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BEFORE THE
SURFACE TRANSPORTATION BOARD

DOCKET NO. 42054

PPL MONTANA, LLC,

Complainant,

v.

THE BURLINGTON NORTHERN AND
SANTA FE RAILWAY COMPANY,

Defendant.

REBUTTAL EVIDENCE AND ARGUMENT OF PPL MONTANA, LLC
IN REOPENED PROCEEDING

John M. Cutler, Jr.
McCarthy, Sweeney & Harkaway, P.C.
Suite 600
2175 K Street, N.W.
Washington, DC 20037
(202) 775-5560

Attorney for PPL Montana, LLC

Dated: August 6, 2003



Part of
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I. INTRODUCTION

In its Decision served March 24, 2003 in this proceeding ("2003 Decision"), the Board granted the September 30, 2002 Petition for Reconsideration filed by Complainant PPL Montana, LLC ("PPL") in part, and reopened the proceeding for further evidence as to certain issues.

The Board held that it could not definitively determine whether, under its segment cross-subsidy test, revenues from traffic over the "western part" of PPL's stand-alone railroad, the Wyoming Montana Coal Railroad ("WMCRR"), exceed costs for that part. If they do, the Board "will proceed with a full SAC analysis of the WMCRR." 2003 Decision at 11. If they do not, the Board said it will conclude that there is cross-subsidy of the kind held impermissible in its decision served August 20, 2002 ("2002 Decision") in this proceeding, and it will dismiss PPL's complaint. The Board has identified two main issues that must be resolved in determining whether such a cross-subsidy exists.¹

First, the Board must decide whether PPL's evidence in the reopened proceeding corrects the "mismatch" between operating expense ratios calculated using western part traffic volumes the Board took from PPL's opening evidence but applied to cost evidence based on the lower western part traffic volumes in PPL's rebuttal evidence. If so, the Board must decide whether this correction eliminates the \$9.26 million net shortfall the Board found in its 2002 Decision.

Second, if the foregoing correction replaces that shortfall with a surplus, the Board must decide whether the surplus is eliminated by correction of an alleged "understatement" of western part expenses "due to the omission from our calculation of certain

¹ PPL does not abandon any of the issues raised in its prior filings that were decided adversely to PPL by the Board. However, PPL's arguments have been preserved for possible judicial review and need not be revisited at this time.

types of expenses that vary with the size of a carrier's system and thus a portion of which may be attributable to the western part traffic collectively." 2003 Decision at 10.

PPL's Opening Evidence and Argument in Reopened Proceeding, filed May 23, 2003, and the Argument below and the attached Verified Statements of PPL Witnesses Thomas D. Crowley and Dr. George Borts show that correction of the "mismatch" cited above produces a surplus of revenues over costs for the western part of the WMCRR, and that the surplus is not eliminated when operating expenses omitted from the Board's earlier calculation are properly apportioned as between the western and north-south portions of the WMCRR, based on accepted railroad accounting principles. Accordingly, the Board should find that there is no impermissible cross-subsidy here, and should proceed with its determination of the stand-alone cost of service to PPL's Corette generating station.

II. ARGUMENT

A. Correction of the "Mismatch" Transforms the Board's \$9.26 Million Shortfall into a \$38 Million Surplus

There is no need to devote extended discussion to the first question identified above. In its May 23, 2003 Opening Evidence, PPL demonstrated that using the Board's methodology but correcting for the STB's "mismatch" results in a \$38 million surplus of western part revenues over western part costs, in place of the \$9.26 million net shortfall previously calculated by the Board under its segment cross-subsidy test. See the May 23 Verified Statement of PPL Witness Crowley at 10-14.

Defendant The Burlington Northern and Santa Fe Railway Company ("BNSF") accepted the calculations of PPL Witness Crowley correcting the Board's "mismatch" in its Reply filed July 7, 2003. See the attached Rebuttal Verified Statement ("RVS") of

Witness Crowley at 9. See also BNSF's Argument at 9-10, accepting Mr. Crowley's string program output -- i.e., the \$38 million surplus -- "as the starting point for the revised cross-subsidy analysis here." The same concession appears in the Verified Statement of BNSF Witnesses Kent and Klick ("Kent/Klick VS") at 19-20.

B. PPL Has Correctly Allocated Costs in the Four Expense Categories and the Surplus Remains

The second question identified above concerns the appropriate treatment under the Board's segment cross-subsidy test for four categories of expenses "omitted" from the Board's prior cross-subsidy analysis. The four categories in question are operating managers, general administrative staff, loss and damage and maintenance-of-way. See 2003 Decision at 10. PPL and BNSF disagree as to this issue. However, the position taken by BNSF is untenable.

In their attached Rebuttal Verified Statements, Witnesses Crowley and Borts defend PPL's showing that the \$38 million surplus is not eliminated when the costs for the four categories of expenses are properly allocated. PPL made this showing using two different methodologies.

Mr. Crowley's Approach No. 1 involves adhering to the position taken by PPL and BNSF in this proceeding prior to its reopening. As explained in PPL's May 23 Opening Argument (at 6-7), BNSF assigned none of the costs in the Board's four expense categories to western part traffic, and BNSF effectively conceded that stand-alone revenues on the western part of the WMCRR exceeded stand-alone costs on the western part by over \$44 million. BNSF Witnesses Kent and Klick completely ignore this aspect of Mr. Crowley's May 23 Opening Evidence. See Crowley RVS at 21-22.

Mr. Crowley also used a second methodology, referred to as Approach No. 2, to confirm that the surplus is not eliminated (Crowley RVS at 2 and 6-12). Under this approach, Mr. Crowley calculated URCS variability coefficients for the WMCRR and applied those coefficients to identify the variable portion of the expenses in fifteen expense categories.

BNSF accepts Mr. Crowley's cost allocation but takes issue with his assertion that the fixed costs are not attributable to western traffic. In light of BNSF's acceptance of so much of PPL's evidence, the final issue confronting the Board is a narrow one. Assuming it does not adopt Mr. Crowley's Approach No. 1, which may be unique to this proceeding,² how does the Board intend to apply its attributable cost test in allocating costs as between segments of stand-alone railroads under its segment cross-subsidy analysis? PPL argues for the use of incremental or variable costs; BNSF argues for total costs, including fixed as well as variable components. BNSF's argument in favor of its approach is that in SAC cases, SAC costing must be used for each segment. This argument is defective on numerous grounds.

As a matter of law, BNSF's approach is inconsistent with past precedent. It amounts to calling on the Board to conduct segment-by-segment SAC analyses. However, the Board rejected that characterization of its new test, stating:

[W]e did not employ a "segmented SAC" test. In contrast with what we do in a SAC analysis, in our threshold cross-subsidy analysis, we purposely excluded unattributable costs from the analysis, and looked only at whether the revenues generated by western-part traffic would be suffi-

² As PPL has previously argued, the segment cross-subsidy test gives railroad defendants every incentive to try to defeat rate regulation, regardless of how high the challenged rates are, by identifying the segment of each complainant's SARR that generates the lowest revenues, and allocating as many costs as it can to that segment. Concessions like those by BNSF in this case will not be repeated in future rate cases.

cient to cover costs not shared by shippers only using the north-south part of the WMCRR.

2003 Decision at 7, emphasis in original, footnote omitted. See also Borts RVS at 6. A segment SAC test cannot be reconciled with Coal Rate Guidelines -- Nationwide, 1 I.C.C. 2d 520 (1985), aff'd. sub nom Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3d Cir. 1987) (hereafter, Coal Rate Guidelines), on which the Board relies for its cross-subsidy analysis.

Coal Rate Guidelines indisputably teaches that the issue traffic of the complainant shipper cannot lawfully be required to cross-subsidize railroad facilities the issue traffic does not use. Whether the statute permits, and the decision supports, extension of that same prohibition to non-issue traffic over which the Board lacks jurisdiction is a point PPL does not concede. Nevertheless, the economic analysis in Coal Rate Guidelines is highly relevant to the present dispute.

Under the Board's test for cross-subsidy, the key inquiry is whether revenues for the segment at issue cover the attributable costs of the segment. In essence, BNSF is arguing that total costs are attributable costs. This proposition was squarely rejected in Coal Rate Guidelines. See, e.g., 1 I.C.C. 2d at 526 (emphasis in original):

Most importantly, railroads exhibit significant economies of scope and density.¹² Economy of scope refers to the fact that the rail plant is indivisible and can produce numerous services at less cost than those services could be produced by separate rail plants for each service. Economy of density refers to the fact that greater use of the fixed plant results in a declining average cost. Thus, the marginal cost of rail service is less than the average cost, because the fixed plant is used in a progressively more efficient manner.

¹² A third type of commonly recognized production economy is economy of scale. Economies of scale are present when the average cost of service declines as the size of rail plant increases.

The ICC went on to observe that the differential between marginal costs and average costs is the unattributable costs, because these costs cannot be assigned to specific movements. Id. Attributable costs, in contrast, can be assigned to specific movements.

BNSF's "total cost" approach to expense allocation ignores these production economies, while PPL's "variable cost" approach recognizes them. In precluding recognition of production economies, BSNF would violate the ICC's statement in Coal Rate Guidelines that "If these [production] economies are significant, a captive shipper can increase the traffic base for the stand-alone system in order to lower the cost to itself." 1 I.C.C. 2d at 532.

BNSF is also repudiating positions the railroads themselves took in the Ex Parte No. 347 (Sub-No. 1) proceeding. See 1 I.C.C. 2d at 531. In discussing higher density and lower density lines, the ICC observed:

The railroads respond that the costs of high density lines cannot be reviewed in isolation.... Much of this additional traffic also utilizes lower density lines and related facilities, which have not exhausted economies of density, to feed into the high density lines. Thus, the railroads maintain, a carrier's light and high density lines are inextricably linked and cannot be segregated in the manner suggested.

BNSF's total cost approach would essentially treat the western part and the north-south part as separate railroads, to be costed separately regardless of the production economies that are an integral factor in application of the SAC test. This position lacks support in the law, in economics and in the real world of railroad pricing.

It is also telling that the STB included a reference to Ex Parte No. 347 (Sub-No. 2), Rate Guidelines -- Non-Coal Proceedings, 1 S.T.B. 1004 (1996) when it distinguished its cross-subsidy analysis from "segmented SAC." 2003 Decision at 7. In Rate Guidelines -- Non-Coal Proceedings, the Board rejected the AAR Simplified SAC model because, *inter alia*, "all lines in the rail network are valued at full replacement cost" and because the AAR presumed the use of the same assets and technology as the incumbent, undermining the SAC test's goal of costing based on systems of optimal efficiency. 1 S.T.B. at 1015.

The Board went on to hold that the AAR's simplified model "is inconsistent with sound railroad economic principles," which support service for "any traffic that covers its own (attributable) costs." Id. at 1016.

The foregoing precedents are not entirely analogous to this case because none of them involved the allocation of costs as between segments of a single stand-alone railroad. In this respect, this is a case of first impression. However, the ICC and Board have consistently rejected railroad attempts to inflate the costs that must be borne by a stand-alone railroad by depriving the stand-alone railroad of the production economies that support real railroads' combinations of higher and lower density lines. BNSF's approach here is more of the same, and should be rejected.

The Rebuttal Testimony of PPL Witnesses Crowley and Borts establishes that not only is BNSF's total cost approach bad law, but it is also bad economics. As Mr. Crowley explains, real-world railroads actually use incremental pricing to take advantage of production economies, and it would be economically self-defeating not to. Crowley RVS at 3.

These economic facts of life have been recognized in the ICC and STB decisions discussed above. They have also been recognized in the economic literature. See Crowley RVS at 10-12, quoting from a leading economic treatise and from the Final Report of the Railroad Accounting Principles Board (RAPB).

Dr. Borts agrees, pointing out that BNSF "would have us believe that the SARR would experience an increase in the constant component of operating costs if output were increased, and a decrease in constant costs if output were reduced." He goes on:

It is generally concluded by regulators and economists alike that there are economies of scale and scope in the production of railroad services. Therefore it is not reasonable to expect costs to change in equal proportion with changes in output. There are some components of costs that do not vary directly with output. A reduction of output, for example, will not necessarily lead to a reduction in constant costs. Thus the treatment sponsored by BNSF contradicts the characterization of costs that has been the bedrock of economic analysis of the railroad industry. BNSF has overstated the incremental cost (and thus understated the incremental profit) to the western portion of the SARR from providing service to captive shippers, thus denying the SARR the opportunities that are available to all railroad firms, namely the benefits of economies of scale and scope.

Borts RVS at 5.

Remarkably, BNSF's witnesses concede the validity of these distinctions when they acknowledge that "expenses for operating managers, general and administration, loss and damage and maintenance of way are typically determined for the rail system as a whole and are not directly based on the level of particular operating statistics."

Kent/Klick V.S. at 20, discussed in Mr. Crowley's RVS at 7-8 and 21-22. The Kent/Klick testimony is entirely consistent with their direct cost approach, where they allocated all costs for these four expense categories to the north-south part of the

WMCRR in the previous phase of this proceeding. Messrs. Kent and Klick now abandon that approach without explanation.

Messrs. Kent and Klick go on at page 21 to contradict their own testimony at page 20 by attacking Mr. Crowley for concluding that attributable costs, for purposes of the Board's segment cross-subsidy test, are variable costs. But in accepting that these costs are "determined for the system as a whole and ... not directly based on the level of particular operating statistics," they are conceding that these include joint and common costs, which are unattributable. See Coal Rate Guidelines, *supra*, 1 I.C.C. 2d at 526, n. 13:

Unattributable costs reflect both joint and common costs. "Common Costs" are costs shared by two or more services in variable proportion. For example, a terminal represents a common cost; it is used by different services in varying proportions. "Joint Costs" are costs shared by two or more services in fixed proportion. A backhaul movement is the classic railroad example.

Witness Crowley also explains that if the western portion did not exist, there is no portion of these expenses that would be saved. RVS at 13-15. Dr. Borts concurs. RVS at 5-6.

Mr. Crowley provides examples to illustrate the point. See his RVS at 5, explaining that while each train requires one crew, each crew will move 270 trains per year, so elimination of one train does not permit elimination of one crew. See also his explanation of how WMCRR crews at Donkey Creek serve mines south of Donkey Creek for northbound trains, and southbound trains from the Decker and Eagle Butte branches, as well as western part trains. RVS at 14. Citing the opening evidence of PPL Witness McDonald in the original phase of this proceeding, Mr. Crowley points out that WMCRR

crews based at any point are able to operate in any direction. Id. This flexibility benefits the WMCRR and the stand-alone group as a whole.

It is well-established that grouping is an essential component of SAC analysis, and that it is "reasonable and practical to assume that the revenue contribution of other (i.e., non-complaining) shippers will be at the level of their current rates." Coal Rate Guidelines, 1 I.C.C. 2d at 544. In its 2002 Decision, the Board expressed concern that there might be non-complaining shippers in the SAC group that would not use the western part but would pay part of its costs. For this to take place, some costs attributable solely to western part traffic would have to be recovered in rates charged to other traffic.

If the western part had not existed, or were sold or abandoned, PPL doubts that north-south shippers' rates would decline at all, which is one of PPL's objections to the segment cross-subsidy test. However, assuming arguendo that this is a legitimate concern as a matter of law and economics, BNSF is effectively arguing that, absent the western part, other shippers' rates would be reduced by the total costs its witnesses assign to the western part. This is not correct. At best, the variable portion of those costs would be avoided by the railroad.

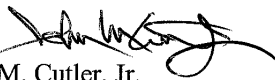
III. CONCLUSION

As a matter of law and as a matter of economics, the method used by Mr. Crowley is the proper method for determining whether the \$38 million surplus calculated by Mr. Crowley and accepted by BNSF is eliminated, once there is an allocation to the western part of costs in the four "omitted" expense categories.

BNSF has been able to eliminate the surplus only by inventing a methodology that violates basic SAC principles in that it denies the stand-alone railroad the benefit of

production economies, in violation of Coal Rate Guidelines. BNSF also contradicts its own prior evidence and arguments. Because BNSF's position is untenable, the Board should approve PPL's approach, and should find that there is no segment cross-subsidy now that the "mismatch" which led to the reopening of this proceeding has been corrected. Accordingly, the Board should proceed to develop the maximum reasonable rates for service over the WMCRR. The extraordinarily high revenue to variable cost percentages produced by the challenged rates strongly suggest that they exceed the SAC level, and are therefore unlawful.

Respectfully submitted,



John M. Cutler, Jr.
McCarthy, Sweeney & Harkaway, P.C.
2175 K Street, N.W., Suite 600
Washington, DC 20037
(202) 775-5560

Attorney for PPL Montana, LLC

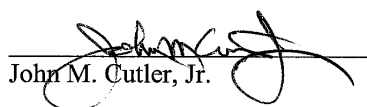
Dated: August 6, 2003

CERTIFICATE OF SERVICE

I hereby certify that I have this 6th day of August, 2003, caused copies of the foregoing document to be served by messenger delivery on Washington, DC counsel and by overnight express delivery on Texas counsel for Defendant BNSF, as follows:

Anthony J. LaRocca, Esq.
Stephoe & Johnson, LLP
1330 Connecticut Avenue, N.W.
Washington, DC 20036

Michael E. Roper, Esq.
The Burlington Northern and
Santa Fe Railway Company
2500 Lou Menk Drive
Fort Worth, TX 76131



John M. Cutler, Jr.

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

PPL MONTANA, LLC,

Complainant

v.

**THE BURLINGTON NORTHERN AND
SANTA FE RAILWAY COMPANY,**

Defendant

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Docket No. 42054

Rebuttal
Verified Statement

of

Thomas D. Crowley
President
L. E. Peabody & Associates, Inc.

on behalf of

PPL Montana, LLC

Due Date: August 6, 2003

TABLE OF CONTENTS

	<u>PAGE</u>
I. Introduction	1
II Summary of Findings	4
III. Kent/Klick Changed Their Approach To Calculating A Cross-Subsidy	6
A. Theoretical Failings Of Kent/Klick Approach	9
B. Kent/Klick's Approach Represents A Fundamental Misunderstanding of Railroad Costing and Pricing Practices	12
C. Kent/Klick's Calculation of Costs For The Western Part of WMCRR	12
D. Allocated Versus Attributable Costs	18
IV. Kent/Klick Changed Positions On Other Key Issues	20
A. Cost Level Used In A Cross-Subsidy Analysis	20
B. Impact Of The Missing Four Categories Of Expenses	21
V. Conclusions	23

LIST OF EXHIBITS

EXHIBIT NO. ^{1/} (1)	TITLE (2)
29	Explanation of Differences In BNSF's Reply Table 1

^{1/} Exhibit_(TDC-1) through Exhibit_(TDC-10) were filed with my opening evidence in this proceeding on December 14, 2000, Exhibit_(TDC-11) through Exhibit_(TDC-21) were filed with my rebuttal evidence in this proceeding on May 7, 2001 and Exhibit_(TDC-22) through Exhibit_(TDC-28) were filed with my Reopened Opening Evidence in this proceeding on May 23, 2003.

I. INTRODUCTION

My name is Thomas D. Crowley. I am an economist and President of the economic consulting firm of L. E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Suite 200, Alexandria, Virginia 22314. I am the same Thomas D. Crowley that filed verified statements in the opening and rebuttal phases of this proceeding, in support of the petition for reconsideration filed September 30, 2002 by Complainant PPL Montana, LLC ("PPL") and in support of PPL's opening evidence in this reopened proceeding on May 23, 2003.

I have been asked by Counsel for PPL to respond to the Reply Verified Statement of Christopher D. Kent and John C. Klick ("Kent/Klick") filed in this reopened proceeding on July 7, 2003.

In my Opening Verified Statement in this reopened proceeding, I presented two different economic approaches to address the request of the Surface Transportation Board ("STB" or "Board") for additional evidence on the calculation of the "...portion of the WMCRR operating expenses attributable to the traffic using the western part"^{1/} of the stand-alone railroad relied on by PPL in this case in order to determine if a cross-subsidy exists. In its decision served August 20, 2002 in this proceeding, hereafter referred to as PPL I,^{2/} the Board calculated costs and revenues separately for the portion of PPL's stand-alone railroad (the Wyoming Montana Coal Railroad, or "WMCRR") west of Campbell, WY, which the Board called the "western part," and

^{1/} STB Docket No. 42054, PPL Montana LLC v. The Burlington Northern and Santa Fe Railway Company ("PPL II"), decision served March 24, 2003, unprinted, p. 9.

^{2/} STB Docket No. 42054, PPL Montana, LLC v. The Burlington Northern And Santa Fe Railway Company ("PPL I"), decision served August 20, 2002.

for the remainder of the WMCRR, which the Board called the "north-south part."^{3/}

The two different economic approaches that I presented in my Opening Verified Statement in this reopened proceeding, in response to the STB's request, demonstrated that no cross-subsidy exists between the traffic or traffic groups handled by WMCRR. Approach No. 1 relied upon direct cost calculations and was the approach presented by BNSF in the original Reply phase of this proceeding.^{4/} Approach No. 1 was also used by the Board to make its initial cross-subsidy calculations. While the theoretical underpinnings of using Approach No. 1 to measure a cross-subsidy may be disputed, I have included the results of applying this approach because it was requested by the Board in PPL II and because it demonstrated that no cross-subsidy exists after the error identified by the Board is corrected. Approach No. 2 is the methodology followed by a railroad (or any business) when evaluating whether or not to add or delete traffic (or any product) to or from its system i.e., revenues are compared to the variable service costs. Approach No. 2 also demonstrates that no cross-subsidy exists.

In their Reopened Reply, Kent/Klick abandoned the approach they used in their original Reply evidence (without any explanation) and instead adopted portions of my Approach No. 2. However, they calculated the total costs implicit in the variable cost calculations included in my

^{3/} The Board developed ratios for each operating expense category for the purpose of allocating expense for western part traffic based on BNSF's calculation of operating expense attributable to the north-south part. The ratios were not proposed by BNSF as they have now claimed in their Reopened Reply, p. 6. Nonetheless, the ratio of 0/100 for the four expense categories of operating managers, G&A, loss and damage and MOW were calculated by the Board based on BNSF's allocation of 100% of those expenses to the north-south (core) part of the WMCRR on Reply.

^{4/} BNSF Reply Argument, pp. 31-32 and Kent/Klick Reply, pp. 14-15.

Approach No. 2, which obviously includes both variable and fixed costs or both attributable and unattributable costs.

A single economic issue separates PPL and BNSF in the determination of whether or not a cross-subsidy exists in the stand-alone cost model. The issue can be framed with the following question: In determining whether or not a cross-subsidy exists, should the revenues generated by the issue traffic be compared to total costs (BNSF's new position) or to attributable, variable, incremental or marginal costs (PPL's position)? The answer to this question is straightforward -- attributable, variable, incremental or marginal costs should be used. This fact is easily tested by reviewing the analytical approach followed by the railroads when evaluating whether or not to add or delete traffic from their systems. This evaluation process involves comparing the revenues generated by the issue traffic to the attributable, variable, incremental or marginal costs of providing service. Stated differently, it would be economically self-defeating for railroads evaluating traffic in the real world to use the total cost principles espoused by Kent/Klick for purposes of this reopened proceeding.

The balance of my rebuttal verified statement addresses the specific issues raised by Kent/Klick under the following topical headings:

II. Summary of Findings

III. Kent/Klick Changed Their Approach To Calculating A Cross-Subsidy

IV. Kent/Klick Changed Positions On Other Key Issues

V. Conclusions

II. SUMMARY OF FINDINGS

Based on the analyses discussed in the balance of this rebuttal verified statement, a summary of my findings is as follows:

1. In their Reply evidence in this proceeding, BNSF and Kent/Klick included a cross-subsidy analysis wherein they calculated the operating costs attributable to the north-south part of the WMCRR. Implicit in that analysis was a calculation of the direct operating costs associated with the western portion. BNSF recognized in their cross-subsidy analysis that four categories of operating expenses, those associated with operating managers, general administration staff, loss and damage and maintenance of way, would be incurred by the north-south part regardless of whether or not the western part was constructed and operated. In BNSF's analysis, none of the costs associated with those four categories were considered to be directly attributable to the western part, nor would they change incrementally with the addition or deletion of traffic on the western part.
2. BNSF's stated logic for treating the four expense categories in the manner described above was that: 1) it was not possible to directly calculate those costs based on traffic levels; 2) those costs included unattributable common costs; and 3) any allocation of the expense categories would be arbitrary. In this phase of the Reopened proceeding, BNSF has abandoned its earlier methodology for calculating attributable cost and has invented a new methodology that incorporates portions of two mutually exclusive costing techniques. They have applied their original direct cost approach to some cost components and have applied a fully allocated (total) cost approach to others. This new costing approach employed by BNSF is clearly results-driven and furthermore it violates basic accounting principles.
3. In PPL I, the Board based its cross-subsidy analysis on the direct cost approach presented by BNSF in Reply. When this procedure is followed to calculate direct operating costs for the western traffic, and the resulting costs (together with the investment costs associated with the western part) are compared to the revenues generated by the western traffic, it is clear that no cross-subsidy exists.
4. The methodology developed by the Board and included in the cross-subsidy analysis presented in PPL I is not the methodology utilized by railroads when they decide whether to add traffic to their network or whether to alter the configuration of their network. The long-established industry methodology is to evaluate the incremental cost (that portion of cost that varies with traffic levels or network configuration) that would be incurred if a group of traffic were moved (or a service discontinued), and compare it to the incremental revenue that would be generated (or lost) by the traffic.

5. The Board has held that cost-sharing is permissible under Guidelines, while the recovery of a shipper's attributable costs from other shippers (cross-subsidization) is not. Thus, each group of traffic that makes up the stand-alone traffic base is not required to pass the stand-alone test on its own. Each traffic group must only produce enough revenue to cover its attributable costs.
6. BNSF's discussion of "top-down" vs. "bottom-up" costing principles is intended to confuse the issues of stand-alone cost and cross-subsidy analysis. Stand-alone costs are, as pointed out by BNSF, built from the bottom-up based on the collective operating requirements of the system as a whole. Implicit in that calculation is the fact that costs will be shared by sub-groups of stand-alone traffic. Stand-alone operating requirements are not calculated for each sub-group of traffic and summed. For example, while one crew is required to move each train, each crew will move 270 trains throughout the year. So, the elimination of one train from the SAC traffic group does not equate to the lack of need to hire the crew that would have moved that train.
7. By allocating total (fixed plus variable) operating costs to the western part, BNSF has in effect costed the western part as an independent stand-alone railroad rather than as a sub-group of the greater WMCRR, for the purpose of determining whether a cross-subsidy exists. This is not the analysis requested by the Board.
8. Kent/Klick's position on the allocation of the four expense categories has been inconsistent throughout the proceeding, and has been reversed in their Reopened Reply in order to achieve a favorable result based on the Board's proposed cross-subsidy test. In their original Reply, Kent/Klick endorsed a direct cost approach and in this phase of the proceeding, they have adopted a total cost approach.

III. KENT/KLICK CHANGED THEIR APPROACH TO CALCULATING A CROSS-SUBSIDY

In their Reply evidence in this proceeding, Kent/Klick used a direct cost approach to determine the operating costs attributable^{5/} to the north/south portion of the WMCRR. When doing so, they specifically allocated 100 percent of WMCRR's expenses for operating managers, general administration staff, loss and damage and maintenance of way to the core north/south part of the WMCRR. The reason for the assignment to the north/south portion is that these categories of expense are calculated for the system as a whole and are correctly tied to the core of the WMCRR system.^{6/}

In PPL II, the Board was concerned that "there may also have been understatement of the expenses attributable to western-part traffic, however, due to the omission from our calculation of certain types of expenses that vary with the size of a carrier's system and thus a portion of which may be attributable to the western-part traffic collectively. These expense categories were operating managers, general administrative staff, loss and damage, and maintenance of way."^{7/} The Board invited the parties to assess the extent to which these four expense categories are attributable to western traffic.

In response to the Board's question, Kent/Klick abandoned the approach they used earlier in this case with regard to these four operating expense categories, without any explanation. In

^{5/} As discussed below, Kent/Klick's direct cost approach overstates attributable costs because they include both attributable and unattributable cost components.

^{6/} When determining if a cross-subsidy exists in PPL I, the Board accepted Kent/Klick's direct cost approach and also attributed 100 percent of these four expense items to the core of the WMCRR system.

^{7/} PPL II, p. 10.

fact, BNSF makes a transparent attempt to disassociate itself from the evidence it presented in Reply. In its Reopened Reply, BNSF states:

“Since neither party had proposed a methodology for allocating the cost of operating managers, G&A, loss and damage or maintenance of way (“MOW”) to the east-west traffic, the Board allocated only the remaining operating costs.”^{8/}

This is not true. The Board’s allocation was based on BNSF’s own allocation of 100% of those four accounts to the core, north-south part of the WMCRR. Instead BNSF now adds a portion of these four operating expense categories to the direct costs implicit in their Reply statement at the total cost level. Stated differently, when left to their own analytical devices, Kent/Klick believed that none of the monies associated with the four expense categories should be assigned to the WMCRR east-west traffic. However, after the Board suggested that “there may also have been understatement of the expenses attributed to the western-part traffic”, Kent/Klick’s position shifted 180 degrees and they are now suggesting that an allocation of these four expense categories be assigned to the east-west traffic.

Kent/Klick’s new position is extremely curious in light of a pair of statements included in their Reopened Reply which confirms the correctness of allocating the four expense categories to the north/south traffic. Specifically, Kent/Klick state, “expenses for operating managers, general and administration, loss and damage and maintenance of way are typically determined for the rail system as a whole and are *not directly based* on the level of particular operating statistics”.^{9/} [emphasis

^{8/} BNSF Reopened Reply, p. 6.

^{9/} Kent/Klick Reopened Reply, p. 20.

added]. And further that, "By contrast, SAC operating costs, including the costs developed by PPL using the string program, are built from the ground up".^{10/} However, after making these theoretically correct statements, Kent/Klick ignore them and incorrectly allocate a substantial portion of the total costs (fixed plus variable) included in these four operating expense categories to the western part of the WMCRR system. Clearly, these expenses are not directly related to the traffic moving on the western part of the WMCRR and would be minimally reduced if traffic moving on the western part were eliminated from the WMCRR system.^{11/}

Attempting to justify the inappropriate allocation of these four categories of expense to the western part in conjunction with their direct cost approach, Kent/Klick imply that they simply followed the approach I developed but at a total cost level. Kent/Klick state in Reopened Reply, "We have reviewed Mr. Crowley's approach to assigning cost from these expenses to categories to the western leg, and have accepted them – and the specific level of expense that Mr. Crowley has assigned to the western leg on the basis of those operating statistics – for the purposes of the cross-subsidy analysis".^{12/}

Kent/Klick are mixing two mutually exclusive methodologies. Their new method, in effect, allocates to the western part both the fixed and variable portion of the eleven direct expense

^{10/} BNSF Reopened Reply, p. 11.

^{11/} For example, the entire General and Administrative expense for the WMCRR equals \$5.5 million and includes 1) the salaries, wages and benefits for the WMCRR G&A personnel, 2) the office buildings, materials and supplies required to support these personnel, and 3) the information technology capital operating costs required for the system. None of the G&A personnel or any of the information technology expenses would be reduced if the traffic moving on the western part of the system were eliminated, yet, Kent/Klick's new methodology allocates \$2.7 million of the total \$5.5 million G&A expense to the western part of the WMCRR.

^{12/} Kent/Klick Reopened Reply, p. 21.

categories^{13/} and of the four non-direct expense categories, thereby substantially overstating the costs attributable to the traffic moving over the western part of the WMCRR. They inappropriately mix and match their direct cost approach and the incremental or variable cost approach that I presented as an alternative.

The correct and long-established methodology utilized by railroads to evaluate traffic is the evaluation of the incremental cost associated with carrying the traffic. If the additional cost associated with moving a piece or group of traffic (in the long run) is less than the additional revenue the traffic will generate, railroads will opt to move the traffic. When applying the incremental or variable (attributable) cost approach, it is incorrect to mix and match it with a direct total cost approach as Kent/Klick have done in their Reopened Reply.

**A. THEORETICAL FAILINGS
OF KENT/KLICK APPROACH**

As noted above, I presented two approaches to demonstrate that a cross-subsidy did not exist. Approach No. 1 was the direct approach used by the BNSF in Reply and incorporated by the Board in PPL I and PPL II, with a correction for the Board's error, and Approach No. 2 was the long run variable cost approach used by railroads in evaluating traffic. In their Reopened Reply, Kent/Klick now use a combination of the two approaches that I presented. In following this new methodology, Kent/Klick include WMCRR common (fixed) costs in their cross-subsidy analysis and thereby overstate the costs attributable to that traffic.

^{13/} Kent/Klick agree with me that when the Board's mismatch error is corrected, the \$9.26 million shortfall previously calculated by the Board results in a \$38 million surplus. (Kent/Klick, Reopened Reply, pp. 19-20)

The Board, the Railroad Accounting Principles Board and the economic literature are clear that common (fixed) costs are not assignable to a specific piece of traffic or a traffic group. The following selected quotes demonstrate the proper use of this concept and also show that Kent/Klick have overstated the costs attributable to WMCRR's east-west traffic.

In PPL I, the Board criticized PPL for:

"...not adequately distinguish[ing] between cost sharing (the grouping of traffic to share the joint and common, i.e., unattributable, costs of providing rail service), which Guidelines permits, and cross-subsidization (the recovery of a shipper's attributable costs from other shippers), which Guidelines proscribes."^{14/}

The economic literature defines common costs as follows:

"Common costs are similar to joint costs, in that they are incurred as the result of providing services to a range of users, but differ in that the use of resources to provide one service does not *unavoidably* result in the production of a different one... . With several classes of user it is often possible to trace certain components of cost to those responsible but there is still usually a large proportion which is untraceable.... One of the difficulties with railway operations is that common costs... form a very substantial part of total cost."^{15/}

The Railroad Accounting Principles Board ("RAPB") recognized that common costs are not avoidable costs:

^{14/} PPL I, pp. 8-9, footnotes omitted.

^{15/} Kenneth J. Button, Transport Economics: 2nd Edition, Edward Elgar, Cheltenham, UK, 1993, pp. 80-84. (emphasis in original).

“The avoidability test is applied on an incremental basis. That is, the change in the level of an activity may result in a change in the level of costs incurred. Without the change in the level of the activity, the change in the level of costs would not have occurred. However, elimination of the activity may not result in total cost avoidance if joint and/or common costs are present. The presence of joint and common costs *requires* the use of statistical techniques to establish cost variability. Estimates of cost variability are an integral part of GPCS [General Purpose Costing System].”^{16/} [Emphasis added]

Fixed costs are shared (common) costs and are not attributable to specific movements. The WMCRR would incur the fixed or constant operating expenses with or without the traffic that moves over the western leg of the SARR. The portion of cost that varies with volume (variable cost) is the proper measure of the additional cost associated with such traffic. Kent/Klick made no attempt to identify the common or fixed costs in the eleven direct expense categories included in their Reply methodology which the Board used in PPL I and thus have overstated their assignment of those monies to the east-west traffic. Additionally, Kent/Klick changed their position on how to handle the other four expense categories from their Reply testimony, where they claimed these monies were unattributable, to their Reopened Reply testimony, where they now claim that these monies are attributable to the east-west traffic.

^{16/} Railroad Accounting Principles Board, “Railroad Accounting Principles; Final Report”, September 1, 1987, (“RAPB Final Report”), Vol. 2, pp. 9-10

**B. KENT/KLICK'S APPROACH REPRESENTS
A FUNDAMENTAL MISUNDERSTANDING OF
RAILROAD COSTING AND PRICING PRACTICES**

By picking and choosing portions of different costing approaches, Kent/Klick missed the point of the incremental approach that I used as a preferred alternative method to identify whether or not a cross-subsidy exists. In doing so, they displayed a fundamental misunderstanding of railroad costing methodologies and pricing practices as they pertain to the eleven categories of operating expenses that are included in their direct cost methodology.

The methodology that I employed (Approach No. 2) is the method endorsed by the RAPB, which stated, "GPCS use variability to measure the changes in cost that occur in response to changes in output.... The variable portion of total expense is identified using regression analysis, with only the variable portion of expense allocated or assigned to service units."^{17/} When an entity is attempting to make a decision as to the addition or elimination of specific production (in this instance traffic moving on the western part of the WMCRR), variable costs are more relevant than the total costs now proposed by Kent/Klick.

**C. KENT/KLICK'S
CALCULATION OF COSTS FOR
THE WESTERN PART OF WMCRR**

Kent/Klick claim that it is improper to apply an URCS percent variable to the operating costs calculated using the PPL string program output because:

1. The operating costs are calculated based on the service units specific to western traffic generated by the string program from the bottom-up;

^{17/} RAPB Final Report, Vol. 1, pp. 29-30.

2. The service units times the unit costs thus are entirely attributable to the western traffic;
3. If the western traffic went away, 100 percent of the operating costs would go away as well; and
4. The Board and PPL included 100 percent of investment (construction costs) and so must also include 100 percent of operating costs related to western traffic.

Kent/Klick's analysis fails for a number of reasons. First, they are treating the western part of the WMCRR as a stand-alone railroad, not as a portion of a stand-alone railroad. Both Kent/Klick and the Board have accepted the calculation of revenue for western traffic as including the revenue for the portion of the move that occurs on the north-south segment (east of Campbell, WY). Therefore, the cost calculation must necessarily include costs specific to movement of western traffic while it is on the north-south line. This is implicit in the PPL string program calculation of service units, which has been accepted by both the BNSF and the Board.

By definition both common (fixed) costs and variable costs are associated with the movement of the western traffic. As noted above, the Board correctly recognized that common costs are unattributable costs. Kent/Klick rely on the false presumption that all costs and all revenues associated with the western traffic are incurred on the western portion of the WMCRR. The Board's approach was clearly intended to treat the western portion as a lower-density component of the greater WMCRR and not as an independent SARR.

The fixed or constant operating costs associated with the western traffic would indeed occur with or without the western traffic, they constitute the constant operating costs of the core system. Such costs are therefore shared by shippers using only the core portion of the WMCRR.

Second, the operating costs applied to the output of the PPL's string model include both fixed and variable portions of costs. For example, train and engine personnel hired to cover the crew starts produced by the string output for the traffic moving over the western part of the WMCRR do not work only on traffic moving over the western part of the WMCRR. As explained in PPL's Opening evidence, crews based at Donkey Creek serve mines south of Donkey Creek for movements north out of PRB mines. In addition, these crews also handle trains originating on the Eagle Butte or Decker Branches between Donkey Creek and Converse for interchange with BNSF at Converse. PPL's Opening evidence also states that crews based at any point will be able to operate in any direction from that point as necessary, in either straight away service or turnaround service. This gives the WMCRR flexibility in scheduling trains and sizing its crew personnel requirements.^{18/}

Clearly, the train and enginemen operating costs are then not entirely separable between the western part and the north/south part. Were the western part to be eliminated, the WMCRR would lose the flexibility to schedule the crews that typically work the western part to the north/south part when they are needed and therefore the reduced WMCRR would be required to hire additional crew members to cover these peak periods. Stated differently, even the eleven categories of expense that are included in Kent/Klick's direct method have fixed portions that are not exclusively allocable to the western part of the WMCRR. As a result, only the variable portion of these expenses are appropriately allocated to the traffic moving on the western part.

Kent/Klick claim that variable costs based on a WMCRR URCS formula is an inappropriate way to calculate incremental or variable costs because the service units that I generated for the

^{18/} See McDonald Opening, p. 33.

east-west traffic would be avoided if the western leg were not built. While the service units would be avoided if the western leg were not built, as pointed out by the RAPB, the unit cost level to assign to these service units to determine what expenses would be avoided if the western leg were not built is the variable portion of expenses. It is not a total unit cost level that Kent/Klick suggest. The fact that a piece of traffic or a group of traffic no longer moves on a railroad does not translate to total allocated cost savings by the railroad when the railroad no longer handles the traffic. Rather, the railroad will only realize incremental cost savings with the loss of this traffic.^{19/}

Third, Kent/Klick present a generic URCS regression equation at page 23 of their Reopened Reply and imply that my URCS variable cost approach is flawed because I did not set the capacity variable to zero in developing variable unit costs for the WMCRR. Kent/Klick seem to be suggesting that the only way to utilize URCS to measure the loss of traffic would be to set the capacity variable to zero. While this approach would achieve their desired answer (100% variability), it is theoretically incorrect. The quantification of the costs incurred or the costs saved if a piece of traffic or group of traffic is gained or lost, respectively, is a function of the entire railroad.^{20/} For the reasons stated earlier, a railroad would not evaluate this potential gain or loss in traffic at a total cost level but rather at an attributable, incremental, variable or marginal level.

^{19/} I have reproduced as Exhibit (TDC-29), Kent/Klick's Table 1 and included an explanation of the reasons for the differences in the monies appearing in each column. Not surprisingly, Kent/Klick have included costs for the east-west traffic at a total cost level for each of the fifteen cost categories and I have relied upon the specific WMCRR variable or incremental cost level as calculated through application of the WMCRR URCS to each of the fifteen cost categories.

^{20/} It is also incorrect to set the capacity variable at zero because doing so ignores the fact that traffic moving on the western part also moves on the north-south part, which would continue to operate even if the western part of the system ceased to exist.

Kent/Klick state that I implicitly endorsed their new total cost position when I included 100 percent of the road property investment in my analysis. Kent/Klick are correct that I included 100 percent of the road property investment in my analysis but, as stated in my opening, this was due to the Board's request that only operating expenses be addressed in reopening. As stated in opening I do not believe that 100 percent of the stand-alone road property investment identified by the Board represents the proper level of road property investment when analyzing whether or not a cross-subsidy exists.^{21/}

Fourth, by setting the URCS capacity variables to zero, Kent/Klick are suggesting that an URCS formula be developed for only the western portion of the WMCRR to determine variability and not to the entire WMCRR as I developed and presented in opening. The Kent/Klick variability approach of attempting to develop variability coefficients for a portion of a railroad has been considered and rejected by the Interstate Commerce Commission ("ICC"). In a March 26, 1986 decision in Docket No. 36180, the ICC addressed and rejected this approach. Excerpts from the ICC's decision clarify this issue as follows:

The second basic issue is the "variability" of the costs. When a railroad makes investments and incurs expenses enabling it to operate at a certain capacity, its costs can be broken down into two types - variable and constant. Traditionally, costs are considered variable to the extent that they change with fluctuations in traffic volume over the intermediate to long term. The remaining portion of the costs, which are unaffected by such fluctuations, are considered constant and cannot be directly attributed to any particular traffic movement.

^{21/} See my Reopened Opening Verified Statement, p. 14 and p. 18.

In this case, the railroads have offered a different approach for determining variability. In essence, they treat as 100 percent variable (and assignable to coal traffic) all additional costs incurred on the line after the surge in coal traffic beginning in 1976. In other words, the railroads apply a "but-for" analysis - i.e., they assert that but for the heavy coal movements, the costs involved would not have been incurred. (This approach is equivalent to the avoidability analysis we use in abandonment and discontinuance proceedings.)

The railroads' approach is misdirected. It attempts to relate variability to specific traffic movements, rather than fluctuations in the overall traffic volume. Moreover, it incorrectly assumes that the coal traffic is the sole cause and the sole beneficiary of these expenditures. In fact, other shippers on the line contribute to the total volume that necessitated these expenditures and use the improved common facilities and/or improved services. Those shippers should also be contributing to the payment of these expenditures. Accordingly, the costs associated with the San Antonio traffic are not 100 percent variable, as the railroads claim.

In the absence of better (i.e., more specific) evidence of variability, the degree of variability of the railroads' costs in this case must be drawn from Rail Form A. Rail Form A is a standardized costing methodology, developed by the Commission staff, which calculates variability on an industry-wide basis by applying regression analyses to pooled rail data (for all class 1 railroads over several years) for each major expense category. Rail Form A cost variabilities have been broadly used and widely accepted. Moreover, we believe Congress contemplated their use when, in section 203(c)(1)(A), it enacted a standard based on variable costs. *Cf.* 49 U.S.C. 10705a(m).^{22/}

Subsequent to the issuance of this decision, Rail Form A costing was replaced by the Uniform Railroad Costing System ("URCS"), which is why I used URCS costing in my analysis.

^{22/} Docket No. 36180, San Antonio Texas, Acting by and Through its City Public Service Board v. Burlington Northern Railroad Company, et al., 1 I.C.C. 2d 561, 569-570 (1986).

**D. ALLOCATED VERSUS
ATTRIBUTABLE COSTS**

The Board asked the parties to correct an error in the PPL I cross-subsidy calculations^{23/} and also asked the parties to address four expense categories that were not included in the PPL I cross-subsidy calculations. As noted above, Kent/Klick and I agree that the error in the Board's PPL I cross-subsidy calculations should be corrected. However, and also as noted above, we disagree on how to address the four expense categories that were not included in their PPL I cross-subsidy analysis.

At page 22 of BNSF's Reopened Reply, Kent/Klick present a table which purports to summarize my calculations of costs before and after the application of URCS percent variables. They attribute both columns of numbers to me, which is incorrect.^{24/} Using the values in this table for the four expense categories, Kent/Klick make the statement that, "Mr. Crowley's opening statement in this phase of the proceeding determined that \$8.2 million of expense in three of these four categories is attributable to the western leg, before the application of any URCS based percents variable".^{25/} This statement is also incorrect. The \$8.2 million represents total allocated costs, not attributable costs.

^{23/} As noted by the Board in PPL II, their cross-subsidy analysis was flawed in that they applied a ratio of operating expense that was developed using the western part traffic volume in opening to the revised western part traffic volume that was included in Rebuttal. BNSF has mischaracterized the Rebuttal traffic group in their Reopened Reply, p. 6 where they claimed that, "PPL had changed its traffic assumptions on Rebuttal, which resulted in a somewhat higher traffic volume on the north-south line..." This statement is not true. The north-south volume did not increase in Rebuttal, but rather the western traffic volume decreased.

^{24/} I calculated the variable cost values and Kent/Klick calculated the total cost values.

^{25/} Kent/Klick Reopened Reply, p. 25.

BNSF also states that, "Mr. Crowley did use the underlying statistics, such as locomotive unit miles and gross ton miles, to allocate these expenses between the north-south and east-west traffic. There was no need or justification for applying the URCS-based variability percentages to the costs developed from the underlying operating statistics."^{26/} In fact there is a need to apply the percentages to the allocated costs because allocated costs by definition are not attributable costs. Only the variable portion of these costs is attributable.

^{26/} BNSF Reopened Reply, p. 12.

IV. KENT/KLICK CHANGED POSITIONS ON OTHER KEY ISSUES

The Reopened Reply evidence submitted by Kent/Klick presents testimony on several key factual and conceptual issues that is different from the position sponsored by Kent/Klick in the original Reply phase of this proceeding. The major issues where Kent/Klick changed their position are discussed below.

A. COST LEVEL USED IN A CROSS-SUBSIDY ANALYSIS

At pages 7-10 of my opening verified statement in this proceeding, I demonstrated that BNSF was never concerned that the “east-west” traffic handled by the WMCRR was generating costs that were greater than the revenues produced by the traffic (i.e., cross-subsidy). Rather, Kent/Klick were concerned that the revenue divisions of the “north-south” cross-over traffic were disproportionate and therefore this traffic had to be cross-subsidizing the remaining traffic. Kent/Klick’s position was that “...the stand-alone cost constraint is violated if a subset of the WMC’s movements generates revenues in excess of stand-alone costs.” (Emphasis in the original, Kent/Klick Reply, p. 14).

To demonstrate their position, Kent/Klick identified a subset of the total WMCRR traffic, ran PPL’s string diagram model^{27/} to identify the statistics associated with this traffic and developed

^{27/} In their Reopened Reply statement, Kent/Klick state that, “As the Board has recognized in other proceedings, the string program that Mr. Crowley has relied upon in this proceeding is difficult or impossible for third parties to run, and is flawed in several fundamental ways.” (Kent/Klick, p. 19). This statement is flatly incorrect, and furthermore it is contradicted by BNSF’s own evidence in this proceeding. The only other proceeding wherein the Board commented on the string program was in TMPA, and nowhere in that decision did the Board assert that the model is “flawed” in any way. Rather the Board’s criticism was of the lack of documentation produced in support of the model *in that case*. In this proceeding, more thorough documentation was provided in PPL’s evidence and BNSF was able to and in fact did run the model and utilize the resulting output in its own cross-subsidy analysis. “In its cross-subsidy presentation, BNSF allocated the operating expenses PPL developed for the entire WMCRR between the north-south and western parts using PPL’s string model computer programs.” (PPL I, p. 11).

the costs that should be used in their version of a cross-subsidy analysis. Based on this analysis, Kent/Klick conclude that the maximum division that WMCRR would receive for any piece of cross-over traffic would be "...less than the stand-alone costs of handling that traffic" (Kent/Klick Reply, p. 17). Stated differently, Kent/Klick opined that the proper cost level to use in a cross-subsidy analysis is "long-run incremental costs" (Kent/Klick Reply, p. 17). Kent/Klick explain that "long-run incremental costs would be less than stand-alone costs to the extent that economies of scope would be created by building the additional facilities." (Kent/Klick Reply, p. 17).

As demonstrated in the prior section of this rebuttal verified statement, Kent/Klick have changed their position on the cost level that should be used in a cross-subsidy analysis and are now advocating a "total cost" level and not the "incremental" cost level they advocated in their reply evidence.

**B. IMPACT OF THE MISSING
FOUR CATEGORIES OF EXPENSES**

The Board asked for comments on the proper allocation of "...the four categories of operating expenses that were omitted from our prior analysis..."^{28/} The reason the Board asked for these comments is that in making its cross-subsidy calculations, the Board followed the procedures presented by the BNSF in Reply (and discussed immediately above). Stated differently, the development of costs in the Board's cross-subsidy procedures was identical to BNSF's Reply procedures. In Reply, the BNSF did not assign any monies from these four categories of expense to the WMCRR's "east-west" traffic. Rather BNSF assigned all of the monies in these four categories of expense to the WMCRR's "north-south" core traffic.

^{28/} PPL II, p. 10.

In their Reopened Reply, Kent/Klick changed their position on what to do with the monies associated with the four categories of expenses. For the first time, Kent/Klick take the position in their Reopened Reply that for cross-subsidy purposes, the expenses for operating managers, general and administrative, loss and damage and maintenance of way should be assigned to the “east-west” traffic and that these expense categories should be assigned at a “total” cost level and not the incremental cost level advocated by Kent/Klick in their Reply Evidence.

Kent/Klick offer no explanation for such a dramatic switch in positions. In Kent/Klick’s explanation before and after their table appearing on page 22 of BNSF’s Reopened Reply, they seem to be saying that they included these four categories of expenses at the total cost level because I included them at a variable cost level in my analysis. They offer no theoretical or factual explanation as to why they changed positions on including these so-called missing categories or why they should now be included at a “total” cost level. Kent/Klick’s new position is particularly curious in light of their statement two pages earlier in their reply where they state that the monies in these categories are not occasioned by a particular subset of traffic.^{29/} Specifically, Kent/Klick state:

“In contrast, expenses for operating managers, general and administration, loss and damage and maintenance of way are typically determined for the rail system as a whole and are not directly based on the level of particular operating statistics”.^{30/}

^{29/} This position is consistent with Kent/Klick’s position in Reply that the four expense categories should be allocated to the core system and not the east-west traffic.

^{30/} Kent/Klick Reopened Reply, p. 20.

V. CONCLUSIONS

The two separate and distinct approaches to evaluating the cross-subsidy issue that I developed and presented in my Reopened Opening Verified Statement demonstrated that the traffic handled by WMCRR on the western portion of the theoretical railroad is not being cross-subsidized by the north-south traffic moving on the WMCRR. The Reopened Reply evidence presented by BNSF provides no basis for changing the outcome of either of my cross-subsidy approaches. The Board should therefore “proceed with a full SAC analysis of the WMCRR”.^{31/}

^{31/} PPL II, p. 11.

EXPLANATION OF DIFFERENCES IN BNSF'S REPLY TABLE 1

Item (1)	Numbers Used		Reason For Differences (4)
	By BNSF (2)	By PPL (3)	
1. Train & Engine Personnel	\$4,424,218	\$3,739,852	BNSF at total cost level; PPL at 84.5% variable per WMCRR's URCS formula
2. Locomotive Lease Expense	2,151,163	2,151,163	BNSF at total cost level; PPL at 100.0% variable per WMCRR's URCS formula
3. Locomotive Maintenance Expense	2,117,235	1,613,132	BNSF at total cost level; PPL at 76.2% variable per WMCRR's URCS formula
4. Locomotive Operating Expense	5,319,848	5,123,875	BNSF at total cost level; PPL at 96.3% variable per WMCRR's URCS formula
5. Railcar Lease Expense	459,225	459,225	BNSF at total cost level; PPL at 100.0% variable per WMCRR's URCS formula
6. Railcar Maintenance Expense	1,018,438	875,857	BNSF at total cost level; PPL at 86.0% variable per WMCRR's URCS formula
7. Material & Supply Operating	85,495	70,081	BNSF at total cost level; PPL at 82.0% variable per WMCRR's URCS formula
8. Ad Valorem Tax	1,036,573	0	BNSF at total cost level; PPL at 0.0% variable per WMCRR's URCS formula
9. Operating Managers	1,886,414	1,546,302	BNSF at total cost level; PPL at 82.0% variable per WMCRR's URCS formula
10. General & Administration	2,692,821	2,361,556	BNSF at total cost level; PPL at 87.7% variable per WMCRR's URCS formula
11. Revenue Division - Non-Indexable	430,626	0	BNSF at total cost level; PPL at 0.0% variable per WMCRR's URCS formula
12. Trackage Rights - Non-Indexable	31,972	20,813	BNSF at total cost level; PPL at 65.1% variable per WMCRR's URCS formula
13. Loss and Damage	0	0	BNSF at total cost level; PPL at 0.0% variable per WMCRR's URCS formula
14. Insurance	850,163	698,569	(Sum of lines 1 through 13 plus line 15) times 3.37%
15. Maintenance of Way	3,546,491	2,745,125	BNSF at total cost level; PPL at 77.4% variable per WMCRR's URCS formula
16. Annual Costs	\$26,050,682	\$21,405,550	xxx

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

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


Thomas D. Crowley

Sworn to and subscribed before me
this day of August 5, 2003.

Anthony V. Evanshaw III
Notary Public for the State of Virginia

My Commission expires: September 30, 2003

BEFORE THE
SURFACE TRANSPORTATION BOARD

PPL MONTANA, LLC.

Complainant

v.

THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY,

Defendant

Docket No. 42054

Rebuttal Verified Statement

of

George H. Borts

on behalf of

PPL Montana, LLC

My name is George H. Borts. I am a Professor of Economics at Brown University. My address is 220 Slater Avenue, Providence, Rhode Island, 02906. I have presented evidence before the Board on behalf of PPL Montana, LLC ("PPL") in various phases of this proceeding, and my professional qualifications were described in my opening Verified Statement. The purpose of this statement is to comment on the economic issues raised in the BNSF Reply filed on July 7, 2003.

At page 5 of its Reply, BNSF states that the Board found an impermissible cross-subsidy of the so-called western portion of PPL's SARR and "reached this conclusion using a cross-subsidy analysis suggested by PPL's expert witness rather than the analysis proposed by BNSF."

In fact, neither BNSF's expert nor I ever suggested the test the STB applied for determining whether traffic over one segment of a SARR cross-subsidizes traffic moving over another. My discussion of the attributable cost test arose in the context of rebutting the tests offered by Professor Baumol for preventing allegedly improper cross-subsidies by cross-over traffic involving the allocation of revenues as between the SARR and BNSF. I have never suggested, nor do I agree, that the Board is correct in abandoning its prior consistent practice of treating SARRs as unitary rail systems. See my Verified Statement filed September 30, 2002.

The BNSF apparently does not contest Mr. Crowley's calculation of a \$38 million surplus on the western portion, after correcting for the Board's error in failing to note the rerouting on rebuttal of certain traffic from the western to the north-south portion of the SARR. BNSF is correct in conceding this point, because Mr. Crowley's analysis is correct.¹

However, BNSF argues that this \$38 million surplus is more than offset by the allocation of four categories of costs - - G & A, loss and damage, operating managers, and maintenance of way - - to the western portion. According to BNSF, these costs must be allocated to the western portion as if it were its own SARR. See the discussion of the

¹ This surplus would have been much larger if the Board had granted more of PPL's request on reconsideration to show that even under the Board's new test, there is no cross-subsidy.

“bottom up” nature of the costing preferred by BNSF in the Reply statement of their witnesses Christopher Kent and John Klick at 20-23.

There are several problems with this analysis. In the first place, the segment cross-subsidy test - - which the Board has adopted in this proceeding and erroneously attributed to me - - is a new test that has never been applied in any other SAC rate case. There is no established methodology for allocating costs among segments of a SARR for the purpose of determining whether traffic over one part of a SARR cross-subsidizes traffic over another.

The Board is breaking new ground here, and if it is determined to make a threshold cross-subsidy analysis a part of this and all future SAC cases, the analysis should reflect sound economic principles. The first economic principle that must be applied is that the SARR have all of the economic advantages and opportunities available to the incumbent. BNSF’s calculations of western portion costs deny such opportunities to the SARR by preventing it from taking advantage of economies of scale and scope. This will be seen below in the comparison of western portion cost calculations presented by PPL and BNSF.

In his May 23 Verified Statement and now in his current V.S. Mr. Crowley shows that the cost of constructing and operating the western portion is less than the revenues generated by its traffic. Based on his comparisons between incremental cost and incremental revenue, Mr. Crowley’s calculations show that the SARR makes a profit from the western portion. Thus there is no cross-subsidy being paid to the captive traffic by the non-captive traffic on the SARR.

In their Reply, BNSF’s cost witnesses, Messrs. Kent and Klick argued that Mr. Crowley incorrectly calculated the costs of the western portion traffic, and if such costs were correctly calculated, the traffic would show a loss. The difference between the two methodologies focuses on what is included in incremental cost. Mr. Crowley’s measure of incremental cost consists of the variable operating expenses of the western traffic as it operates over the entire SARR, combined with the annualized road capital costs of the western portion. These are the attributable costs associated with construction and operation of the western portion of the SARR, for if the western portion were not built, these are the costs that would be avoided.

Messrs. Kent and Klick agree with the road capital cost calculation for the western portion, and with the allocation of system wide (i.e. SARR-wide) operating expenses to western portion traffic. But they disagree with the application of variable operating expenses to measure the costs imposed by the western portion traffic. They argue that the appropriate operating expense measure should include both the constant as well as the variable operating expenses, whereas, Mr. Crowley's measure includes only the variable portion.

Messrs. Kent and Klick have objected to this procedure on the grounds that "the expenses in each of those categories assigned to the western portion by Mr. Crowley prior to application of the percents variable, already reflect the level of those expenses that would be avoided if the western portion were not built and operated." (V.S. Kent and Klick, p. 23)

The Argument section of BNSF's Reply statement reinforced Kent and Klick, stating that PPL reached its conclusion by "manipulating the calculation of operating costs for purposes of the cross-subsidy analysis in a way that is fundamentally inconsistent with the SAC test." (BNSF Argument, p. 4) The point is further developed on page 11 of the Argument, which states,

The fundamental problem with PPL's logic is that it confuses variable costs developed using the Board's URCS program and operating costs developed using SAC procedures.

By identifying operating statistics for specific trains or specific movements, SAC operating costs include only the costs that are directly attributable to the traffic at issue. Applying the top-down URCS approach to bottom-up SAC costs confuses two analytically distinct methodologies and produces an unwarranted reduction in attributable costs.

PPL's lower measure of incremental cost is not the result of an oversight on Mr. Crowley's part, but rather represents a fundamental difference in approach to the measurement of cross-subsidy. It may be seen from Mr. Crowley's discussion of his procedures, where he makes it clear that it is a mistake to assume that total expenses (both variable and fixed or constant operating expenses) should be assigned to this increment of traffic. His reason is that the WMCRR would incur the fixed or constant operating expenses with or without the traffic that moves over the western portion of the SARR.

The fixed or constant operating costs associated with the western traffic would indeed occur with or without the western traffic, they constitute the constant operating costs of the core system. Such costs are therefore shared by shippers using only the core portion of the WMCRR. (Crowley, August 6, 2003 V.S. page 13)

Mr. Crowley's treatment recognizes that the constant component of the SARR's operating expenses is unaffected by a change in the level of output.² In contrast, Messrs. Kent and Klick would have us believe that the SARR would experience an increase in the constant component of operating costs if output were increased, and a decrease in constant costs if output were reduced.

The difference in treatment of constant costs must reflect different assumptions about the underlying causes of constant costs. It is generally concluded by regulators and economists alike that there are economies of scale and scope in the production of railroad services. Therefore it is not reasonable to expect costs to change in equal proportion with changes in output. There are some components of costs that do not vary directly with output. A reduction of output, for example, will not necessarily lead to a reduction in constant costs. Thus the treatment sponsored by BNSF contradicts the characterization of costs that has been the bedrock of economic analysis of the railroad industry. BNSF has overstated the incremental cost (and thus understated the incremental profit) to the western portion of the SARR from providing service to captive shippers, thus denying the SARR the opportunities that are available to all railroad firms, namely the benefits of economies of scale and scope.

There is little question that if the western portion of the WMCRR had been configured as its own stand-alone railroad, the operating costs saved by going out of business would consist of both constant and variable costs. For by going out of business or (what is the same thing) not going into business in the first place, all costs both constant and variable are saved. But the Board does not intend that the western portion of the WMCRR be a stand-alone railroad. If it were, the operating expenses of the western portion would be limited to its own geographic domain between Campbell, WY and

² In his V.S. Mr. Crowley cites the Final Report of the Railroad Accounting Principles Board, ("RAPB"), which states that, "[e]limination of the activity may not result in total cost avoidance if joint and/or common costs are present." Railroad Accounting Principles: Final Report, September 1, 1987, Vol.2, pp. 9-10.

Laurel, MT. As a SARR, moreover, its revenues would be truncated to reflect rate divisions on interchange traffic at Campbell.

The Board had the opportunity to require that the western portion of WMCRR be costed out as a SARR and did not choose that methodology. The Board clearly stated its preferred approach in its decision of March 21, 2003.

[W]e did not employ a segmented SAC test. In contrast to what we do in a SAC analysis, in our threshold cross-subsidy analysis, we purposely excluded unattributable costs from the analysis, and looked only at whether the revenues generated by western-part traffic would be sufficient to cover costs not shared by shippers only using the north-south part of the WMCRR.³ (Decision, Docket No. 42054, page 7)

Nothing could be clearer. The constant operating costs that Mr. Crowley is accused of incorrectly deleting from western portion operating costs are in fact incurred by WMCRR whether or not the western portion exists. For they constitute the constant and unattributable operating costs of the entire WMCRR. Because they are constant and unattributable, such costs are not relevant to the determination of cross-subsidy to captive traffic using the western portion. This determination depends only on a comparison between the revenues gained and costs imposed on WMCRR by the creation and operation of the western portion.

As measured by Mr. Crowley, the cost of serving traffic that uses only the north-south part of WMCRR is not affected by the construction and operation of the western portion. Consequently, the incremental costs of building and operating the western portion are indeed “not shared by shippers only using the north-south part of the WMCRR.” Mr. Crowley’s procedure is correct.

Under the Board’s segmented cross-subsidy test, WMCRR’s freight revenues must be sufficient to cover the SARR’s unattributable costs, with positive contributions coming from both the western and north-south portions. Further, so long as the western

³ A footnote keyed to this sentence says the following: “As long as the traffic on the western part could make any contribution to the carrier’s unattributable cost, the railroad would be better off participating in the transportation than not participating in it. See Rate Guidelines - Non-Coal Proceedings, 1 S.T.B. 1004, 1016 (1996).”

portion's share is positive, there is no cross-subsidy to captive traffic, and the WMCRR is better off building and operating it. These tests are met in this case.

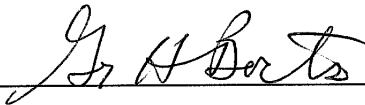
VERIFICATION

STATE OF RHODE ISLAND

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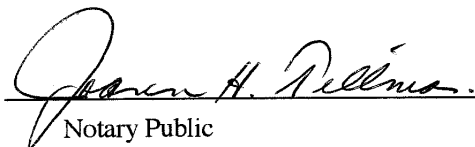
COUNTY OF PROVIDENCE

GEORGE H. BORTS, being duly sworn, deposes and says that he has read the foregoing Verified Statment, that he knows the facts set forth therein, and that the same are true to the best of his knowledge, information, and belief.



Subscribed and sworn to before me

this 31st day of July 2003.


Notary Public

My commission expires June 20, 2005.