. in *EP 657*, for example, that the Department of Energy's Energy Information Administration estimates that PRB coal production will grow from a level of 398 million tons per year in 2004 to 615 million tons annually in 2024.⁴⁶ Such demand growth cannot help but strain rail transportation capacity.

Beyond UP and BNSF, market participants widely recognize that coal transportation capacity is tight. When CANAC, a railroad operations planning and engineering consulting firm, updated their "landmark" rail capacity study in late 2003, they found that the PRB's Joint Line was "operating near the threshold of capacity" and that as a result, "outages [mine and track] will be inevitable."⁴⁷ The *U.S. Coal Review* similarly notes that in "Wyoming's Powder River, there is no shortage of coal, but transportation capacity going east has been reached."⁴⁸ Furthermore, between 2003 and the present, *Platts Coal Outlook* has routinely published articles reporting that "rail capacity on the Southern PRB's Joint Line, operated by both UP and Burlington Northern Santa Fe, is at or very near maximum."⁴⁹

Nor has the existence of PRB capacity constraints been lost on Wall Street. In October 2004, Legg Mason observed in its discussion of Union Pacific that "demand for coal appears very strong, as there is more coal being produced than can be hauled," and that "Burlington Northern Santa Fe does not have enough capacity to make up for Union

⁴⁵ See, Docket 42088, *Western Fuels Association, Inc., & Basin Electric Power Cooperative v. The Burlington Northern Santa Fe Railway Company*, Rebuttal Verified Statement of Joseph P. Kalt, at 6-9.

⁴⁶ U.S. Energy Information Administration, *Annual Energy Outlook 2005*, Supplemental Table 111 (hereinafter "EIA AEO Table 111").

⁴⁷ "Capacity Issues and Trends in the PRB," *Platts Coal Outlook* (November 17, 2003).

⁴⁸ "Coal Coming On: Demand Likely to Increase in 2005," *The Billings Gazette* (January 16, 2005).

⁴⁹ "Coal Market Reaching Fever Pitch as Prices, OTC Volumes Soar," *Platts Coal Outlook* (December 8, 2003). See also "KFx Project Raises Possibility of Arch Reviving Coal Creek Mine," *Platts Coal Outlook* (March 29, 2004), and "Shippers, Railroads Need Joint Solutions to Problems," *Platts Coal Outlook* (March 21, 2005).

Pacific's diverted traffic."⁵⁰ Moreover, these capacity constraints are not portrayed as a short-term problem since PRB coal volumes are forecasted to grow substantially over the next 20 years.⁵¹ Bear Stearns, for example, noted in May 2005 that "drivers of growth in Western coal volumes [are] expect[ed] to persist."⁵²

The Board has also observed the economic trends that are shaping the balance between supply and demand for rail transportation and has closely watched the ability of the industry to meet increased demand.⁵³ In various contexts, the Board has expressed concern over the adequacy of rail capacity to meet demand. For example, to monitor trends regarding potentially limited capacity particularly during peak seasons, former STB Chairman Nober wrote to each of the Class I railroads in 2004 and 2005 regarding the railroads' ability to handle fall peak demand.⁵⁴ In his 2005 letter, Chairman Nober noted that "over the past two years it has become apparent that many of the service issues experienced by railroads and their customers are related to insufficient rail capacity."⁵⁵ In the same vein, STB Commissioner Mulvey has noted that continuous growth in demand over the next two decades coupled with the railroads' inability to earn their cost of capital and thus further invest in infrastructure will lead to a network that will have exhausted its "excess capacity" and will, therefore, be more vulnerable to random events.⁵⁶ While the

⁵⁰ "Union Pacific Corporation NYSE:UNP – Network Congestion and Fuel Costs Remain Problematic; Demand Still Strong," Legg Mason (October 22, 2004).

⁵¹ The most recent EIA forecast predicts that PRB coal production will increase from 398 million tons annually to 615 million tons annually between 2004 and 2024, an increase of 55%. See EIA AEO Table 111.

⁵² "Railroads: Railway Rush Hour – How Long Will Tightness in Rail Capacity and Pricing Gains Persist?" Bear Stearns (May 12, 2005).

⁵³ STB Commissioner Francis Mulvey, "The Transportation Capacity Problem: Approaches to Congestion Relief," NMFTA/NCC Meetings, San Francisco, California (August 9, 2005) (hereinafter "Mulvey August 9, 2005, Presentation"); STB Commissioner Francis Mulvey, "The STB and the Railroads in a Capacity Constrained Environment," North American Fertilizer Transportation Conference, Mount Tremblant, Quebec (June 13, 2005); Presentation by STB Chairman Roger Nober at The Journal of Commerce Trans-Pacific Maritime Conference, Long Beach, California (February 28, 2005).

⁵⁴ See Letter from the Chairman Nober to Railroad CEOs Re: Fall Peak Service Demands (June 9, 2004) and Letter from Chairman Nober to Railroad CEOs Re: Fall Peak Service Demands and Infrastructure Improvements (June 15, 2005) (hereinafter "Nober 2005 Letter").

⁵⁵ Nober 2005 Letter at 2.

⁵⁶ Mulvey August 9, 2005, Presentation at slide 10.

Board's concerns were not expressed in these instances as being PRB-specific, the Board's observations logically apply to the PRB, where traffic volume is increasing particularly rapidly.

As rail capacity tightens, it is necessary for railroads to earn revenues sufficient to permit them to invest in capital-intensive rail infrastructure. In markets where there is a tight supply of capacity relative to demand, prices can be expected to increase. Indeed, "reasonable" price movements are not solely downward in direction. In well-functioning markets, prices appropriately rise when supply and demand conditions tighten. Such price movement signals to the economy – customer and supplier alike – where and when resources are scarce and in need of conservation by consumers and augmentation by producers. In such an environment, imposing regulated rates that ignore the underlying upward pressure of rising marginal costs on prices limits the ability of the market to correctly signal investors, and discourages the very investment necessary to alleviate capacity constraints. The end game in that scenario has the unsavory flavor of the noted California energy crisis, although in the case of coal transportation our focus is on a much broader swath of the nation than just the West Coast.

The conclusion that comes from this discussion of constrained capacity—namely, that in periods of tight capacity high prices are appropriate and desirable—is central to the discussion of rate reduction methodologies. Methodologies such as MCM, MMM and RAM simply ignore marginal cost and Ramsey principles tied to marginal cost – at a time in which congestion is clearly putting upward pressure on marginal costs and Ramsey prices. In the case of methods such as GPRM and WFA's alternative of its Reduced Mark-Up Method the problem is similar. These purport to preserve relationships in percentage mark-ups above marginal cost across coal and non-coal shippers, but they actually offer to hold constant relative relationships between mark-ups of price over accounting measures of variable cost – and they offer to do this when the economics clearly indicate that economic marginal costs are rising sharply relative to accounting measures of variable cost.

AEPTX⁵⁷ asserts (and is joined in their respective frameworks by other shippers) that PRM ought to be rejected because it does not reduce rates as deeply as GPRM (or MMM, or MCM, or RAM, or Reduced Mark-Up) for any given finding of excess SARR revenues in a SAC analysis. Yet, cogent consideration of the implications of system congestion for marginal costs recognizes that this is a key public interest argument in favor of PRM. As discussed at length in my Reply V.S., GPRM's (and other proposed alternatives') attempts to claim "purity" or even consistency with respect to Ramsey pricing by proxying the true economic marginal costs upon which Ramsey pricing is based with accounting measures of variable cost are rendered futile even in the absence of congestion.⁵⁸ The effects of congestion on economic marginal costs relative to accounting measures of variable costs, however, can make proxies based on the latter downright dangerous to the public interest. In conditions of tight supply relative to growing demand, Ramsey principles imply high and rising prices for constrained services relative to other services, and the public interest is threatened in the extreme by scoffing at this implication and pretending that rates can be held down by proxying high and rising marginal costs with accounting measures of variable cost or by eschewing demand-based pricing and adopting an arbitrary seriatim rule (as under MMM, MCM, and RAM) to try to justify shifting revenue recovery from high marginal cost, low demand elasticity shippers. This does not mean that PRM is "perfect Ramsey" – there is no such rule feasibly available from any quarter. But PRM is the feasible method of rate reduction that respects the implication of Ramsey principles for the rank order of a railroad's rates, and that respects the implications of economic marginal cost for Ramsey pricing.

III. PROPER TREATMENT OF CROSS-OVER TRAFFIC REVENUES FOR SARRS

This rulemaking proceeding has permitted the clarification and crystallization of a number of debates and issues regarding proper implementation of Constrained Market Pricing via the SAC analysis set out in the *Guidelines*. Such is certainly the case with the

⁵⁷ AEPTX Reply at 4-5.

⁵⁸ See Kalt Reply at 10-22.

question of the appropriate treatment of cross-over revenues. These are revenues allocated to complainants' SARRs when their proposed SARRs are presented as serving not only the issue traffic and (perhaps) some non-issue traffic on a through basis, but also serving non-issue traffic on partial moves that "cross over" from/to the incumbent to/from the proposed SARR. The issue of how much cross-over revenue to credit to the SARR warrants careful consideration since the trend in SAC cases has been toward SARRs that subsist almost entirely on cross-over revenue – for example, reaching as much as 95% of the SARR's revenue in the *Western Fuels* case. Such extreme reliance on cross-over revenue raises the question of whether or not SAC cases have veered from the original intent of finding the rates that competition in contestable markets would set for *issue* traffic and, instead, turned into convoluted searches by bizarrely contrived SARRs for non-issue revenue that can be used to minimize the revenue contribution needed from issue traffic in order for the SARR to cover its stand-alone costs.

Reduced to essentials, the debates over cross-over revenues break down analytically into the following:

- First, if the economics of the "simulated"⁵⁹ competition of contestability envisioned in the *Guidelines* are applied to the actual SARR proposed by a complainant that is in that competition, competition in the contestable market would set the rates (and resulting revenues) on the SARR's portions of cross-over moves at no more than the costs the incumbent would avoid by not carrying that portion of the move.⁶⁰ The economics of this are well-established and not seriously debatable.
- Second, if (i) the actual partial SARRs that complainants now routinely propose are treated as "simplifications" of "full"⁶¹ SARRs because developing full SARRs is seen as too burdensome on complainants in SAC cases, and (ii) the economics of the "simulated" competition of the *Guidelines* are to be applied *as if* the complainant has proposed a "full" SARR, a "full" SARR

⁵⁹ *Guidelines* at 528.

⁶⁰ See Kalt Opening at 39-40 and Kalt Reply at 31.

⁶¹ *EP 657: Major Issues in Rail Rate Cases* at 17.

would capture revenues on those “full” through traffic movements. Appropriately conceived of as revenues attendant to demand-based rates – which are only defined for through moves, since customers do not have “demand” in the Ramsey sense for parts of moves⁶² – it is not coherent to speak of differential amounts of these through revenues as applying to different portions of a through move. Rather, any through move is made up of a lump of revenue that contributes to the total costs of the “full” system. Unfortunately, both the Board’s current Modified Straight-Mileage Prorate (MSP) methodology and its original Modified Mileage Prorate (MMP) methodology have attempted to base cross-over revenue assignments on differential portions of through revenues based upon differential costs and functions of sub-portions of through transportation without appropriate recognition of the implications of traffic densities for cross-over rates and revenues.⁶³ The Average Total Cost (ATC) allocation method now suggested by the Board in *EP 657* addresses this problem by simply splitting the total through revenues of a move on the “full” SARR in accord with the ratio that the average total cost of the proposed partial SARR’s segment of a move bears to the average total cost of the full through move.

- Third, the argument in favor of using the notion of “full” SARR competition and associated ATC treatment of cross-over revenues is that it represents procedural *simplification* in SAC cases. The arguments against the simplification and in favor of simulating the competition of the actual SARRs proposed by complainants are that: (i) the “simplification” approach creates (as the Board has recognized⁶⁴) incentives for complainants to proffer partial SARRs that are not calculated to satisfy the *Guidelines*’ criterion of efficiency

⁶² See Kalt Opening at 40-41.

⁶³ Verified Statement of John C. Klick, on behalf of BNSF Railway Company, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases*, at 23-27, and Reply Verified Statement of John C. Klick, on behalf of BNSF Railway Company, *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases*, at 15-22.

⁶⁴ STB Docket No. 42072, *Carolina Power & Light Company v. Norfolk Southern Railway Company*, Decision (December 22, 2003), at 31-32.

in SARR design, but instead are calculated to maximize the contribution of cross-over revenues so as to maximize the opportunity to find that extant incumbent rates generate above-SAC revenues; and (ii) application of the economics of contestability to the actual SARRs proposed by complainants would appropriately incent complainants to proffer *efficient* SARRS in terms of their sizes, layouts, operations, and targeted traffic groups.

- Finally, it is important that, whatever treatment of cross-over revenues is adopted, it be coherently integrated with the accompanying rate reduction methodology. In a framework in which contestable market economics are applied to the actual partial SARRs as proposed by complainants in SAC cases, cross-over revenues do not properly involve any allocation of through revenues. Rather, the SARR replaces the incumbent for the cross-over portions of moves, and cross-over revenues are properly calculated as being no more than the incumbent's avoidable costs of the crossed-over portion of a move. On the other hand, if the framework of "simplification" and "full" SARR analysis is applicable, competition by "full" SARRs for through moves represents competition over the rates paid for through movements by customers. These rates are the rates to which Ramsey principles apply. As such, simulated competition from "full" SARRs in the contestable market of SAC analysis would be expected to put downward pressure on the through rates for through traffic sought by a "full" SARR. Thus, to be coherent, rate reduction in SAC analyses that allocates revenues to cross-over traffic via the short-cut of an ATC methodology would apply the rate reduction percentages (e.g., under PRM) to the through revenues associated with cross-over traffic.

III.A Cross-Over Revenue Allocation and SAC Analysis of Actually-Proposed SARRs

Shippers in this proceeding resist applying the economics of contestability to the partial SARRs that complainants in SAC cases actually propose. Notwithstanding the applicable economics and their consistency with contestability, it is in shippers' interests as complainants in SAC cases to seek more than the incumbent's avoidable costs on

cross-over portions of moves as cross-over revenues. They do so by asserting that allocating revenues to SARRs' cross-over traffic at the level of incumbents' avoidable costs on those moves is inconsistent with economic principles discussed in the Interstate Commerce Commission's (ICC) decision in *Nevada Power*.⁶⁵ Their reasoning is incorrect.

The ICC noted in *Nevada Power* that "we cannot take into account any post-entry [price] responses by the incumbent."⁶⁶ The reason for this is that incumbent railroads have sunk costs, and sunk costs act as a barrier to entry because they can allow a real world incumbent to "retaliate" in response to the prospect of entry by ignoring sunk fixed costs and reducing its rates all the way down to variable costs. The ICC was explicit in *Nevada Power* about the problem:

Because of the prevalence of "sunk costs" in railroading, however, post-entry competition between a SARR and an incumbent will not mirror contestable outcomes. That is because an incumbent could remain in the market even if it were to offer rates that do not cover costs that are already sunk...[Accordingly,] a potential entrant will shun a market when price retaliation by the incumbent reduces revenues before the entrant has a chance to recoup its costs.⁶⁷

Because the goal of SAC analysis under the *Guidelines* is to "mirror contestable outcomes" and because the indispensable prerequisite for markets to be contestable is the absence of sunk costs that could impede entry or exit, the incumbent and its sunk costs are effectively removed from the picture as a competitor *for the service offered by the SARR*. For the services offered by the SARR, the SARR is a replacement for the incumbent. At the same time, however, this does not mean that the non-SARR remainder of the incumbent goes away: As WCTL's expert, Prof. Borts, puts it, "the SARR can choose what portion of the route to serve, and purchase transportation service from the

⁶⁵ Reply Verified Statement of George H. Borts, Ph.D., on behalf of Western Coal Traffic League, et al., *Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases* (hereinafter "Borts Reply"), at 7; WCTL Reply at 26-27; and WFA Reply at 5-6.

⁶⁶ Interstate Commerce Committee, No. 37038, *Bituminous Coal – Hiawatha, Utah to Moapa, Nevada*, Decision (October 12, 1994), at 265-267.

⁶⁷ 10 I.C.C.2d at 266-267.

incumbent or other railroads for the remainder.”⁶⁸ As I have detailed in my Opening V.S. and my Reply V.S., the outcome of contestability in such a setting of partial SARRs is that those SARRs will receive revenues on their portions of cross-over traffic equal to no more than the associated fixed and variable costs avoided by the remaining incumbent when it is replaced by a SARR. These avoidable costs would include any fixed costs that, in the real world, would be sunk and not avoidable.⁶⁹ Contestability removes sunk costs from the picture and, with it, the ability of an incumbent to “retaliate” against entry and prevent a SARR from replacing it.

As discussed at length in my Reply V.S.,⁷⁰ WCTL (esp. through Prof. Borts) would have us interpret the “no entry-detering retaliation” insights of *Nevada Power* as meaning that SARRs do not have to accept the outcomes of a competitive, contestable market in SAC analyses. WCTL would have the Board treat the stand-alone costs of the SARR as a “floor...not a cap”⁷¹ on SARR revenues. This turns contestability on its head. The essence of contestability and the *Guidelines*’ embracing of contestability is that contestability allows SAC analysis to “simulate” competitive market outcomes.⁷² The sine qua non of contestability and the competitive outcomes it generates is the absence of profits in excess of costs (where costs include a profit return sufficient to just cover the cost of capital). This has been accurately captured by the Board in its *AEPCO* decision (emphasis added):

[C]ontestable market theory allows for the simulation of a competitive price by calculating what a hypothesized efficient producer *would need to charge* to provide service.⁷³

What any producer, including a SARR, “needs to charge” to provide service is its stand-alone costs – and no more.

⁶⁸ Borts Reply at 10-11.

⁶⁹ See Kalt Opening at 43-46 and Kalt Reply at 31-33.

⁷⁰ See Kalt Reply at 30-37.

⁷¹ WCTL Opening at 47.

⁷² *Guidelines* at 529.

What WCTL and other shipper interests invoking *Nevada Power* would have that decision stand for is the proposition that SAC analysis is intended to bring its simulated economics of contestability to bear only upon the competition for the issue traffic, while ignoring the implications of contestability anywhere else in SAC analysis. Thus, for example, WCTL wants SARRs to collect any revenues they can on cross-over traffic, regardless of the implications of competition. Doing so leaves less revenues to be collected on issue traffic. But if this is what *Nevada Power* stands for, then it stands contrary to the public interest criteria that flow from competitive markets (i.e., revenues that do not exceed what an efficient producer *would need to charge* to provide service) and is internally self-contradictory.

If it is to be non-contradictory and coherent as a matter of basic economics, as applied to cross-over traffic revenues, *Nevada Power*'s discussion of sunk costs (see above) and its resulting dictum to the effect that "price retaliation by the incumbent reduces revenues before the entrant has a chance to recoup its costs"⁷⁴ can only be interpreted to mean that SAC analysis should insulate SARRs from pricing by incumbents that allow incumbents to take advantage of their sunk costs. An efficient SARR *can* recoup its costs when incumbents are precluded from pricing below their full (fixed and variable) costs. Such pricing by incumbents is high enough to cover the costs of an efficient SARR.

To illustrate, consider an incumbent with full costs of \$100, consisting of, say, \$60 of directly variable costs plus fixed costs (including any fixed costs that would be sunk in the real world) of, say, \$40.⁷⁵ In a real world of sunk costs, such an incumbent

⁷³ STB Docket No. 42058, *Arizona Electric Power Cooperative, Inc. v. The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company*, Decision, August 20, 2002, at note 9.

⁷⁴ 10 I.C.C.2d at 266-267.

⁷⁵ It is important to stress that the avoidable costs of an incumbent losing cross-over traffic to a SARR in a contestable setting consist of *more than* just the incumbent's associated *variable* costs. Concomitantly, to the extent that *Nevada Power* stands for the proposition that a SARR's cross-over revenues should not be restricted to merely the replaced incumbent's *variable* costs, that decision is sound. Moreover, as I discuss in my Reply V.S. in *Western Fuels*, in cases where the SARR does not replace the incumbent for all traffic over lines replicated by the SARR properly-calculated, URCS can be used as a starting point for determining proper avoidable costs and, hence, cross-over revenues. URCS includes costs that would be considered fixed and sunk in the real world. Treating applicable

could rationally lower its rates all the way to the directly variable costs (\$60) to block entry by a SARR with total costs of, say, \$90, none of which have yet been sunk. Under SAC analysis, however, the incumbent is subjected to the economics of contestability; that is, the incumbent is assumed to have no sunk costs. The incumbent's avoidable costs, if it loses to the SARR, are \$100 and, hence, it cannot rationally price so as to generate revenues of less than \$100. Accordingly, if an efficient SARR then has full costs of \$90, that SARR has no worries about "retaliatory" pricing by the incumbent (since the incumbent has no sunk costs to ignore); and the SARR has no worries that, if it sets its prices at less than \$100, it will replace the incumbent and recoup its costs. The only coherent, non-contradictory interpretation of *Nevada Power's* concern regarding SARR cost recoupment is that the incumbent not be able to thwart the efficient SARR's attempts to replace the incumbent by "retaliating" against entry with pricing below its (the incumbent's) full costs. The economics of contestability embodied in the *Guidelines* assume that the incumbent has no sunk costs, so this is made impossible. The efficient SARR always replaces the incumbent and recoups its costs under such conditions.

In summary, an efficient (i.e., lower-cost-than-incumbent) SARR has no worries about having the "chance to recoup its costs" in a contestable market: its stand-alone costs are at or below the level of revenues generated by *competitive* pricing by an "incumbent" in a contestable market. Properly applied, the economics of contestability leave incumbents with no sunk costs and hence no prospect of retaliating as *Nevada Power* worried they could in the not-simulated real world of sunk costs. In fact, rational pricing in a contestable market, including the pricing and revenues that a partial SARR could expect when replacing an incumbent and providing cross-over services in a contestable market, embodies the deep reason the public interest is served by competition in a market. Specifically, the rational pricing that emanates from consistent application

such components as avoidable in the contestable setting is proper, and associated URCS-based measures of avoidable costs can thereby remove from SAC analysis the sunk costs that might otherwise be a source of entry-blocking advantage to an incumbent. By including in avoidable costs those components of fixed costs that would not be sunk under conditions of contestability and that would thereby be avoided by the incumbent upon its being replaced by the SARR, the implementation of a URCS-based measure of avoided costs would – consistent with *Nevada Power* – preclude the incumbent from exploiting any entry-blocking advantages created by its sunk costs. See STB Docket No. 42088, *Western Fuels Association, Inc., & Basin Electric Power Cooperative v. BNSF Railway Company*, Reply Statement of Joseph P. Kalt, at 23.

of the economics of contestability in SAC analysis recognizes that a “winning” efficient partial SARR “wins” by being able to make offers in the marketplace that at least leave one party better off and no parties worse off: By pricing its cross-over moves at no greater than the full avoidable costs of the incumbent on those SARR segments, the incumbent is no worse off, the SARR captures up to the benefits of its greater efficiency (\$100 minus \$90 in the example above), and cross-over shippers see downward pressure on through rates to the extent the SARR’s greater efficiency is not entirely captured by the SARR.⁷⁶ Setting SARR cross-over revenues at the level of the incumbent’s total avoidable fixed and variable costs of the SARR-replaced cross-over service is the only way of guaranteeing these results in SAC cases.

In sum, the implication of the simulated competition of contestability for the cross-over revenues of partial SARRs is cross-over allocations that are no greater than the fixed and variable costs (including fixed costs that in the real world would be sunk and unavoidable) that the incumbent avoids by being replaced by the SARR for the cross-over portions of moves handled by the SARR. These are precisely the results that arise under when SARRs carry portions of cross-over moves themselves and “purchase transportation service from the incumbent...for the remainder.”^{77,78}

III.B “Full” SAC Analysis and Cross-Over Revenue Allocation

Shippers in this proceeding are uniform in their desire to perpetuate the use of mileage pro-rate methods for determining the allocation of cross-over revenues to

⁷⁶ If the SARR’s efficiency advantage is not entirely retained by the SARR (e.g., because in terms of the numerical example, the SARR prices its cross-over service at between \$100 and \$90), the overall through marginal cost of cross-over traffic is reduced and the rational incumbent reduces its profit-maximizing through rate for such traffic because the lower marginal cost allows profits to be maximized at a balance point involving lower rates and higher volumes.

⁷⁷ Borts Reply at 10-11.

⁷⁸ Arkansas Electric Cooperative Corporation’s expert, Michael Nelson, seems to imply that a partial SARR would put downward pressure on through rates (Reply Testimony of Michael A. Nelson on behalf of Arkansas Electric Cooperative Corporation, Ex Parte No. 657 (Sub-No. 1), *Major Issues in Rail Rate Cases*, at 10-11). As the Board, the courts, and economics have long recognized, this is fallacious. See, for example, United States Court of Appeals for the District of Columbia, No. 95-1435, *Western Resources Inc., Petitioner, v. Surface Transportation Board and United States of America, Respondents*, On Petitions for Review of an Order of the Surface Transportation Board (March 28, 1997), at 7-11.

SARRs. Yet, the discussion above makes it clear that such methods bear no relation to contestability or the economics of competition by partial SARRs. In fact, even under the alternative suggested by the Board in this proceeding, in which SAC analysis seeks the results of contestability for “full” SARRs and merely employs partial SARRs as simplifying short-cuts to that end, mileage pro-rate methods of cross-over revenue allocation are indefensible within the economics of contestability and Constrained Market Pricing embodied in the *Guidelines*.

MSP- and MMP-type methodologies fail to adequately account for line densities in setting cross-over revenue allocations. In attempting to defend such methodologies as market proxies, complainants commonly attempt to assert that MSP and/or MMP properly assign the marketplace’s values to different portions of a through movement. Such arguments, however, are futile, inevitably devolving into arbitrary semantic debates of the form: “This mile of track (or this equipment, or this switching yard, etc.) contributes this much of the overall value of the through move that customers value.” The flaw is well-recognized in the *Guidelines*: “Any means of allocating these costs among shippers other than actual market demand is arbitrary...”⁷⁹ The economic problem lies in the fact that components of a rail move – miles of track, equipment, yards, and the like – work as an integrated whole to deliver what customers value. What customers value is through transportation that moves their goods and commodities from a point of origin to a desired point of delivery with expeditious speed, timing, and handling. If a railroad’s movement of traffic is not wasteful and the pieces of the system enable that movement to provide what customers demand, there is no non-arbitrary allocation of value to pieces of a movement that can be derived from some differentiation by function and then used to set rail rates.

The foregoing is implicitly recognized in the Board’s suggestion of an Average Total Cost method of dividing through revenues between SARR and non-SARR to arrive at the former’s cross-over revenues. While the “devil” is likely to be in the details in terms of employing railroad cost measures to arrive at ATC for particular moves, an ATC

⁷⁹ *Guidelines* at 526.

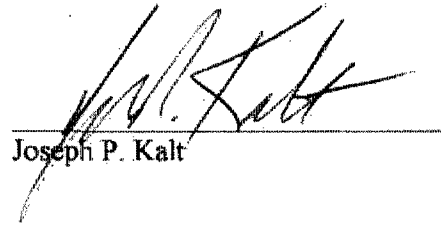
methodology does not attempt to differentiate the value contributions of the component rail inputs to a through move. Rather, it would take the demand-based revenues of the incumbent on such moves and eschew such differentiation in favor of splitting the overall value (revenue) between SARR and incumbent based on the SARR segment's share of the ATC of the full move. The implicit reasoning is that all of the revenues go to cover all of the costs of a move, and each segment is supporting all of the revenues. In proffering an ATC methodology, the Board has correctly recognized that MSP/MMP do not account for the inverse relationship between density and the level of rates needed to recover any given amount of revenue and cover any given amount of costs. The ATC methodology, on the other hand, pays due attention to this reality.

In the event that a SAC analysis finds that total SARR revenues exceed the SARR's stand-alone costs and a rate reduction is warranted under the *Guidelines*, a proper rate reduction methodology (whether it be PRM, GPRM, MCM, MMM, etc.) must model the competition of the "full" SARR as putting downward pressure on the rates that are relevant to customers and to Ramsey pricing. These are the rates for origin-to-destination movements of customers' traffic. The ATC method of allocating cross-over revenues for purposes of a simplified "full" SARR analysis is consistent with a hypothesized full SARR competing to carry traffic over its full route and, in so doing, putting downward pressure on through rates for full movements. ATC allocation of cross-over revenues amounts to saying the ATC-proportionate share of competition's downward pressure on through moves falls on the affected segments of partial SARRs' cross-over carriage.

It is not unreasonable for a regulatory body such as the Board to seek the kind of simplification it sees in a so-called "full" SARR framework. Doing so, however, involves trade-offs. In the case at hand, the use of the concept of the "full" SARR and the acceptance of partial SARRs as short-cuts to analysis of "full" SARR contestability would soften, but not totally eliminate, complainants' incentives to go searching for partial SARRs that maximize contributions of cross-over revenues so as to minimize the revenue burdens on issue traffic, regardless of how physically or operationally inefficient the resulting partial SARRs may be. At least, however, the use of an ATC approach to

allocations of cross-over revenues in a “full” SARR framework would eliminate the incentives that MSP and MMP give complainants to seek partial SARRs that do not take account of the density of traffic on the segments that carry their cross-over traffic.

I declare under penalty of perjury that the foregoing is true and correct.



Joseph P. Kalt

Executed on June 30, 2006.

REBUTTAL VERIFIED STATEMENT

OF

ROBERT D. WILLIG

I. INTRODUCTION

My name is Robert D. Willig. I filed an Opening Verified Statement in this proceeding on May 1, 2006 (Willig Opening VS), and a Reply Verified Statement on May 31, 2006 (Willig Reply VS). A copy of my CV is attached as Exhibit No. __ (RDW-1) to My Opening VS.

In this Rebuttal Verified Statement, I have been asked by BNSF Railway Company ("BNSF") to address two issues raised in the Reply Comments filed by WCTL et al., including the Reply Verified Statement filed by Professor Borts (Borts Reply VS).¹ First, I have been asked to address the claim that the railroads, in this proceeding, are advocating complete deregulation of rates. Second, I respond to criticisms of Dr. Kalt's concept of "contestability pricing."

II. MANY OF THE SHIPPERS' CRITICISMS OF BNSF'S OPENING TESTIMONY ARE MISGUIDED CHALLENGES TO THE *GUIDELINES* THEMSELVES

In my Opening VS, I noted that while the Board's rate reduction proposals were explicitly designed to address the possibility of "manipulation" by the carriers of the percent reduction approach that it has long relied upon, the Board's notice of proposed rulemaking did not identify any circumstance in which a carrier had tried to manipulate the SAC outcome and, more importantly, lacked any meaningful definition of "manipulation." I urged that rather than proposing rate reduction methodologies that are demonstrably and fundamentally inconsistent

¹ See *Joint Reply Comments of Western Coal Traffic League, Concerned Captive Shippers, Western Fuels Association, Inc., Edison Electric Institute, National Rural Electric Cooperative Association, and American Public Power Association*, filed May 31, 2006 ("WCTL Reply Comments"), and *Reply Verified Statement of George H. Borts*, filed May 31, 2006 ("Borts Reply VS").

with *Guidelines*, such as MCM and MMM, the Board would better serve the public interest by defining “what constitutes regulatory ‘manipulation’ in economic terms, and . . . explore what analytic steps might practically be taken to discern what pricing is manipulative in that sense.” Willig Opening VS at 25-26. I explained that the relevant inquiry is “whether the challenged rate is consistent with perceived market demand,” and stated that “[i]f a new rate established by a rail carrier is one that would have been set for ordinary business purposes in the absence of regulation, it cannot be manipulative.” *Id.* at 26.

Rather than respond substantively to BNSF’s arguments, the shippers’ Reply Comments misrepresent the testimony and, in the process, make it clear that the shippers either have completely lost sight of, or proactively seek to dismantle, the CMP framework. In *WCTL’s Reply Comments*, this effort is framed as follows:

In effect, BNSF is advocating a rate standard predicated on “what the traffic will bear,” a premise repeatedly (and properly) rejected as a valid regulatory model. *See Increased Rates and Charges, 1978, Nationwide*, 365 I.C.C. 14, 16 (1981).

In his Reply Verified Statement, the Coal Shippers’ witness, Professor George H. Borts, explains how such a complete expropriation of all available economic rents is proof positive that a railroad is engaging in unrestrained monopoly pricing, and hardly can serve as a proper regulatory measure of rate *reasonableness* under 49 U.S.C. § 10701 and the National Transportation Policy. *See R.V.S Borts* at 2-5. Additionally, however, the theory is unsustainable as a matter of law, as its fundamental underpinning was squarely rejected by the D.C. Circuit twenty years ago. *WCTL Reply Comments* at 10-11.

This is followed by a discussion of a D.C. Circuit decision relating to the I.C.C.’s *exemption* of export coal entirely from rate regulation.

To suggest that BNSF – or any of the other railroads in this proceeding – is advocating rate deregulation is an extreme mischaracterization. I can only conclude that shipper efforts so completely to misrepresent the railroads’ views on these issues are designed to promote changes

in rate regulation that, if adopted, would be fundamentally at odds with the economic principles set forth in the *Guidelines*.

At pages 16 and 17 of my Opening VS, I showed that CMP, as designed by the ICC, was effectively a *two*-step process;² as I explain below, the shippers' allegations simply ignore step 2 of the process. In the first step, CMP relies on the carriers "to use the market demand which they observed as the basis for their pricing." *Guidelines* at 527. Furthermore, *Guidelines* explicitly recognizes that railroad managements are most knowledgeable about the market, and have the most to gain by pricing on individual movements in a way that is most likely to lead to overall net revenue maximization.³

The second step contemplated by CMP is to determine whether rates set by reference to observed market demand might nonetheless violate contestable market principles.⁴ *Guidelines* at 528. This step in CMP recognizes that perceived market demand could be affected by entry and exit barriers that would permit a carrier to charge rates on a portion of its system that were higher than would be sustainable if the market were competitive/contestable. In those markets, CMP would constrain overall revenues to be no higher than the forward-looking costs of constructing and operating a system designed to serve those demands (*i.e.*, stand-alone costs). In this way, the SAC test imposes a ceiling on the total revenues generated by market-based rates for the issue and 'grouped' traffic that is consistent with contestable market theory. Implicit in the discussion in my Opening VS is what might be deemed a third step in the CMP approach; *i.e.*, reducing rates for individual movements in the stand-alone traffic group, if overall revenues exceed SAC.

² See, also, Klick Opening VS at 4-6.

³ See, also, Willig Opening VS at 16-17.

⁴ This step can be viewed as including the test for whether rates are higher than necessary for the railroad's revenue adequacy, on which I do not focus here.

It is clear that the potential for “manipulation” – which constitutes the rationale articulated by the Board for considering a change in the rate prescription methodology – might conceivably exist at the first step of CMP, when an issue traffic rate is first established by the carrier; and to be consistent with the *explicit requirements* of CMP, carriers must be permitted to set prices in the first instance based on perceived demand. The shippers’ view that implementing this first step in the CMP process constitutes deregulation of rates simply *ignores* the second element of CMP, *i.e.*, the regulatory constraint on rates that is imposed by the SAC test. Because the SAC test is an appropriate regulatory cap on rates paid by a shipper or group of shippers, the carriers are advocating that they be able to charge “what the market will bear” *subject to application of the SAC test*.⁵ This is a far cry from seeking an exemption from regulation.

Instead, it is the shippers who seem to be advocating abandonment of the Board’s current CMP-based regulatory scheme, because it is they who argue that railroads should be *prevented* from pricing in accordance with perceived market demand. The shippers ignore the reality that Ramsey prices *are* profit maximizing prices, backed down only as necessary and appropriate to satisfy the constraints of the SAC test. Recognizing that implementation of pure Ramsey pricing was fraught with analytical difficulties, the expressed goal of *Guidelines*, was to develop a regulatory scheme that would result in Ramsey prices without imposing an impossible analytical burden on the agency and the parties to individual rate cases.⁶ Of course, CMP caps the total revenues produced by such profit-maximizing prices at SAC, which permits markups above

⁵ As I observed earlier, “. . . in the context of CMP and the SAC test – that since it is only the forward-looking costs of an *efficient* hypothetical competitor that are covered by Ramsey prices, application of Ramsey pricing in this context is not equivalent to ‘charging what the traffic will bear.’” (citing Hadley as characterizing Ramsey prices as “not charging what the traffic cannot bear.”) Willig Opening VS at 16, and n. 22.

⁶ Thus, I noted in my Opening VS, the I.C.C.’s *Guidelines* decision adopting CMP sought to encourage Ramsey-like prices *without* requiring the movement-specific calculations of marginal cost and elasticities of demand that would be required to implement a pure Ramsey pricing scheme.

marginal cost for each movement in the stand-alone traffic group only to the extent that would be observed if the market for all railroad services were contestable.

It is worth revisiting why permitting railroads to set prices initially in response to observed market demand is necessary if the application of CMP is to result in Ramsey-based prices, subject to the SAC constraint. In my Opening VS, I explained that one of the roles of prices in a free-market economy is to encourage resources to be used most efficiently in ways that best serve the public interest:

By demanding particular goods or services, consumers bid their prices to a level sufficient to attract the materials, labor and capital inputs necessary for their production. If prices do not reflect consumer preferences – and are held below the levels at which supplies are adequate to satisfy consumer demand – insufficient quantities of inputs will be attracted to the production of goods and services that are highly valued by consumers. By the same token, if prices are set above levels at which supplies are adequate to satisfy consumer demands, too many resources will be attracted to the production of goods and services that are not as highly valued by consumers. Prices also guide investment decisions, influencing not only the overall magnitude of the accumulation of capital during a particular period, but also determining the apportionment of that capital among the different industries and their various economic activities. Willig Opening VS at 7.

This is the key to understanding why the first step in CMP *must* be to permit the carriers to set rates using “the market demand which they observe.” Only prices set with respect to observed demand are capable of reflecting with specificity the extent to which each and every shipper values the rail service that it utilizes – and as I explained in my Opening VS, railroads (particularly revenue inadequate railroads) have tremendous incentives to understand individual shipper demands and set prices accordingly, because this is the way to maximize profits. When carriers are permitted to set prices in this way, the prices will be directly related to the value each shipper receives from its rail service, *i.e.*, they will be Ramsey optimal, provided that they do not violate the constraint of revenue adequacy.

Even if a carrier's demand-based rates do not permit it to achieve overall revenue adequacy, *Guidelines* contemplates the possibility that some subset of the railroad's system might be characterized by barriers to exit and entry sufficient to impede effective competition from emerging and to permit the railroad to charge unreasonably high rates. This is what the SAC test is designed to determine and, if necessary, remedy. If revenues are found to exceed SAC, then rate reductions are required to produce rates for individual movements in the stand-alone traffic group that conform to the contestable market assumptions modeled by SAC. Because the starting point for any rate reductions required under the SAC test is, by virtue of the first step in CMP, a rate structure that already reflects the relative value of rail service to each customer in the stand-alone traffic group, applying the appropriate rate reductions required by CMP will result in a rate structure that is consistent with *both* contestable market theory and Ramsey prices. Here, appropriate rate reductions do not alter the hierarchy of prices found in the demand-based rate structure that preceded the regulatory rate reductions (*i.e.*, so that the reduction in revenues required to meet the SAC test is distributed consistent with Ramsey principles).

If railroads were not permitted to price in the first instance consistent with observed market demand – as the shippers urge here – then how should they price? Obviously, a pricing regime that ignores relative demand in setting prices would be totally at odds with the explicit requirements of CMP, as set forth in *Guidelines*, and completely inconsistent with the economic principles underpinning *Guidelines*. More fundamentally, as I explained in my Opening VS, preventing prices from reflecting relative elasticities of demand – as perceived by the carriers – would introduce inefficiencies into the market for rail services that would be harmful to the public welfare. The notion that prices should be based on some notion of “fairness” – as is

implicit in MCM and MMM and explicit in the criticisms made by WCTL and Professor Borts in their Rebuttal filings – would lead to a meaningless standard that would divorce the regulation of railroad prices from economic efficiency and the market forces that best reflect and satisfy shippers’ needs and demands.

III. THE VIEW OF THE INCUMBENT AS ANOTHER CUSTOMER OF THE SARR IS CONSISTENT WITH USE OF “CONTESTABILITY PRICING” TO ESTABLISH THE SARR’S REVENUE ALLOCATIONS ON CROSS-OVER TRAFFIC

In his Reply VS, Professor Borts takes exception to contentions by UP’s witness Neels and BNSF’s witness Kalt that use of cross-over traffic in a contestable market environment would lead to a SARR revenue allocation consistent with efficient component pricing (“ECP”), or what Professor Kalt terms “contestability pricing.” In making his arguments, Professor Borts cites with approval a statement from the I.C.C.’s decision in *Nevada Power*, in which the I.C.C. agreed with the shipper that use of cross-over traffic was permitted:

Viewing a SARR’s interline rail partners simply as additional customers of the SARR means that the captive shipper is not required to ensure that far-flung rail lines are earning their full replacement cost of capital. *Bituminous Coal – Hiawatha, Utah to Moapa, Nevada*, 10 I.C.C.2d at 280 (Chairman McDonald concurring).

In reading this statement, I was struck by how consistent this statement is with testimony on this issue in my Opening VS to the effect that “in a contestable market a competitor will successfully enter if it is . . . *willing* to do so at the rates currently charged by the incumbent.” Willig Opening VS at 28. The I.C.C. and the Board have long held that a SARR can succeed in attracting customers only if it provides comparable service at comparable prices. Put another

way, a SARR must be constructed and operated in a way that leaves its customers no worse off, as compared to the real world status quo.⁷

If the interline rail partners that the SARR will work with to handle cross-over traffic are to be viewed “simply as additional customers of the SARR,” then they, too, must be left no worse off, from handling cross-over traffic movements, than they are today, which means they should earn the same contribution from handling those movements in cross-over service as they do in the real world today.⁸ As I put it in my Opening VS:

It is possible that a new competitive SARR could choose to enter the market by providing only a portion of the service that the defendant provides for one or more movements in the stand-alone traffic group. In that case, of course, the SARR must continue to rely on the “residual incumbent” (*i.e.*, the portion of the incumbent that is not duplicated by the SARR) to provide the balance of the service to each of these cross-over movements; and the same “willing and able” standard would be applied to assessing the residual incumbent’s behavior – with respect to cross-over traffic – as is implicit in the SAC test envisioned by *guidelines*. The residual incumbent clearly would be *willing* to handle the non-SARR portion of cross-over movements as long as its contribution on each movement is unaffected, leaving it no worse off than it would have been if it had handled the entire movement. *Id.* at 28-29.

As I noted earlier, Dr. Borts characterizes ECP (and contestability pricing) as constraining the SARR revenue allocation to be no higher than “the avoidable variable costs of the incumbent.” I do not fully understand what Dr. Borts means by this term, but suffice it to say that, when properly applied, contestability pricing would include as a component of avoidable costs the full, long-run, forward-looking costs of the right-of-way and equipment that the residual incumbent would not incur if the SARR handles the cross-over traffic for some portion

⁷ See *TMPA v. BNSF*, STB Docket No. 42056, slip op. at 18, note 39 (served March 24, 2003) (the SARR must be able to provide service that does not increase transportation costs for the shipper or result in longer cycle times).

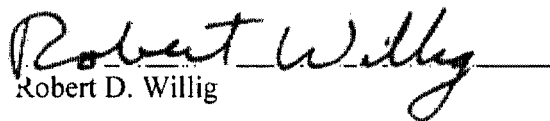
⁸ In the *TMPA* case, the Board recognized that the residual incumbent, as well as the shipper, should be no worse off as a result of any rerouting of traffic by the SARR over a different route from that used by the incumbent in the real world. The Board found that the complainant cannot merely assume that the residual incumbent would agree to incur additional costs resulting from the reroute that the incumbent does not have in the real world. See *TMPA* at 24.

of its movement (including costs that are traditionally considered “sunk”). It would also likely include supervisory and other overhead personnel. The point is that contestability pricing would identify the totality of all long-run, forward-looking costs that the incumbent would otherwise have to incur to handle the cross-over traffic, and to set the SARR’s cross-over revenue allocation equal to those costs.

Professor Borts’ recognition that the residual incumbent should be treated “simply as an additional customer[] of the SARR” allows us to illustrate the point that the transaction between the SARR and the residual incumbent is not a price war, not some form of “retaliatory price alteration” nor some form of competition; yet it leads inexorably to the same avoided-cost based revenue allocation for the SARR on cross-over traffic that was derived by Professor Kalt, based on contestable market principles. Just as the SARR has to attract its traffic by offering shippers rates and service quality equivalent to what they receive from incumbents, the SARR also has to attract the cooperation of the residual incumbent on cross-over traffic by offering it a long-run contribution that is equivalent to the long-run contribution that it earns from end-to-end carriage in the status quo. Consequently, the SARR’s revenue allocation can be no higher than the long-run, forward-looking costs that would otherwise be incurred by the residual incumbent in handling the cross-over traffic movements.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 29, 2006


Robert D. Willig

REBUTTAL VERIFIED STATEMENT

OF

JOHN C. KLICK

I. INTRODUCTION

My name is John C. Klick. I am a Senior Managing Director of FTI Consulting, with offices at 1201 I Street, NW, Washington, D.C. 20005. I have previously submitted Opening and Reply Verified Statements on behalf of BNSF Railway Company ("BNSF") in this proceeding, and a statement of my qualifications was attached as Exhibit No. __JCK-1 to my Opening VS I filed on May 1, 2006.

I have been asked by BNSF to respond to certain issues raised in the Reply Comments of WCTL¹ and WFA.² In particular, I have been asked to address issues related to rate reduction and cross-over traffic revenue allocation that are raised in the *WCTL Reply*, and the Reply Verified Statement of Professor Borts ("Borts Reply VS") that accompanies the *WCTL Reply*, and issues related to cross-subsidy raised in the *WFA Reply*.

II. RATE REDUCTION ISSUES

A. Contrary to Claims Made by Professor Borts, MCM and MMM Do Not Preserve Existing Rate Structures

At pages 1 and 2 of his Reply VS, Professor Borts makes the following statement:

In its proposed rule making the Board investigated two possible methods of providing rate relief to shippers whose SARR was found to have revenues in excess of SAC: the Maximum Contribution Methodology (MCM) and the Maximum Markup Methodology (MMM). Both methods are consistent with the economic principles that underlie

¹ *Joint Reply Comments of Western Coal Traffic League, Concerned Captive Coal Shippers, Western Fuels Association, Inc., Edison Electric Institute, National Rural Electric Cooperative Association, and American Public Power Association*, filed May 31, 2006 ("WCTL Reply").

² *Additional Reply Comments of Western Fuels Association, Inc. and Basin Electric Power Cooperative, Inc.*, filed May 31, 2006 ("WFA Reply").

Guidelines, because they guarantee that rail rates do not generate revenues in excess of SAC, and they allocate SAC among the SARR's shippers in a manner that respects their relative elasticities of demand. Moreover, the allocation procedures under MCM and MMM are sufficiently flexible to preserve the existing structure of the defendant's freight rates, by leaving relatively intact the ranking of shippers from high to low rates per ton-mile.

Professor Borts tries to convey the impression that MCM and MMM are consistent with Ramsey pricing principles, as required by the *Guidelines*, but he knows perfectly well they are not. In its Opening Comments, BNSF demonstrated that MCM and MMM are inconsistent with the principles of Ramsey pricing and contestability that are the expressed foundation for the *Guidelines* because (1) they compress rates on all of the relatively highly-rated traffic to a single revenue per ton-mile (MCM) or revenue-to-variable cost ratio (MMM), and (2) they provide for *no* rate reduction on relatively demand elastic traffic, in violation of Ramsey pricing *and* contestability principles.

Professor Borts's Reply VS does not really suggest otherwise. For example, he does not say that MCM and MMM are consistent with Ramsey principles or with contestability. Instead, he suggests that "they allocate SAC among the SARR's shippers in a manner that *respects their relative elasticities of demand*." Borts Reply VS at 1, emphasis supplied. But in the process of developing *Guidelines*, the Board explicitly found (1) that it is inappropriate to *assume* that all relatively demand inelastic traffic has the same elasticity of demand,³ and (2) that any excess of revenues over SAC is to be distributed to individual movements in stand-alone traffic group consistent with Ramsey principles. The latter requires that *all* movements receive a rate reduction, and that movements with higher percentage margins *before* the rate reduction phase of a SAC analysis must exhibit higher percentage margins *after* the rate reduction phase of a SAC

³ I.C.C. Ex Parte No. 347 (Sub-No. 1), *Coal Rate Guidelines, Nationwide*, decided February 8, 1983, slip op. at 23: "While certain of the proposals attempt to reflect demand by allocating the shortfall only to captive traffic, they fail to recognize that there are degrees of captivity."

analysis, even if both movements can be characterized as relatively demand inelastic. MCM and MMM simply do not operate in a manner that is consistent with these fundamental requirements of *Guidelines*, and Professor Borts's Reply VS does not dispute this fact.

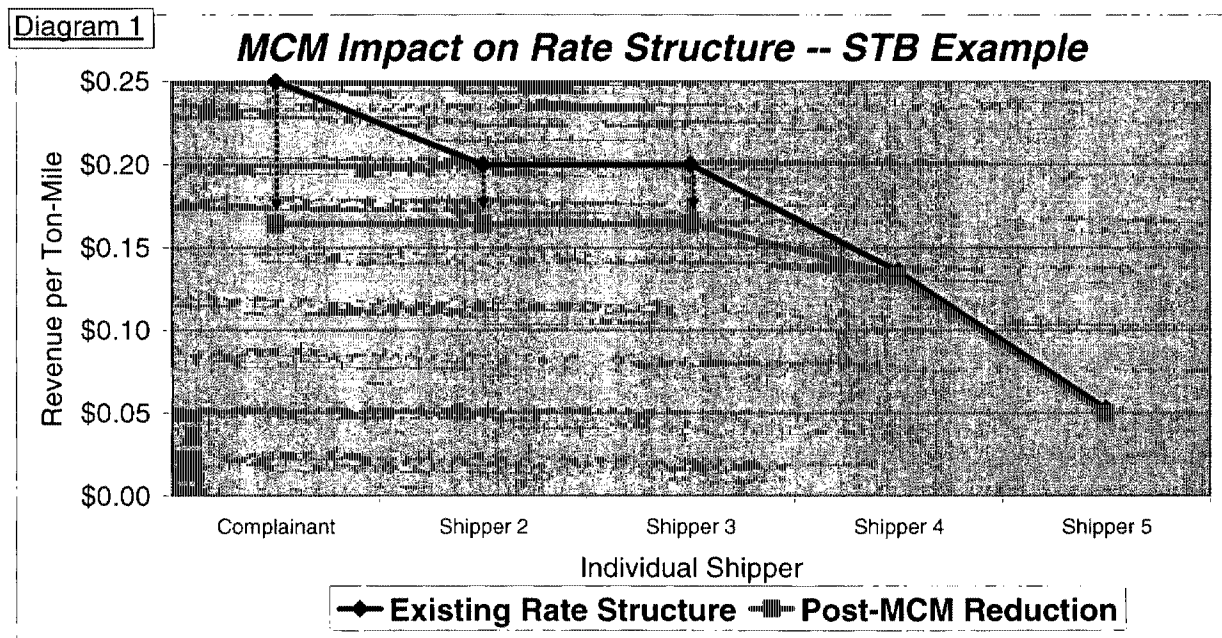
Similarly, Professor Borts states "[m]oreover, the allocation procedures under MCM and MMM are sufficiently flexible to preserve the existing structure of the defendant's freight rates, by leaving *relatively intact* the ranking of shippers from high to low rates per ton-mile." *Id.* at 1-2, emphasis supplied.⁴ In fact, MCM and MMM do not come close to conforming to the requirement of Ramsey pricing that the relative ranking of shippers, in terms of percentage margin, be maintained.

The rate compression created by MCM and MMM, the forcing of all relatively high rates to the same revenue per ton-mile or same revenue-to-variable cost ratio, and the failure to adjust revenues for *all* of the movements in the stand-alone traffic group would result in radical alterations of the defendant carriers' rate structures. This is fundamentally at odds with the *Guidelines*, in which the I.C.C. explicitly established minimal disruption of the carriers' rates structures as a goal of any rate reduction process:

If we determine that a rate has been set at an unreasonably high level, we will take whatever action is appropriate, based upon the nature and extent of the violation shown, to afford relief to the complaining shipper and to promote proper pricing by the carrier. In considering a rate prescription and/or reparations, we will attempt to provide an effective remedy for the complaining shipper, *but in a manner that would not introduce further distortions into the carrier's pricing structure.* *Guidelines* at 1 I.C.C.2d at 548.

⁴ It is important to reiterate the fact that where cross-over traffic is involved, MCM and MMM do not reflect rate levels at all, but allocations of defendant's end-to-end revenues to only the portion of the movement that the SARR is hypothesized to handle. As BNSF pointed out in its Reply Comments, it is not possible for these allocated revenues to reflect the relative demand elasticity of these movements, since shippers only have demand for the through movement.

It is in fact a straight-forward exercise to show how far off the mark Professor Borts is in suggesting that MCM and MMM leave “relatively intact” the revenue per ton-mile rankings of the shippers in the stand-alone traffic group. The STB’s own example, set out in its February 27, 2006 decision initiating this Rulemaking, shows that the defendant’s rate structure is not left “relatively intact” after applying MCM or MMM.⁵ Diagram 1 presents graphically the results that the STB determined when MCM is applied, plotting the existing rate structure and the post-MCM reductions that result from distributing the total SAC requirement amongst the traffic group, without increasing any existing rates. As the diagram shows, the rates for the Complainant’s traffic and for each of Shippers 2 and 3 are all reduced to the same revenue per ton-mile (16.4 cents), and the rates for Shippers 4 and 5 remain unchanged. Such an outcome does not leave the rate structure “relatively intact.”



This is not an isolated result unique to the STB’s particular example. The impact of MCM and MMM on a defendant’s rate structure is seen more dramatically by extending the

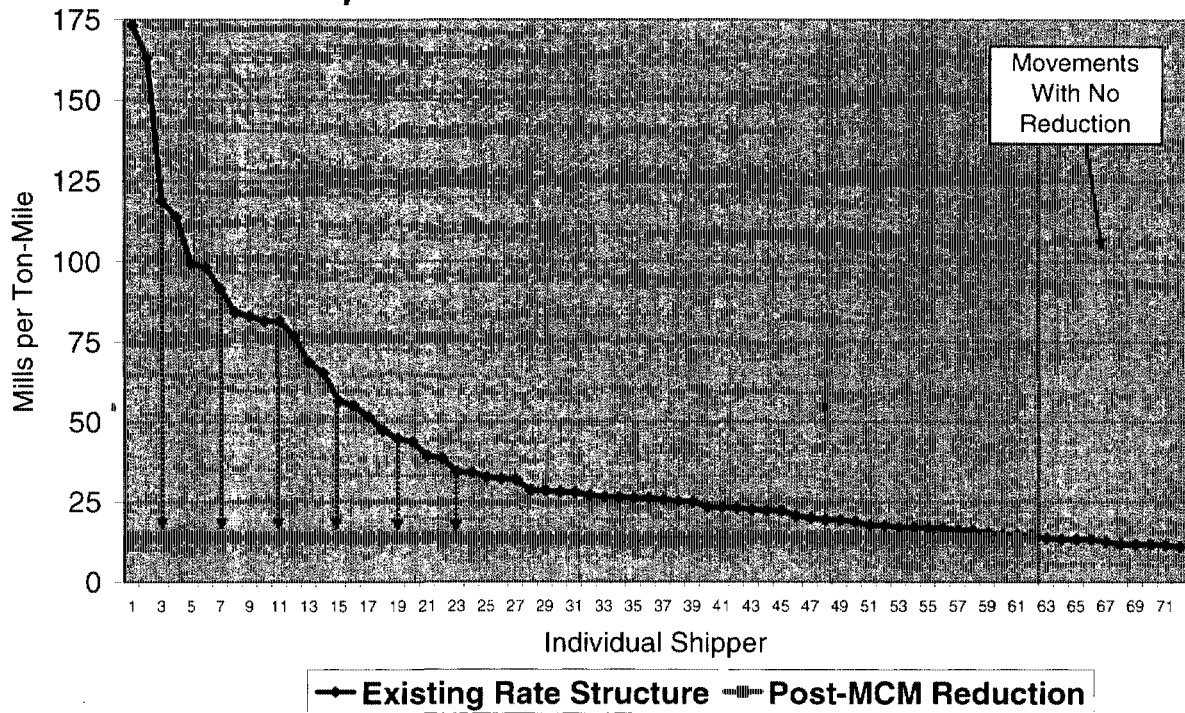
⁵ Feb. 27, 2006 Ex Parte No. 657 decision, at 10-14

number of data points. To illustrate, I next examined the results of applying the STB's proposed maximum-rate approaches in the *Laramie River* proceeding. To do so, I have used the complaining shippers' assumptions regarding the stand-alone traffic group and network configuration and calculation of the total stand-alone cost requirement.⁶ In diagram 2, I show the revenues per ton-mile reflected in the stand-alone traffic group *before* the rate reduction phase of the SAC study, and the revenues per ton-mile that exist *after* the rate reduction phase of the SAC study when MCM is used. If the claims made by Professor Borts were valid, one would expect to see distributions of essentially the same shape before and after the rate reduction phase, but diagram 2 demonstrates conclusively that this is not the case. When MCM is used, the distributions are radically different, demonstrating that use of MCM would fail miserably in preserving the relative relationship of revenues per ton-mile that exist within the stand-alone traffic group before the rate reduction process is implemented.

⁶ To avoid any disclosure of confidential rate information for shippers in the *Laramie River* traffic group, diagram 2 depicts only the revenues per ton-mile for each destination in rank order, without identifying the individual destinations or shippers. Any example in which the pre-rate reduction revenues exhibit a range of revenues per ton-mile will exhibit the same radical alteration of the rate structure after application of MCM or MMM.

Diagram 2

MCM Impact on Rate Structure -- Laramie River

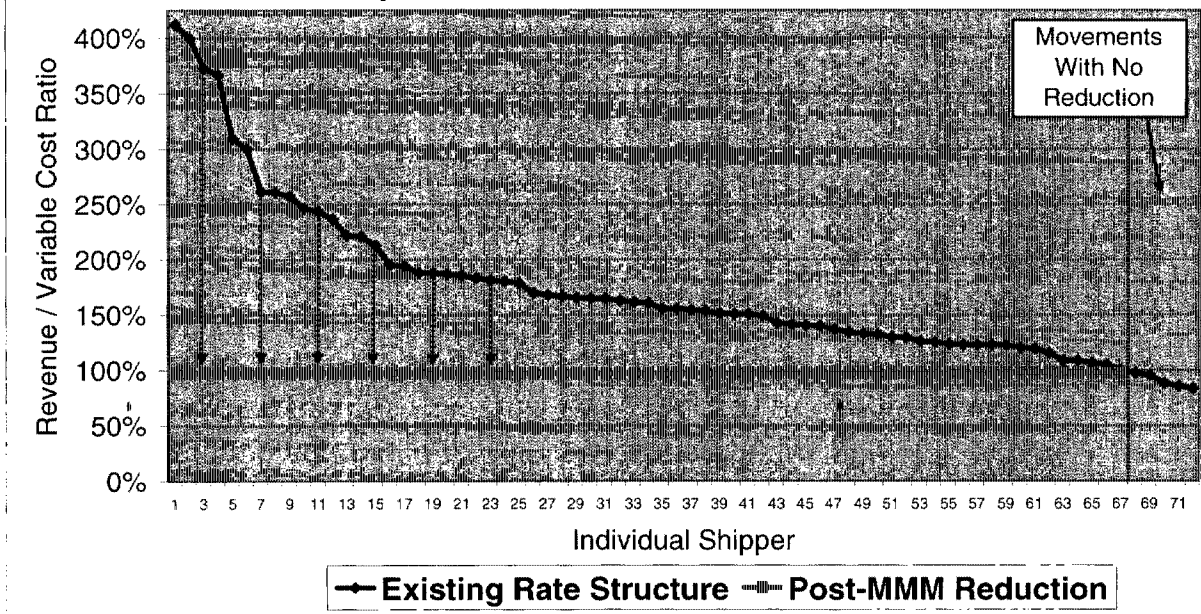


In diagram 3, I make the same comparison of revenues per ton-mile before and after the rate reduction phase of the SAC study, assuming MMM is used.⁷ Once again, the existing pattern of revenues per ton-mile is substantially altered by applying MMM.

⁷ For this diagram, I have re-ordered the individual shippers by R/VC ratio.

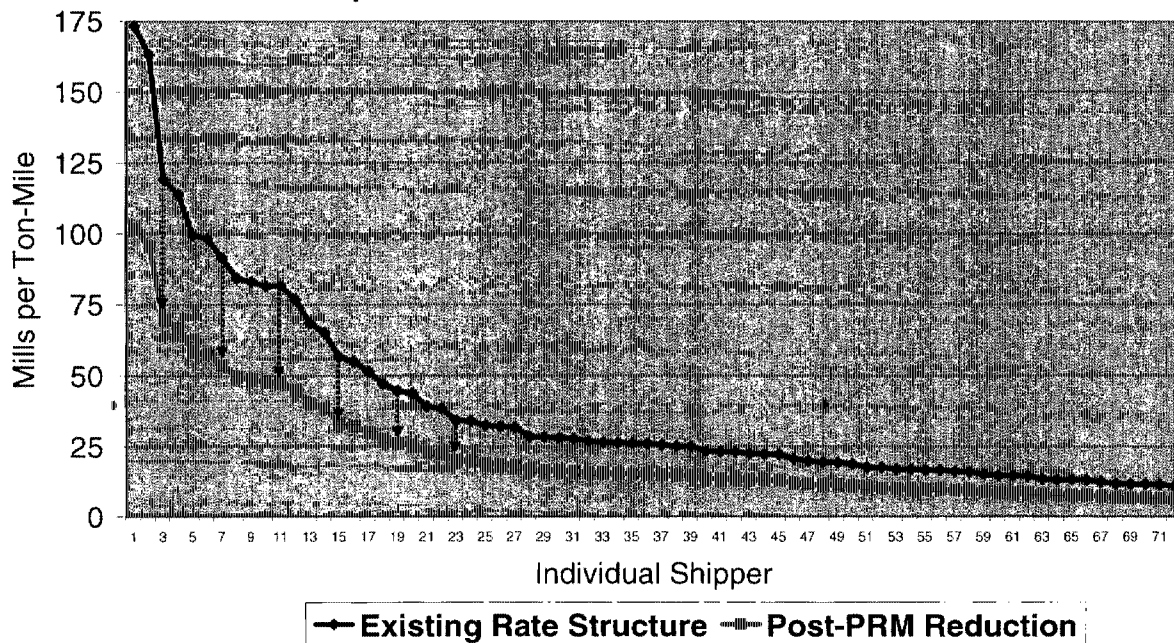
Diagram 3

MMM Impact on Rate Structure -- Laramie River



Contrast these results with those shown in diagram 4, in which I make the same comparison using the Percentage Reduction Method ("PRM"). The difference is startling – when PRM is used, the distributions of revenues per ton-mile are lower overall, but in substantially the pattern before and after the rate reduction – as they would be if Ramsey pricing principles could be formally implemented. Clearly PRM accomplishes what MMM and MCM cannot – consistency with contestable market theory and Ramsey pricing principles *without* substantially altering the range of revenues per ton-mile that exist pre-rate reduction.

Diagram 4

PRM Impact on Rate Structure -- Laramie River

B. Claims Made By Shippers that Use of the Percentage Reduction Method Allows Railroads to “Dictate” the SAC Outcome Are Unfounded

In their Reply Comments, the shippers have effectively abandoned prior claims that railroads have “gamed” the use of PRM, and instead suggest that continued use of PRM would somehow abrogate the Board’s statutory obligation to regulate railroad rates because it allows the railroads to dictate the outcome of the SAC test.⁸

What the shippers really seek is a wholesale departure from *Guidelines* that would abandon reliance on differential pricing, and seek to ensure that the rate levels set by the railroads, in response to individual shipper demand, would have virtually *no* influence on the SAC outcome. Indeed, the charts I presented in the prior section illustrate that under either MCM or MMM, the defendants’ existing rate structure, which reflects the railroad’s perceived demand for service, is almost completely irrelevant to the maximum rates set based on the

⁸ See, for example, *WCTL Reply Comments* at 8-13 and *WFA Reply Comments* at 3.

outcome of the SAC analysis. That appears to be why the shippers support the use of those methodologies.

As Professors Willig and Kalt explain in their Rebuttal Verified Statements, to be consistent with *Guidelines* and CMP *any* rate reduction methodology *must* start with the rates set by the defendant carrier in response to perceived market demand. This is so because rates set in response to the market demand that is perceived for each movement will result in a railroad rate structure that is consistent with Ramsey pricing principles. Then, if revenues are found to exceed SAC (*i.e.*, are found to generate revenues that in aggregate are higher than those that could be sustained if the market were contestable), a rate reduction methodology that reduces rates on *all* movements in a manner that preserves the hierarchy observed in the pre-rate reduction rate levels will result in a *post*-rate reduction rate structure that also is consistent with Ramsey pricing principles. As I noted before, Diagram 4 shows that PRM produces a rate structure that continues to reflect the relative demand among SARR shippers for the defendant's service.

The tacit admission by shippers that they cannot support a claim that the rail industry has tried to manipulate the SAC test eliminates the only justification that the Board provided in the *X-657 Decision* for considering a change in its rate reduction procedures. Coupled with the demonstrations that BNSF and other rail carriers have made, in their Opening and Reply Comments, that MCM and MMM (as well as GPRM, the Reduced Markup Method, and RAM that were suggested by various shipper interests in Opening Comments) are *inferior* to PRM in terms of their consistency with Ramsey pricing principles and contestability theory, the Board is justified in concluding that there is no reason to depart from PRM.

III. REVENUE ALLOCATION ISSUES

In its Reply Comments, WCTL asserts that the railroads have offered no support for the proposition that the Average Total Cost (“ATC”) approach proposed by the Board in its *X-657 Decision* is superior to the Modified Straight-Mile Prorate (“MSP”) for allocating defendants’ revenues on cross-over traffic between the SARR and the residual incumbent. Professor Borts makes a similar claim. Once again, this is entirely inaccurate. For example, in my Opening VS in this proceeding, I characterized ATC as “superior” to MSP because (1) it explicitly takes the effects of density into account by incorporating an average fixed cost component into the revenue allocation process, and (2) the average variable cost component of ATC more accurately reflects the efficiencies of handling trainload traffic – including the relatively efficient costs to originate and terminate this traffic on BNSF – than does MSP. I also noted that use of ATC was less likely to bias the SAC result. Klick Opening VS at 24-26.⁹

Professor Willig’s Opening VS also endorsed the use of ATC:

An alternative approach is suggested by the Board’s view – which in my opinion is absolutely correct – that the results of the SAC test, using cross-over traffic, should closely mimic the results of the “full SAC.” This approach would employ a revenue allocation procedure to approximate the results of the “willing and able” standard. I think the average total cost, or “ATC” procedure proposed in the *Decision* has merit for this purpose – with the caveat that either party to an individual rate case *must* be permitted to present evidence that the approximation is

⁹ At page 11 of his Reply VS, Professor Borts repeats a claim he initially made on Opening, *i.e.*, that ATC is flawed because it relies on an arbitrary allocation of fixed costs. But as I stated in my reply VS at 21, there is a fundamental difference between establishing end-to-end rates for individual movements – where use of non-demand-based cost allocations can have the pernicious results identified in the *Guidelines* – and establishing a revenue allocation mechanism that applies *across* all similarly situated movements. The Average Fixed Cost (“AFC”) component of ATC simply recognizes that, on average, more fixed costs per unit of volume have to be recovered *across all movements* on lighter density segments than on heavier density segments, so overall revenues allocated to the lighter density segments have to be correspondingly higher, all other things being equal. The focus of the revenue allocation task is to allocate through rates for individual movements between segments of the movement in a manner that is unlikely to bias a SAC presentation that employs cross-over traffic vis a vis the results that would have been achieved if a “full SAC” presentation had been made. Because a “full SAC” analysis implicitly reflects the different economies of density that characterize different segments of the full SARR, it is appropriate to take the resulting total cost differences into account when cross-over traffic is used by including a factor in the revenue allocation calculation that reflects these differences in economies of density.

biased (*i.e.*, evidence to the effect that a “full SAC” result would likely be significantly different than the result obtained using the approximation). Willig Opening VS at 30.

A decision rendered on June 16, 2006 by the United States Court of Appeals for the District of Columbia Circuit (“DC Circuit”) in the *Xcel* case casts important light on this issue in two respects. First, in comparing the Density Adjusted Revenue Allocation method (“DARA”) advanced by BNSF in that proceeding to MSP, the Court concluded:

Although we take BNSF’s point that the MSP method of allocating revenue to cross-over traffic does not take into account economies of density, we believe the Board gave an adequate reason for rejecting the DARA method, namely, its failure to take into account the diminishing nature of those economies.

* * *

In its order denying rehearing in this case, the Board recognized there “may well be a better revenue allocation procedure that could be practical for SAC cases” and invited proposals, whether submitted in future rate proceedings or as requests for rulemaking. *See Decision II*, at 11. Were the Board presented with a model that took account both of the economies of density and of the diminishing returns thereto, a decision to adhere to its MSP model would be on shaky ground indeed. [DC Circuit Decision at 17-18.]

In my Reply VS in this proceeding, I demonstrated that, unlike DARA, the Board’s proposed ATC method *does* in fact take account of both “the economies of density and of the diminishing returns thereto.” Klick Reply VS at 20. To see why this is so, I reproduce below Table 1 from my Reply VS.

Table 1 (From Klick Reply VS, page 19)
Demonstration that ATC and DARA Perform Differently
As Densities Increase

	ATC		DARA	
	SARR	Residual Incumbent	SARR	Residual Incumbent
Mileage	500	500	500	500
Variable Cost Per Ton	\$5.00	\$5.00	\$5.00	\$5.00
Fixed Costs Per Mile	\$160,000	\$160,000	\$160,000	\$160,000
End-to-End Rate	\$20.00	\$20.00	\$20.00	\$20.00
<i>First Hypothetical</i>				
Density (Millions of Tons)	50	25	50	25
Fixed Costs Per Ton-Mile	\$.0032	\$.0064	xxx	xxx
Fixed Costs Per Ton	\$1.60	\$3.20	xxx	xxx
Variable Costs Per Ton	\$5.00	\$5.00	\$5.00	\$5.00
Total Cost Per Ton	\$6.60	\$8.20	xxx	xxx
DARA Allocation of Contribution	xxx	xxx	\$3.33	\$6.67
DARA Total Revenue Allocation	xxx	xxx	\$8.33	\$11.67
Division of End-to-End Rate	44.6%	55.4%	41.7%	58.3%
<i>Second Hypothetical</i>				
Density (Millions of Tons)	100	50	100	50
Fixed Costs Per Ton-Mile	\$.0016	\$.0032	xxx	xxx
Fixed Costs Per Ton	\$0.80	\$1.60	xxx	xxx
Variable Costs Per Ton	\$5.00	\$5.00	\$5.00	\$5.00
Total Cost Per Ton	\$5.80	\$6.60	xxx	xxx
DARA Allocation of Contribution	xxx	xxx	\$3.33	\$6.67
DARA Total Revenue Allocation	xxx	xxx	\$8.33	\$11.67
Division of End-to-End Rate	46.8%	53.2%	41.7%	58.3%

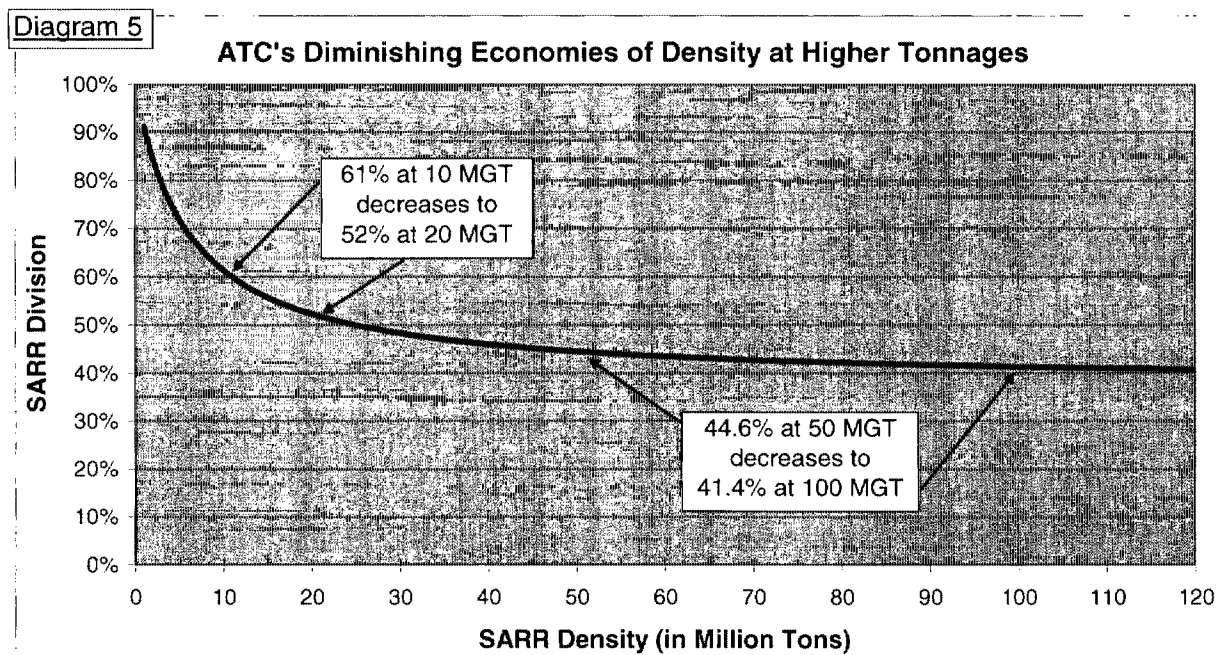
Note that in the first hypothetical, the SARR density is 50 million tons, while the Residual Incumbent density is 25 million tons (and note that each is comprised of 500 route miles). Thus, in the first hypothetical, SARR density is twice the Residual Incumbent density. In the second hypothetical, the SARR density is 100 million tons, while the Residual Incumbent density is 50 million tons. As is the case in the first hypothetical, SARR density is twice the Residual Incumbent density; but in the second hypothetical, densities for the SARR and densities for the Residual Incumbent are each twice the respective densities in the first hypothetical.

The reason ATC reflects “diminishing returns” on the economies of density is because as densities increase, the AFC per unit of volume component of ATC declines, while the AVC per unit of volume component remains the same. Thus, when one moves from the first hypothetical to the second hypothetical, one observes that the “Fixed Costs Per Ton” for the SARR decline from \$1.60 to \$0.80, and the “Fixed Costs Per Ton” for the Residual Incumbent decline from \$3.20 to \$1.60. At the same time, “Variable Costs Per Ton” remain at \$5.00 for both the SARR and the Residual Incumbent in both hypotheticals.

As a result, even when the relationship between on-SARR and off-SARR densities remains in proportion, substantially higher densities on-SARR and off-SARR mean that the proportion of total cost that is represented by the “Fixed Costs Per Ton” – the AFC component of ATC where economies of density are reflected – becomes smaller and smaller, and the revenues allocated to the lighter-density segment become smaller and smaller. At very high densities, the AFC component would effectively disappear, and the revenue allocation would effectively be based entirely on the variable cost component. The same cannot be said for DARA, which generates the identical revenue allocation regardless of density (as long as the SARR and Residual Incumbent densities remain in proportion).

The above table and discussion of the hypotheticals demonstrates ATC’s recognition of the diminishing economies of density. Specifically, as tonnages increase – *see* the “Second Hypothetical” – the impact of the relative economies on the on-SARR and off-SARR segments is reduced. Whereas the DARA approach treats proportionally relative densities in the same fashion – and produces the same division – throughout all density levels, ATC provides the SARR with a higher division (*e.g.*, 46.8% v. 44.6% in the hypotheticals) at the higher density levels as economies of density are diminished.

Diagram 5 below presents another graphical depiction of ATC's treatment of economies of density. This diagram employs certain of the assumptions of Table 1's "First Hypothetical" – *i.e.*, on-SARR and off-SARR segment mileages, variable costs per ton, and fixed costs per mile – and shows the SARR's division at various density levels. In this example, the density of the off-SARR segment is held constant at 25 million tons (confirmed by the 50% division for the SARR when its density is also 25 million tons). This diagram demonstrates that as the on-SARR density increases (and off-SARR density remains the same), the impact of that density on the SARR's division decreases. As shown in Diagram 5, doubling the SARR density from 10 million tons to 20 million tons decreases its division by 9 percentage points, whereas doubling the SARR traffic levels at higher densities (50 million tons to 100 million tons) has only a 3.2-percentage-point impact on the SARR's division.



The second significant finding in the D.C. Circuit's decision is that the Board has it right when it argues that the use of cross-over traffic as a simplification mechanism should not distort SAC results. In this regard, the Court found:

... the Board's explanation for its decision to allow cross-over traffic as a simplifying mechanism, which the Board has described as "now a standard feature of SAC cases," *Decision I*, at 17, was both reasonable and intelligibly explained. The Board must balance, among other concerns, the need for a reasonably accurate methodology and the need to avoid unduly protracting already complex and expensive SAC proceedings. *See* 49 U.S.C. § 10101(15) (Board must provide for "expeditious handling and resolution of all proceedings"); *Ass'n of Am. R.Rs. v. Surface Transp. Bd.*, 306 F.3d 1108, 1111 (D.C. Cir. 2002) ("[I]t is up to the Board to arrive at a reasonable accommodation of the conflicting policies set out in the Staggers Act").

* * *

Our view of this matter might be different if BNSF had presented evidence to establish that the imprecision implicit in the use of cross-over traffic tends to overestimate the revenues generated by a SARR to a degree that outweighs any efficiency gains. [D.C. Circuit Decision at 15-16.]

This line of reasoning favors adoption of ATC over MSP as well. If a simplification methodology yields results that approximate a full SAC analysis, the proponent of a particular SARR configuration would not view cross-over traffic as a revenue enhancing measure; but shippers do. This is because the 100-mile credit the SARR receives, under MSP, for originating or terminating a shipment generates revenues well in excess of the cost that actually is incurred in originating or terminating most cross-over traffic movements.¹⁰ This creates an incentive to "build small," which should not exist if use of cross-over is merely a simplification device. In the *Duke-NS* proceeding, the Board modified the MMP to reduce the incentives shippers had to game the cross-over traffic allocation based on the 100-mile line haul blocks that MMP used.¹¹

¹⁰ *See* BNSF's Reply evidence in *Laramie River* demonstrating that the costs required to originate the cross-over movements of unit train coal would argue for a 25-mile originating or terminating credit, not the 100 miles assumed in MSP. *See* July 10, 2005 BNSF Reply Narr. at III.A-52 to 56. Note, as well, that Diagrams 2 and 3 include cross-over traffic movements from the *Laramie River* case that exhibit revenues per ton-mile as high as 173 mills per ton-mile as a result of MSP – far in excess of the mills per ton-mile generated by any end-to-end unit train coal rate on BNSF. It is obvious that complainants load their SARRs with short-haul cross-over traffic because the MSP method allocates an extraordinarily generous amount of revenues to such traffic.

¹¹ STB November 6, 2003 Decision in Docket No. 42069 *Duke Energy Corporation v. Norfolk Southern Railway Company* at 22-25.

Similar gaming incentives now exist with MSP's use of the 100-mile originating and terminating credit.¹²

By calculating the AVC portion of the ATC revenue allocation directly, ATC minimizes bias in the originating and terminating credit; and by including an AFC component, ATC treats more accurately the revenue allocation required to defray the higher fixed costs per unit that are experienced on the lighter-density portions of the network. Both of these aspects of ATC work in a way to minimize incentives to bias the outcome through use of cross-over traffic, particularly short-haul traffic. Under ATC, the SARR receives more revenue as it extends the network, and proportionately more revenue if those network extensions include line segments with relatively lower average density. As a result, there is less incentive to try to distort the results by incorporating a large number of very short-haul cross-over traffic movements in order to inflate the SARR's revenues.¹³ In short, ATC should help minimize the distortion created by relying upon cross-over traffic, while still permitting use of cross-over where it can significantly simplify the analysis.¹⁴

IV. THE CROSS-SUBSIDY TEST IN *LARAMIE RIVER*

I included a section at the end of my Opening VS that explained that nothing in the Board's *X-657 Decision* should be deemed to moot or otherwise detract from the need to apply

¹² For example, BNSF presented evidence in *Laramie River* clearly demonstrating the incentives that exist for the shipper under MSP. Specifically, BNSF showed that the SARR's origination costs were a small percentage of the total stand-alone costs, and considerably lower than the revenues it collects for performing that activity, thereby producing an opportunity to manipulate the results. See July 10, 2005 BNSF Reply Narr. at III.A-54 to 56 and Exhibit III.A-7.

¹³ In its Reply evidence in the *Laramie River* case, BNSF's "serial build-out" analysis demonstrated that extending the SARR to include adjacent segments resulted in lower incremental revenues to the SARR even though the extension caused the SARR to serve lines with relatively lower densities, highlighting the incentives produced by the MSP approach to distort the SAC analysis by loading up on short-haul cross-over traffic. See Klick Opening VS in this proceeding at 26-27.

¹⁴ Professor Willig's suggestion that either party to a given SAC case be permitted to demonstrate that use of cross-over traffic has generated a result that is substantially inconsistent with a "full SAC" presentation is also consistent with the D.C. Circuit's decision in *Xcel*. D.C. Circuit Decision at 16.

the cross-subsidy test, as described in the Board's *PPL* and *Otter Tail* decisions, in individual rate proceedings, including *Laramie River*. With regard to the *Laramie River* case, I noted that the SAC presentation that BNSF had filed implicitly incorporated this cross-subsidy test.

On Reply, WFA briefly addresses this testimony by stating:

BNSF's cross-subsidy claim assumes that a cross-subsidy exists when SARR revenues for a SARR segment exceed SARR costs. As WFA/Basin explained in detail in Western Fuels, the Board properly rejected BNSF's proffered cross-subsidy test in PPL. See PPL Montana, LLC v. Burlington Northern and Santa Fe Ry., STB Docket No. 42054 (STB served August 20, 2002) at 9-10 (rejecting "BNSF's proposed standard for limiting the revenue contribution from cross-over traffic in excess of SAC"). The Board should adhere to this settled rule in Western Fuels. *WFA Reply* at 10, footnotes deleted.

As I explain below, WFA has mischaracterized the way in which BNSF implemented the cross-subsidy test in the *Laramie River* proceeding. The way BNSF has reflected this test in its SAC results in that proceeding is not inconsistent with the Board's *PPL* decision.

The Board's cross-subsidy test requires that the issue traffic, and other (non-issue) traffic using the potentially subsidized portion of the SARR, must generate revenues sufficient to cover the right-of-way costs for the potentially subsidized portion of the SARR *plus* the operating costs each movement over the potentially subsidized portion of the SARR incurs from the movement's origin to its destination. The test as described in *PPL* ensures that no cross-subsidy exists *before* a potential SAC-based rate reduction occurs; in *Otter Tail*, the Board correctly extended the test to ensure that no cross-subsidy exists *as a result of* a SAC-based rate reduction.

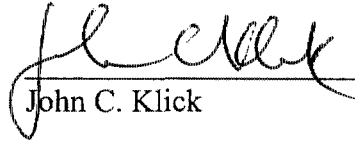
In performing the cross-subsidy calculations, the Board's procedure routinely eliminates the right-of-way costs associated with segments that are used *jointly* by the potentially subsidized and potentially subsidizing traffic – without any reduction in revenues attributed to the potentially subsidized traffic. This increases the likelihood that revenues generated by the

potentially subsidized traffic will exceed the costs that are attributed to that traffic, which would cause the Board to conclude that no cross-subsidy has taken place. All BNSF proposes, in *Laramie River*, is a simple mechanical approach to ensure that cross-subsidy is prevented both before a rate reduction takes place, or as a result of any SAC-imposed rate reduction.

By eliminating from the SAC calculation the right-of-way costs for the north of Donkey Creek segment, and by eliminating the revenues from the non-issue traffic that originates north of Donkey Creek that never moves over the south of Donkey Creek segment – without any reduction in revenues for the south of Donkey Creek traffic – BNSF effectively asks whether the revenues generated by the issue and non-issue traffic that use the south of Donkey Creek segment are sufficient to cover the south of Donkey Creek right-of-way costs *plus* the origin-to-destination operating costs incurred by all of the south of Donkey Creek movements – once all of the Board’s adjustments are incorporated into the SAC study. If the answer is “no, revenues are not sufficient to cover costs,” then a cross-subsidy as described in *PPL* exists. If the answer is “yes,” then a rate reduction is authorized, but only to the extent required to just make south of Donkey Creek revenues equal to the south of Donkey Creek costs – precisely the outcome required under the cross-subsidy test as described in *Otter Tail*.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June ³⁰ , 2006



John C. Klick

REBUTTAL VERIFIED STATEMENT

OF

MICHAEL R. BARANOWSKI

I. INTRODUCTION

My name is Michael R. Baranowski. I am the same Michael R. Baranowski who filed an opening verified statement on May 1, 2006 and a reply verified statement on May 31, 2006 in this proceeding on behalf of BNSF. A statement of my qualifications is attached as Exhibit No. __ MRB-1 to my opening statement.

I have been asked by BNSF to address certain of the points made by shippers in their reply comments related to the proper treatment of productivity in forecasting SARR operating expenses. In Section II of my verified statement I demonstrate that SARR operating expenses determined by the Board are far below the operating expense levels of the incumbent carriers being replaced, leaving no room for further productivity improvements in the early years of a SARR. In Section III I explain why shippers are wrong in their assertion that the substantial capital expenditures that a SARR would need to incur in order to achieve additional productivity are already captured in the RCAF-A. In Section IV I explain why Mr. Crowley is wrong about the effects of the application of a productivity adjustment to the DCF asset inflation indexes on the SARR cost of capital and show that his proposed alternative to arbitrarily increase asset service lives is off base.

II. SHIPPERS' CLAIM THAT THE SARR IS OFTEN LESS EFFICIENT THAN ITS REAL-WORLD COUNTERPARTS IS UNSUPPORTED AND CLEARLY WRONG

Shippers dispute the railroads' contention that productivity improvements forecast for the railroad industry as a whole would be unattainable by a SARR because SARRs are configured and operated in an optimal manner. Shippers contend that under current SAC precedent, a SARR typically is constrained to operate in a manner that falls far short of optimal efficiency. But the shippers' contention is easily refuted by comparisons of SARR operating costs with those of real-world incumbents.

A. BY ANY MEASURE, SARRS ARE VASTLY MORE EFFICIENT THAN ANY RAILROAD OPERATING TODAY

BNSF has explained in its recent submissions before the Board that the SARR operating expenses are far below those of the incumbent that the SARR is assumed to replace and that under SAC theory, the SARR starts out from day one with a far greater efficiency than any real-world railroad. To put the scant opportunities for additional SARR productivity into perspective, I expand upon the evidence provided by BNSF in *Xcel* and *Otter Tail* to show how the SARR is assumed to be much more efficient than any real-world counterpart. In those cases, BNSF demonstrated that complainants' proposed SARR staffing levels and their calculations of associated costs produced operating ratios far below, and revenues per employee that far exceed, those of any real-world railroad of any size. In this section of my testimony, I demonstrate just how much more efficient a SARR is than the real-world railroads it is assumed to replace.

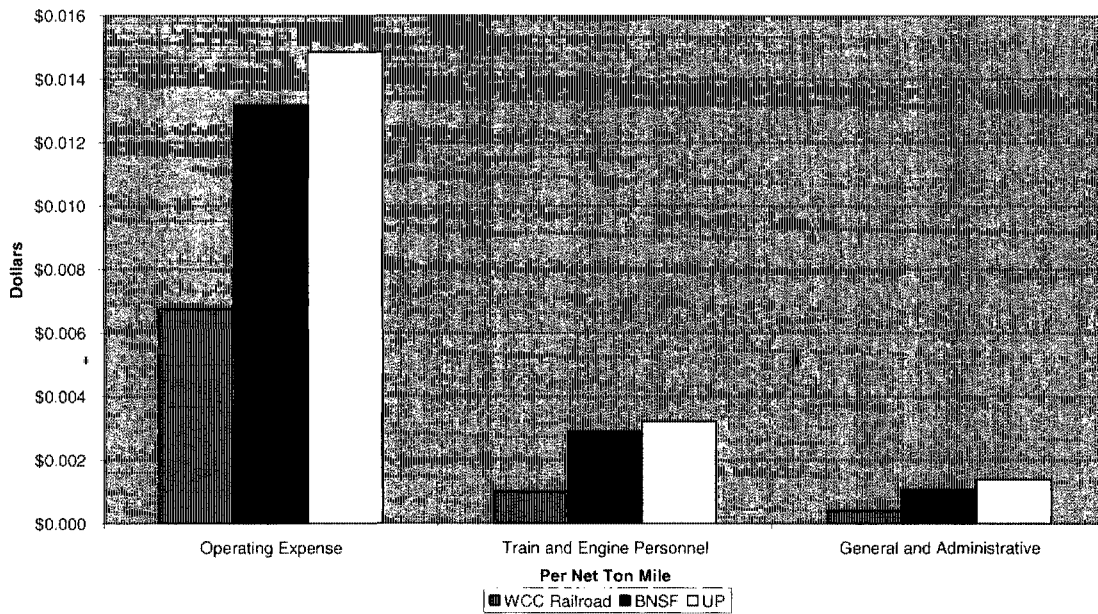
1. Operating Expense Per Ton-Mile

A measure of the SARR's superior efficiency over real-world railroads is clearly demonstrated by comparing the SARR operating expenses per ton-mile (OE/TM) in the two most recent Board decisions in western SAC cases, *Xcel* and *Otter Tail*, with the real-world OE/TM of the western carriers, BNSF and UP, based on their R-1 data for the same year as the base year in each of the two cases. As shown in the charts below, the operating costs accepted by the Board in these SAC cases yield OE/TM for the SARRs that are far superior to those of BNSF or UP.¹

Chart 1 below compares (1) the system average total operating expense per ton-mile, (2) the operating expense per ton-mile for train and engine personnel, and (3) the general and administrative expense per ton-mile found by the Board for the 2001 base year in *Xcel* to the comparable figures for BNSF and UP. The chart shows that SARR operating expenses in aggregate, operating expenses for train and engine personnel and operating expenses for general and administrative costs are each less than half of those of the western Class 1 carriers.

¹ In Docket No. 42088, complainants disparaged any comparisons to real-world railroads, claiming that the SARR has no peers, other than WRPI. The Board in *Otter Tail* rejected complainants' reliance on WRPI for lack of evidentiary support for their claims about WRPI. Docket No. 42071, *Otter Tail Power Company v. BNSF Railway Company*, Surface Transportation Board Decision dated January 25, 2006 at C-20. No evidentiary support has ever been provided in any other case, including this proceeding, to substantiate shipper reliance on WRPI. UP's reply comment in this proceeding demonstrates that claims about WRPI's superior efficiency are greatly inflated, as from the start there was much room for improvement, which was achieved only at great cost. STB Ex Parte No. 657 (Sub-No. 1), *Major Issues in Rail Rate Cases*, Reply Submission of Union Pacific Railway Company dated May 31, 2006 at pages 31 to 32.

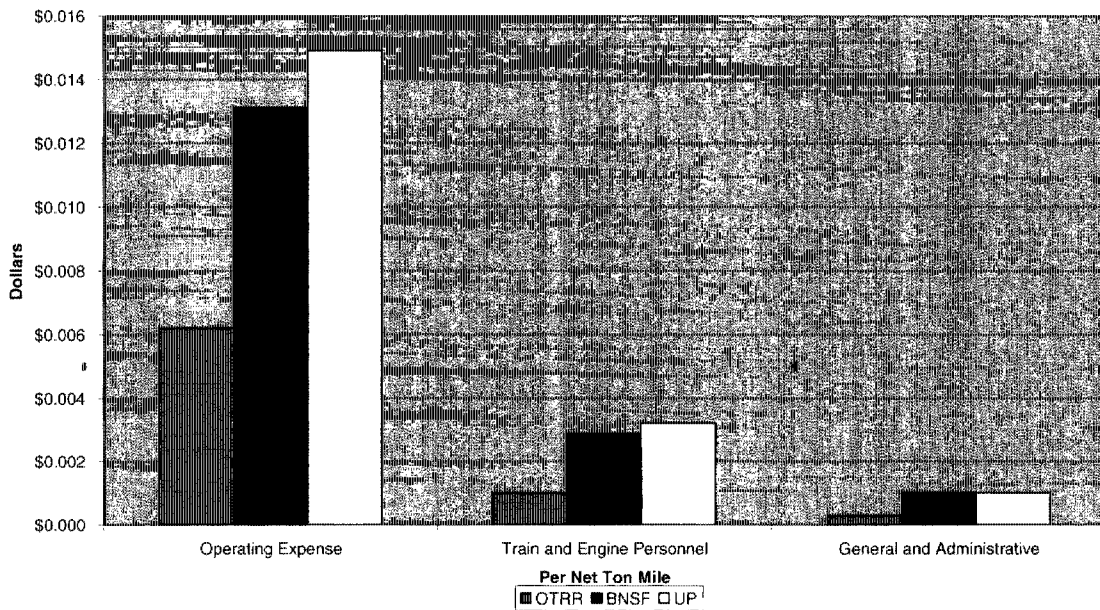
Chart 1
Operating Expense Comparison
Base Year 2001



Railroad data taken from publicly available annual reports and R-1 filings. WCC operating expense data estimated from Board Xcel decisions. Ton-mile data from BNSF Otter Tail brief. The Board can confirm the WCC results using its workpapers from the Xcel decision.

Chart 2 compares the same groups of operating expenses found by the Board for the 2002 base year in *Otter Tail* to the comparable BNSF and UP expenses.

Chart 2
Operating Expense Comparison
Base Year 2002



Railroad data taken from publicly available annual reports and R-1 filings. OTRR operating expense data from Board Otter Tail decisions. Ton-miles were estimated based on those reported in BNSF Otter Tail brief. The Board can confirm the OTRR results using its OTP decision workpapers.

Again, the SARR expenses in aggregate and for key expense categories as determined by the Board in *Otter Tail* are less than half those of the two major western carriers who in the real-world handle the traffic included in the SARR traffic group.

Cost reductions related to reductions in train and enginemen (“T&E”) staffing levels have contributed historically to the productivity experienced by the railroad industry. As the above charts indicate, however, the T&E costs typically attributed to a SARR are well below those experienced on average by real-world railroads. More importantly, the assumptions used to develop the SARR T&E staffing levels begin with optimally sized crew districts, allowing SARR crews to travel longer distances before needing to change crews than their real world counterparts. In addition to the more advantageous crew districts, the number of train crew personnel needed for a SARR is estimated based on the extremely optimistic assumption that each SARR crew member

would average 270 crew starts per year, or an average of 5.2 starts for each of the 52 weeks in a year. No real-world railroad has achieved such high levels of crew productivity for all of its train and engine personnel. By beginning with optimized crew districts and extremely high levels of T&E personnel utilization, there is little room for future productivity improvement for T&E personnel.

Cost reductions related to general and administrative (G&A) costs are also a significant source of productivity in the rail industry as a whole. However, as the above charts demonstrate, SARR G&A costs on average start off considerably below those of the incumbents.

Much of the rationale offered by complainants for lower SARR staffing levels relates to the relatively straightforward operations typically envisioned for a SARR. For example, in *Xcel*, the complainant argued on rebuttal that the WCC's operating ratio and revenue per employee *should* be significantly better than that of other railroads, including short lines, because the WCC "is by definition a unique railroad – single commodity, unit train only operations, with a small customer base" and it "will not have to perform a short-line's most costly activity, *i.e.*, customer switching to build a train consist." Docket No. 42057, *Xcel* Reb. Nar. at III-D-41 and 42 (May 19, 2003). The Board accepted much of complainants' evidence on G&A staffing (*Xcel*, Slip. op. at 65-68), thereby guaranteeing that a SARR operates from the start at a significantly higher level of efficiency than other railroads.

Similarly, in its most recent decision in *Otter Tail*, the Board accepted complainant's G&A evidence despite BNSF's showing that OTP's proposed G&A staffing was unrealistically optimistic even in comparison with a peer group of regional

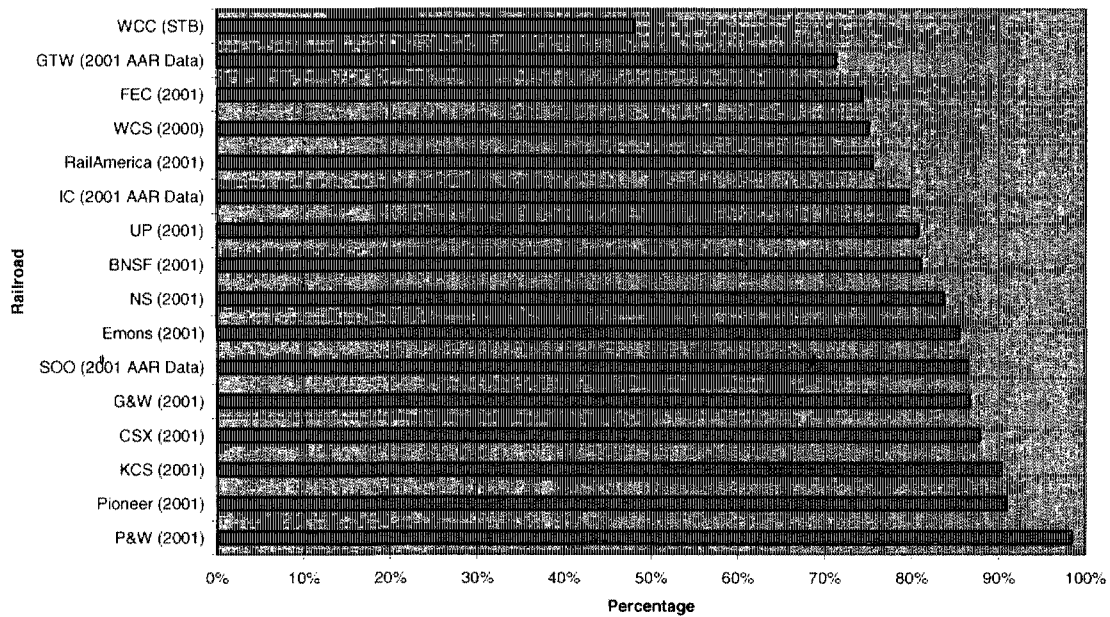
railroads similar to the OTTR. OTP and other complainants in both prior and pending cases develop G&A staffing levels that imply an administrative efficiency never approached by other North American rail carriers of similar scope. This is done principally on grounds that the SARR would have a less complex traffic base than most railroads and that it would aggressively outsource functions to minimize company staff. As the charts above depict, the Board clearly accepted these premises when it accepted OTP's extremely low SARR G&A staffing. Thus, the SARR operating costs from day one reflect the enhanced efficiency of a significantly simpler SARR operation, and a significantly reduced staff through the assumption of outsourcing.

Overall, from the charts above it is easy to see that the SARR at inception is much more efficient than BNSF and UP and that the future productivity that will be captured in the RCAF-A going forward will reflect efforts to move those real-world carriers toward the efficiency level of the hypothetical SARR. There is no reason to expect that the SARR – the assumed industry pace setter -- could become any more efficient.

2. Operating Ratios

A second measure of the substantial productivity captured by the SARR at inception as compared to the railroad industry is the ratio of operating expenses to operating revenues. The railroad industry has long recognized that the lower the operating ratio, the more efficient the railroad. Chart 3 compares the operating ratio determined by the Board for the Xcel SARR, which is below fifty percent, with the operating ratios for other railroads in 2001.

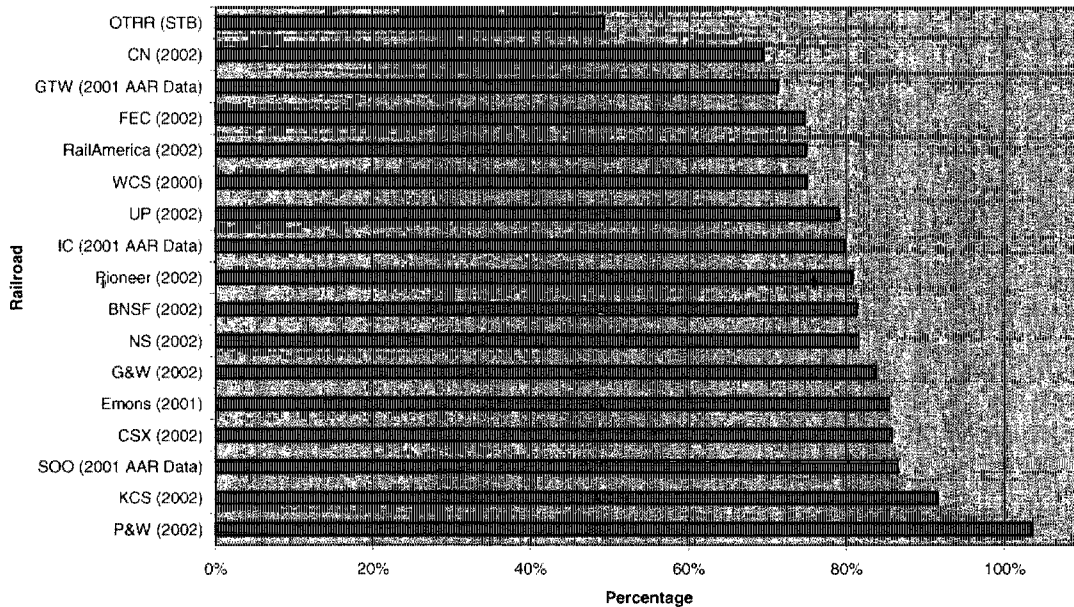
Chart 3
Operating Ratio Comparison
2001



Railroad data taken from publicly available annual reports and R-1 filings. WCC revenue and operating expense data derived from Board Xcel decisions. The Board can confirm the WCC results using its workpapers from the Xcel decision.

Chart 4 compares the operating ratio determined by the Board for the Otter Tail SARR, which is also below fifty percent, with the operating ratios for other railroads in 2002.

Chart 4
Operating Ratio Comparison
2002



Railroad data taken from publicly available annual reports and R-1 filings. OTRR revenue and operating expense data derived from Board Otter Tail decisions. The Board can confirm the OTRR results using its workpapers from the Otter Tail decision.

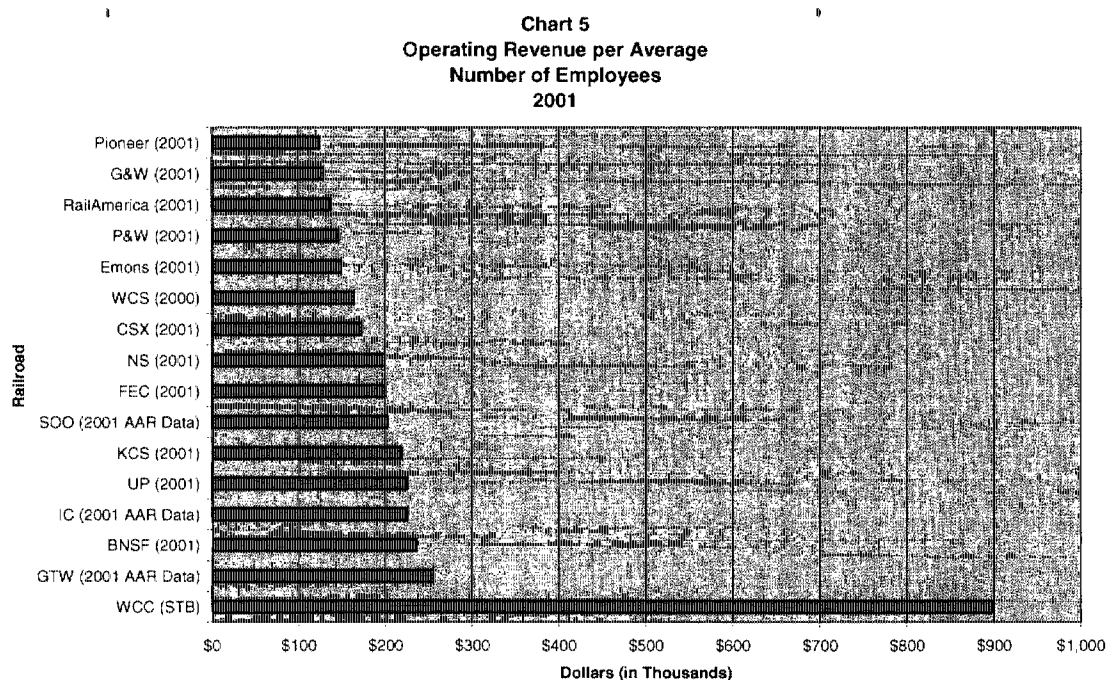
As these charts clearly demonstrate, the SARRs outpace significantly the entire industry with respect to operating ratios.

3. Revenue Per Employee

A third key measure of productivity is the average revenue per employee.

Because the personnel requirements for a SARR provide only enough staff to cover the clearly identifiable functions accepted by the Board, departmental staffing levels are well below those of the incumbent counterparts that, unlike a SARR, must carry staff adequate to address the unexpected challenges that will inevitably occur in the real world. More importantly, because the Board requires the proponents of a SARR to include *only* those essential employees for which the parties can demonstrate a specific need, it is unlikely

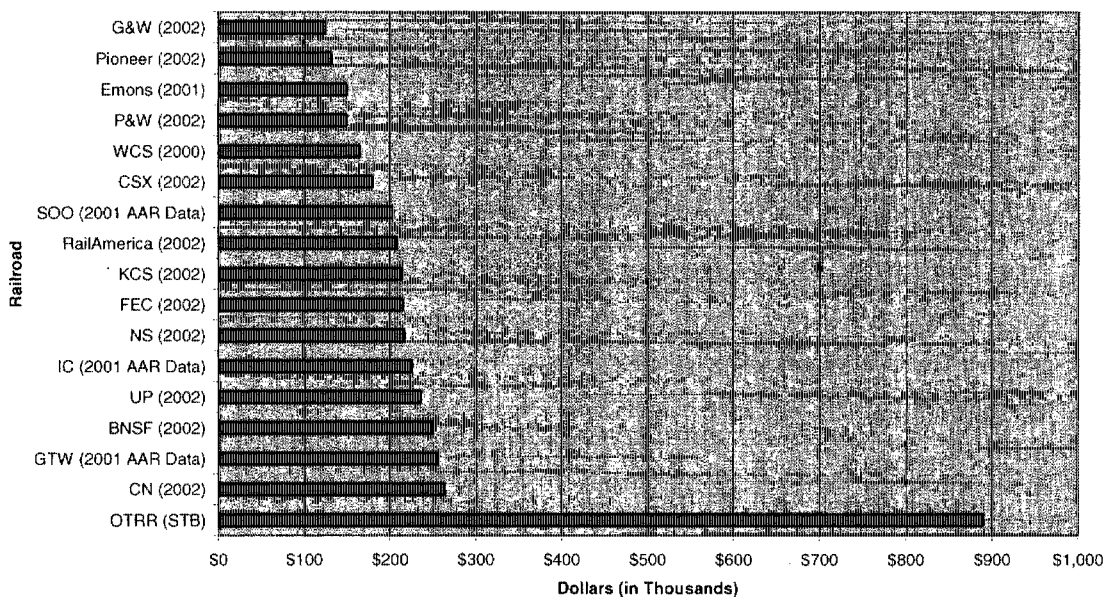
that any of those staffing requirements would be reduced over the course of the DCF period. As such, the substantial productivity gains that the railroad industry has experienced and will continue to experience through staff reductions would not be available to a SARR. Chart 5 compares the average revenue per employee for the WCC in *Xcel* as decided by the Board with those of other railroads and shows that no other railroad – large or small – even comes close to the efficiency of the SARR.



Railroad data taken from publicly available annual reports and R-1 filings. WCC revenue and employee data derived from Board *Xcel* decisions. The Board can confirm the WCC results using its workpapers from the *Xcel* decision.

Chart 6 shows the same relationship for the Board's findings for the OTRR in *Otter Tail*.

Chart 6
Operating Revenue per Average
Number of Employees
2002



Railroad data taken from publicly available annual reports and R-1 filings. OTRR revenue and employee data derived from Board Otter Tail decisions. The Board can confirm the OTRR results using its workpapers from the Otter Tail decision.

4. Transit Times

Transit times are another area in which a SARR starts out vastly more efficient than the incumbent, leaving little room for future productivity improvement. Depending on the particular traffic mix and configuration of the SARR, SARR transit times may vary significantly from the actual transit times of the incumbent, and generally are much more favorable than the actual transit times an incumbent can achieve. In prior cases much of the controversy over transit times centered on the model used to flow traffic over the SARR. Complainants typically relied on a string diagram program, while the railroads used the Rail Traffic Controller (RTC) computer model. The Board repeatedly rejected the severely flawed string diagram in favor of “the proven and commercially available” RTC model. (*See Xcel*, Slip op. at 26).

In *Otter Tail*, complainant initially used the string program which produced transit times that were extremely unrealistic. On reply in that proceeding, BNSF demonstrated the numerous flaws in OTP's string program and showed that transit times for the SARR produced by the RTC model were in some instances comparable to BNSF actual times, and in others superior. In response to BNSF's critique of the string program, the Board allowed OTP to submit supplemental evidence using the RTC model. OTP's supplemental submission produced transit times for the OTRR that were comparable to those produced by BNSF's RTC model.²

In the more recent cases, complainants have heeded the Board's admonition to use the superior RTC model. The transit times produced by the model do not simply mimic the incumbent's actual transit times, but are rather tailored to the specific parameters of the often less complex SARR operation. For example, supplemental evidence submitted by both parties in the pending *WFA/Basin Electric* case demonstrates the significant operational improvements inherent in that SARR's operating plans as modeled by the RTC. While the resultant transit times submitted by the parties are virtually identical, they are significantly below the BNSF actual times. As the Board can see from the confidential evidence provided by WFA/Basin on May 15, 2006³ and by BNSF on June 15, 2006⁴, the SARR transit times in that case are up to 42 percent lower

² Docket No. 42071, *Otter Tail Power Company v. BNSF Railway Company*, Surface Transportation Board Decision dated December 13, 2004 at 3.

³ Docket No. 42088, *Western Fuels and Basin Electric v. BNSF*, Supplemental Opening Evidence of Western Fuels Association and Basin Electric Cooperative in Response to March 17, 2006 Compliance Order, May 15, 2006 at 5. Table 1 (Confidential Version). The BNSF actual transit times in the table were redacted, but the Board can confirm for itself how the SARR transit times compare to BNSF actual times.

⁴ Docket No. 42088, BNSF Reply Supplemental Evidence, June 15, 2006.

than BNSF actual transit times over the same track segments. Thus, at the same time that Coal Shippers are alleging that the operating plans developed by the RTC model are imposing real-world inefficiencies on the SARR, they are submitting evidence that clearly demonstrates the opposite. The SARR operating plan based on a proven superior model inherently includes all available efficiencies at the outset for the assumed traffic base of the SARR, leaving no reasonable expectation of improvement from increased speeds or improved operations.

III. SHIPPERS' CONTENTION THAT THE RCAF-A ALREADY REFLECTS COSTS REQUIRED TO ACHIEVE ADDITIONAL SARR PRODUCTIVITY IS WRONG

Shippers argue that because carriers continuously engage in efforts to improve their efficiency through productivity advances in order to increase their net savings, the “costs” that the railroads argue would need to be incurred by a SARR in order to implement productivity improvements are already factored into the calculation of the RCAF-A. Shippers offer no examples of what these capital expenditures might be or how they are, in fact, factored into the RCAF-A. Nor could they. The RCAF is designed to track only operating expenses and, as such, has no explicit provision for tracking capital expenditures.⁵ However, whether or not the shippers’ claim is accurate for real-world railroads is irrelevant in this proceeding. The real question is whether or not in the context of the Board’s SAC procedures the incremental capital expenditures required for a SARR to be able to improve its productivity are somehow factored into the SARR operating expense inflation index. The answer is a resounding no.

⁵ The RCAF does include a depreciation component, which covers road property and equipment depreciation. However, because of the generally long life of railroad road and equipment assets, the effects of significant road and equipment capital expenditures on the RCAF are substantially diminished.

As I explained in both my opening and reply verified statements in this proceeding, a SARR is optimally configured to accommodate the traffic levels forecasted over the relevant DCF period and the operating plan maximizes these efficiencies. In order to achieve additional productivity, a SARR would have to change some component of its operating plan. Because the operating plan is already optimized for the traffic and network configuration, the only way additional productivity can be achieved is if some aspect of the network configuration were to change.

A good example is shippers' argument that a SARR could improve productivity by extending train sizes. The fact is longer trains would require more horsepower and longer yard tracks and passing sidings, thus requiring substantial incremental investment. There is no provision in the DCF model for the incremental investment needed to acquire more locomotives or extend the track lengths. Even if such a provision were present, the magnitude of these additional costs would more than offset the savings produced by the longer trains.⁶ Shippers' assertion that such costs are factored into the RCAF-A and thus should not be considered separately is clearly wrong.

IV. BNSF'S PROPOSED ADJUSTMENT TO INCORPORATE THE BENEFITS OF PRODUCTIVITY TO THE ASSET INFLATION INDEXES IN THE DCF IS NOT AN IMPERMISSIBLE RAISING OF THE COST OF CAPITAL

In my opening statement in this proceeding, I explained that if the Board were to adopt a 10-year DCF period, there would be no need for any productivity adjustment at all to SARR operating expenses. I also explained that if the Board were to adopt some

⁶ From a practical perspective, it is unlikely that any impetus to extend train lengths will arise in the early years of a SARR's operations. As such, by the time construction is completed and new locomotives procured, the realization of any cost savings is unlikely in the first 10 years of operations.

form of productivity adjustment to the forecast of future SARR operating expenses, it should apply a corresponding productivity adjustment to the indexes used in the DCF to inflate the SARR assets. In other words, a productivity adjustment to the asset inflation indexes should only be implemented if a productivity adjustment is applied to operating expenses.

In his reply verified statement, Mr. Crowley does not dispute the notion that if the Board were to include a productivity adjustment to the forecast of future SARR operating expenses, then it should also apply a comparable productivity adjustment to the inflation indexes used to inflate the SARR asset prices. However, Mr. Crowley argues that an adjustment made directly to the asset inflation indexes would improperly increase the SARR cost of capital. I disagree. In order for Mr. Crowley's assertion to be accurate, there would have to be a direct connection between the inflation assumption used by the Board in the DCF to index SARR investment over the 20-year DCF period and the inflation component of the nominal cost of capital calculated by the Board in its annual railroad cost of capital determinations. Such a connection does not exist. The inflation index used by the Board to index the SARR asset base is a SARR-specific composite input price index comprised of three separate AAR RCR input price indexes: Materials and Supplies, Wage Rates and Supplements and Materials, Supplies, Wage Rates and Supplements, Excluding Fuel. These indexes have always been independent of the inflation implicit in the nominal cost of capital. The inflation implicit in the Board's cost of capital determinations, on the other hand, reflects the inflation in the economy as a whole, which, unlike the AAR indexes, explicitly incorporates the productivity in the economy as a whole. As such, rather than raise the real DCF cost of capital as Mr.

Crowley suggests, the application of a productivity adjustment to the indexes used to inflate the SARR asset base would render the resulting real cost of capital more consistent with the economy-wide inflation assumptions implicitly incorporated in the nominal cost of capital.

As an alternative to adjusting the SARR asset inflation indexes to incorporate the benefits of future productivity gains, Mr. Crowley proposes to adjust the life of the assets to be replaced in the future as a means of accounting for increased productivity. Specifically, Mr. Crowley concludes “[T]herefore, an increase in the life of the asset for the same cost input will reflect the increased productivity in the asset.”

Mr. Crowley’s proposed alternative confuses the source of the asset specific productivity. In first explaining his alternative proposal, Mr. Crowley agrees with me that as technology and material sciences improve, the *construction and replacement* of railroad assets would become more productive. Such productivity improvements will be manifest in lower construction costs, which can be best reflected through adjusting the construction costs of future asset replacements assumed to occur within the DCF. Mr. Crowley’s proposal to increase the life of the asset to “reflect the increased productivity of the asset” incorrectly assumes that the asset itself – and not the construction and replacement of the asset – will become more productive. As a result, rather than reduce the cost of the future replacement of the asset to reflect construction related productivity, Mr. Crowley’s proposal would improperly reduce the annual cost of the original asset by spreading the recovery of the investment over a longer period than the asset will actually be in place.

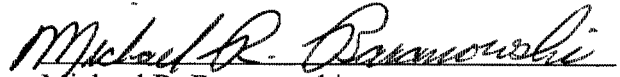
Thus, *if* the Board were to adopt a productivity adjustment for forecasting future operating expenses, it should apply a comparable adjustment to the indexes used to inflate SARR assets. Such a refinement would not increase the SARR cost of capital as Mr. Crowley suggests. Rather, the addition of a productivity adjustment to the input price inflation indexes used to inflate the SARR assets would make the inflation assumptions in the DCF more consistent with those reflected in the Board's cost of capital determinations.

V. CONCLUSION

As the discussions above highlight, the issue of whether or not to incorporate the benefits of additional future productivity on a SARR is complicated. There are questions related to whether a SARR, as an optimally efficient competitor, can be any more productive, how much productivity would be appropriate, when a SARR would begin to experience any incremental productivity benefits, whether the measure of productivity should be based at all on the forecast of productivity for the railroad industry as a whole and whether the productivity should be reflected on both SARR operating expenses and the DCF asset inflation. Because of these complexities and uncertainties, the Board should adopt a 10-year DCF period and not include any additional productivity to either SARR operating expenses or asset replacement costs.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 30 2006


Michael R. Baranowski