I. INTRODUCTION

My name is Thomas D. Crowley. I am an economist and the President of L. E. Peabody & Associates. Inc. an economic consulting firm that specializes in solving economic, transportation, marketing, and fuel supply problems. I have spent most of my consulting career of over thirty-seven (37) years evaluating fuel supply issues and railroad operations, including railroad costs, accounting, prices, financing, cost of capital, capacity and equipment planning issues. My assignments in these matters were commissioned by railroads, producers, and shippers of different commodities. A copy of my qualifications and experiences are attached as Exhibit No. 1 to my Opening Verified Statement that was filed in this proceeding on August 1, 2008 ("Opening VS").

In this Rebuttal Verified Statement, I have been asked to respond to certain comments submitted by Mr. Michael R. Baranowski ("Baranowski") on behalf of the Association of American Railroads ("AAR") in the AAR's Reply statement in this proceeding filed on September 2, 2008. Specifically, I have been requested to comment on the following issues raised by Baranowski : (1) that the impact of taxes on the Surface Transportation Board's ("STB") Uniform Railroad Costing System ("URCS") variable costs is outside the scope of this proceeding; (2) that the definition of effective tax rate that I used in my Opening VS is inconsistent with the definition of the effective tax rate as defined by Generally Accepted Accounting Principles ("GAAP"); (3) that actual railroad tax payments are irrelevant to the determination of an effective tax rate because they do not account for deferred taxes; and (4) that the time value of money benefit of deferred taxes is irrelevant to the Revenue Shortfall Allocation Method ("RSAM") calculation.

I summarize my testimony below under the following topical headings and in the accompanying Exhibit.

II. URCS Variable Costs

III. Effective Tax Rates

IV. Deferred Taxes And Other Tax Off-Sets

V. Time Value of Money

VI. Taxes On RSAM Revenues

II. URCS VARIABLE COSTS

As I stated in my Opening VS, the STB's URCS model includes a variable return on investment ("ROI") component, which is calculated using a pre-tax weighted-average cost of capital ("WACC") based on the federal statutory tax rate of 35 percent.[1] The use of the pre-tax WACC in the variable ROI, which adjusts the cost of equity to allow for a return to common equity holders from after-tax earnings, explicitly adds additional variable costs to each movement to cover the railroad's tax burden. However, railroads seldom pay taxes at the statutory rate due to offsets and credits, and their actual tax expenses are much lower than implied by the statutory rate. Therefore, using a statutory tax rate in the URCS model overstates each movement's variable costs.

Baranowski contends that the over recovery of a railroad's taxes in URCS, resulting from applying the statutory tax rate to the railroad's investment base, is unfounded because URCS variable costs is allegedly designed to measure "intermediate costs," and its not designed to recover the tax costs incurred by a railroad in any one particular year.[2] Baranowski believes that the tax impact of URCS is outside the scope of the instant proceeding, which he states is supposed to only address tax consequences surrounding the RSAM ratio.[3] He also believes that correcting the tax flaw in the URCS variable costs is inappropriate because it would expand the amount of traffic potentially subject to the STB's jurisdiction.[4]

Baranowski's claims ignore the fact that the STB specifically asked the parties in this proceeding to address the over recovery of taxes in the URCS formula. Moreover, his claim that

---

1 See Opening VS at 3.
2/ See Baranowski Reply VS at 2.
3/ See Baranowski Reply VS at 2-3.
4/ See Baranowski Reply VS at 3.

URCS is an intermediate term cost formula[5] also ignores that railroad revenue adequacy determinations, which form the basis of the RSAM ratio, are annual determinations which are materially impacted by annual railroad tax payments. Finally, whether the correction of the tax flaw in URCS expands the amount of traffic subject to STB jurisdiction is irrelevant to the proper accounting of taxes in STB costs calculations.

A. URCS TAX IMPACT

Baranowski's discussions of URCS as an intermediate term cost is really nothing but an attempt to divert the STB from addressing one of the primary issues in this proceeding, namely the over recovery of taxes in URCS. In its decision in Ex Parte No. 646 (Sub No. 2), *Simplified Standards For Rail Rate Cases – Taxes In Revenue Shortfall Allocation Method*, served June 27, 2008 ("*646 (Sub-No. 2)*"), the STB specifically asked the parties to address the issue of the over recovery of taxes in URCS variable costs.[6] Baranowski dismisses the STB's request for comments on this issue by stating that the tax formulation of URCS is outside the scope of this proceeding. Clearly it is not.

URCS variable costs are a key aspect of the RSAM ratio, and also the Revenue Adequacy Adjustment Factor used in the STB's Three Benchmark Maximum Reasonable Rate Methodology. URCS variable costs are used directly in the RSAM ratio as the denominator for the variable costs incurred by the traffic group subject to STB jurisdiction, i.e. VC_{180}. Additionally, URCS variable

---

5/ URCS produces unit costs annually and also relies on expense and service unit data for the most recent five year period. The application of the unit costs to a particular movement can measure short run, intermediate run or long run variable costs depending upon the characteristics of the movement being evaluated and the objectives of the analyst performing the study.

6/ See *646 (Sub-No. 2)* at 3. "Commenters are asked to address the following issues. First, does the treatment of taxes in URCS make the adjustment to RSAM unnecessary, as DuPont suggested?"

costs play a key part in developing the size of this revenue group REV_{180}. Overstating the URCS variable costs used to define the REV_{180} group lowers the amount of traffic with revenue to variable costs greater than 180 percent, and deflates the actual size of this key traffic group.[7] This is critically important in developing the Revenue Adequacy Adjustment Factor used in the Three-Benchmark method because, as I explained in my Opening VS, in its simplest form the Revenue Adequacy Adjustment Factor is equal to one (1) plus a railroad's revenue shortfall (or overage) shown in the STB's annual revenue adequacy determination ("$REV_{short\ over}$") divided by its REV_{180}.[8] Understating the REV_{180} will overstate the Revenue Adequacy Adjustment Factor and will lead to the imposition of maximum reasonable rail rates higher than needed for a railroad to achieve and maintain revenue adequacy.

I estimated in my Opening VS the impact the over recovery of taxes in URCS has on each Class I railroad's Revenue Adequacy Adjustment Factor for the four year period 2000 through 2003. As my analysis indicated, in almost all cases the Revenue Adequacy Adjustment Factor is unaccountably higher than its should be based on a proper accounting of taxes in the URCS calculation.[9] My analysis stands unrebutted by Baranowski, and strongly indicates that the over recovery of taxes in URCS makes the tax adjustment to the RSAM ratio unnecessary.

B. ANNUAL VERSUS MULTI-YEAR COSTS

Baranowski alleges that the tax overstatement in URCS is unfounded because URCS variable costs are designed to capture the intermediate term cost of providing rail service, and are not

---

7/ Baranowski also agrees with this point. See Baranowski VS at 3.
8/ See Opening VS at 3.
9/ See Opening VS at 9.

intended to recover the taxes paid by a railroad in a single year.[10] Baranowski ignores the fact that RSAM ratios and revenue adequacy determinations are calculated on an annual basis, using annual revenue and annual cost. By definition, these annual determinations are not intermediate term in nature. In fact the ICC expressly declined to use multiple year analyses when developing its revenue adequacy procedures:

> Upon review of all the comments, we continue to believe that revenue adequacy should be determined on the basis of data for the most recent single calendar year. We believe that the statute reflects a Congressional intent that the railroads' current, not past, financial performance be the key consideration in revenue adequacy matters.[11]

Indeed, URCS variable costs themselves are adjusted annually based on annual cost data. Baranowski attempts to support his argument by pointing towards the ROI component of the URCS variable costs, indicating that it is intended to recover costs at the annual cost of capital to allow a railroad to achieve revenue adequacy. However, the investment calculation included in the URCS variable costs is itself adjusted annually to reflect current railroad financial positions. Unlike some other costs components included in URCS, such as maintenance of way and maintenance of equipment, the investment base included in URCS is adjusted annually to reflect changes in its size and composition. The ICC specifically chose not to use multiple years of data when developing the investment base in URCS, but rather decided to use an annual figure. To suggest that URCS costs are not impacted by annual changes in costs, including taxes, ignores the obvious.

10/ See Baranowski VS at 2.
11/ See Ex Parte No. 393 (Sub-No. 1), *Standards For Railroad Revenue Adequacy*, 3 I.C.C. 2d 261 at 311-312.

C. EXPANDED STB JURISDICTION

Baranowski agrees that correcting the URCS calculation for the over recovery of taxes will expand the size of the REV_{180} group.[12] He alleges, though, that the ICC rejected an expansion of the REV_{180} group when implementing URCS as the ICC's general purpose costing system in 1989 stating it was not the intent of the change in the costing systems to increase the amount of traffic subject to regulation. Baranowski feels that the same rationale should apply to any correction to the tax treatment in URCS.

Baranowski's linking of the two issues is faulty because there is a huge difference between adopting a completely new general purpose costing system and correcting an obvious flaw in the existing system. While it may be laudable to attempt to maintain the size of the regulatory pool when making a clean break between two different general purpose costing systems, attempting to maintain size equality while fixing a flaw in the existing costing system should have no bearing on the STB's decision.

---

12. See Baranowski VS at 3.

III. EFFECTIVE TAX RATES

As I explained in my Opening VS, any adjustment to the RSAM ratio based on a statutory tax rate will lead to an overstatement in required revenues for a railroad to reach revenue adequacy due to the fact that railroads have historically paid taxes at rates less than that dictated by statute. To adjust for this fact, an effective tax rate should be used in any contemplated adjustment. The effective tax rate is the amount of tax an individual or firm pays when all other government tax offsets or payments are applied, divided by the tax base.[13] Baranowski claims that my calculation of effective tax rates is incorrect because it is inconsistent with the GAAP definition of effective tax rates, and does not include the impact of state or deferred taxes. [14]

Baranowski's application of the GAAP definition of effective tax rate is misplaced. In calculating an effective tax rate to apply in developing URCS costs or developing a tax-adjusted RSAM ratio, the STB is not attempting to prepare audited financial statements prepared under GAAP, but rather to reflect the actual taxes paid by the railroad for the particular year under review. Simply stated, GAAP accounting rules do not apply to this non-GAAP regulatory calculation. This is entirely consistent with the STB's RSAM calculation, which is derived, in part, from two non-GAAP calculations. Neither the Net Railroad Operating Income ("NROI") nor the Net Tax Adjusted Investment Base figures used in the RSAM calculation are called for under GAAP. They are both regulatory constructs developed to further the STB's economic oversight of the railroad industry.

It would also be inconsistent to use effective tax rates prepared under GAAP and included in each railroad's annual reports to shareholders in adjusting RSAM ratios. The effective tax rates included in the audited financial statements issued by the railroads reflect the tax liabilities incurred

---

13/ See Opening VS at 11-12.
14/ See Baranowski VS at 3-4.

by the railroads' publicly traded parent companies, and not the tax positions of the subsidiary railroad companies that report their financial results to the STB in Annual Report Forms R-1. The taxes incurred by the parent companies do not accurately reflect the taxes incurred by the regulated railroad entities.

Finally, the calculation of a railroad's effective tax rate using only Federal tax charges is consistent with the tax treatment in URCS variable costs. The STB determines the pre-tax cost of capital used in the URCS formulation by dividing what the STB terms the after-tax cost of equity by one minus the 35 percent statutory tax rate.[15] State taxes do not enter the equation. If the STB chooses to adopt a tax-adjusted RSAM calculation, even though as demonstrated in my Opening VS that it is not necessary, for consistency with URCS, it should only consider the use of each railroad's effective Federal tax rate.

15/ By pointing out that the STB only uses the Federal Statutory rate in URCS calculations, I am not endorsing the application of the statutory tax rate. In fact, as I first explained in *DuPont* and my Opening VS in this proceeding, it is this application of the statutory tax rate that leads to the over recovery of taxes by URCS.

IV. DEFERRED TAXES AND OTHER TAX OFF-SETS

As I stated in my Opening VS, statutory tax rates should not be used as a basis for an adjustment to the RSAM ratio for the simple fact that railroad tax payments are significantly different than taxes due under a straight application of statutory rates. There are a number of factors that can drive a firm's effective tax rate below its statutory tax rate. These factors include, but are not limited to, the impact of deferred income taxes, tax-loss carryforwards and carrybacks and governmental tax credits. Additionally, I also stated that railroad effective tax rates should not be expected to reach statutory rate levels absent a large scale change in tax accounting regulations and/or a dramatic shift in railroad investment patterns. Therefore, any adjustment of the RSAM calculations using statutory tax rates will provide a windfall for the railroads at the expense of shippers.[16]

Baranowski agrees that the use of accelerated depreciation for tax accounting purposes can lower a railroad's effective tax rate below the statutory level.[17] But he contends that this is just a timing issue, and that any lower effective tax rates early in an asset's life will be counterbalanced by higher effective tax rates later. He concludes that, overall, income produced by each asset placed in service will pay taxes over the asset's life at a rate equivalent to the statutory tax rate.

Baranowski's overly simplistic explanation and examples ignore the capital intensive nature of the railroad industry, and capital investment's impact on taxes. He also does not address those situations where the reduced taxes are not due to accelerated depreciation and deferred taxes, but rather attributable to other tax off-sets enjoyed by railroad companies. These additional factors can have a significant impact on railroad tax payments and cannot be ignored in any RSAM adjustment.

16/ See Opening VS at 11.
17/ See Baranowski VS at 5.

A. ACCELERATED DEPRECIATION AND DEFERRED TAXES

Baranowski asserts that the use of accelerated depreciation for tax purposes has no real impact on a railroad's taxes because railroads will still pay taxes at a statutory level over the life of any specific asset. To support his assertion, he includes at Exhibit Nos. 4 and 5 of his VS a simple example showing the impact of effective tax payments over an asset's life. He surmises that there is no real difference in taxes under standard and accelerated depreciation because, in the long-run, taxes will be paid at the statutory rate.

Baranowski's example focuses on the tax implications of installing only a single asset. However, capital intensive industries, like the railroad industry, do not install single assets and stop investing thereafter. Rather, railroads continuously invest in their company, and continuously install new assets. As I discussed in my Opening VS, railroads continuously are investing in their business, and can be expected to well into the future.[18] Therefore, deferred taxes due to accelerated depreciation are a self perpetuating situation because as long as railroads invest in depreciable assets and the tax rules regarding accelerated depreciation do not change, there will always be a differential between a railroad's accounting and IRS based tax liabilities. The amount of deferred tax liability recognized in a railroad's Balance Sheet will only become payable when the railroad substantially lowers its level of capital investment or ceases to invest in its plant for a number of years. As long as railroads continue to invest in capital assets at reasonably stable levels, they will continue to incur deferred tax liabilities that will lower their effective tax rates. Unless the management of the Class I railroads change their investment philosophy of upgrading and improving the railroad's

18. See Opening VS at 16.

infrastructure in future years, a similar level of deferred tax credits can be expected to occur in the future.

Exhibit No. 6 to this Rebuttal VS illustrates the impact of continued investment on effective tax rates payed by railroads.[19] I constructed the example using the same basic assumptions as used in Baranowski's Exhibit Nos. 4 and 5, i.e. (1) the installation of assets with a 25 year useful lives; (2) an initial asset cost of $10 million; (3) annual income attributable to each asset of $2 million; (4) zero (0) salvage value; and (5) a statutory tax rate of 35 percent. However, unlike Baranowski, I did not assume that the railroad would install only a single asset, but made the more realistic assumption that the railroad would continue to install additional assets every year over 25 years.

As my more realistic example shows, the impact of the continued installation of assets, and the subsequent continual addition of deferred taxes, drives the effective tax rate over 25 years below the statutory level to a rate of 32 percent in aggregate. Moreover, even in the later years, after accelerated depreciation has been depleted on the asset installed in Year 1, the annual tax rates do not rise above the statutory level. This is because, with the continuous addition of assets, the increase in the amount of taxes attributable to an asset installed early in the 25 year period is off-set by the deferred taxes attributable to an asset installed in the later years. As I stated in my Opening VS, this trend will continue as long as railroad management maintains relatively consistent investments.

Railroads are not required to use accelerated depreciation for tax purposes, but chose to do so for the advantages it provides. Baranowski's simple example would attempt to portray the use of accelerated depreciation as a zero-sum game, with accelerated depreciation providing no net advantage to the railroads. This is obviously an incorrect inference. These tax advantages enjoyed

---

19/ Exhibit No. 1 through Exhibit No. 5 were included with my Opening VS.

by the railroads must be incorporated into any RSAM calculation used by the STB. To not do so provides the railroads with a clear windfall between their actual tax payments and any tax recovery assistance provided by the STB.

B. OTHER TAX OFF-SETS

In addition to accelerated depreciation, companies also benefit from other tax off-sets, including tax-loss carryforwards and carrybacks and governmental tax credits. As I stated in my Opening VS, the railroad industry, through the AAR, is lobbying heavily for the passage of the Freight Rail Infrastructure Expansion Act.[20] This act would provide a 25-percent investment tax credit to railroads and other companies that invest in freight rail infrastructure. A tax credit is a direct reduction in a company's taxes payable, and offers greater benefits than a tax deduction.

Baranowski does not address the impact of other tax off-sets on railroad taxes, and his silence on the issue is telling. Failing to account for these tax reducing devices would provide the railroads another form of windfall if not accounted for in any tax adjustment to RSAM ratios. The ICC recognized this specific issue in addressing NROI calculations for revenue adequacy determinations. In discussing an AAR proposal to apply the statutory tax rate to pre-tax income, the ICC stated:

> We continue to be concerned that the AAR's proposal to use a statutory rate applied to railroad pre-tax income would overstate tax expense for railroads with tax loss carryforwards or other items which reduce tax expense below the statutory rate. Consequently, we will not adopt this proposal.[21]

20/ See Opening VS at 14.

21/ See Ex Parte No. 393 (Sub-No. 2), *Supplemental Reporting Of Consolidated Information For Revenue Adequacy Purposes*, 5 I.C.C. 2d 65 at 74.

Using a statutory rate in calculating any RSAM adjustment would have a similar impact as described by the ICC. Application of the statutory tax rate to additional income produced by the RSAM adjustment would overstate the revenue required to reach revenue adequacy for those railroads with tax deferral or credit items which reduce tax expense below the statutory level.

V. TIME VALUE OF MONEY

The primary reason companies employ accelerated depreciation is that it allows them to defer the payment of income taxes until a later date, and essentially receive an interest free loan on the retained funds. Baranowski concedes that railroads receive a time-value of money benefit "in the real world" from deferred taxes, but asserts that RSAM calculation excludes the time-value benefits of deferred taxes because deferred taxes are excluded from the investment base used in the revenue adequacy calculations and in URCS variable costs.[22]

I agree that the STB adjusts the railroads' investment bases for deferred tax liabilities to account, in part, for what are essentially zero-cost loans to the railroads, but I disagree with his inference that these adjustments to the railroads' investment bases somehow validate using a statutory tax rate in adjusting the railroads' RSAM ratios. The two issues are simply not linked.

Baranowski's argument essentially is that the time-value of money benefit the railroads receive from deferred taxes is counterbalanced by a reduction in the rate of return on the railroads' investment bases when calculating ROI in URCS and annual revenue adequacy. Therefore, because of these two balancing actions, Baranowski argues that there is really no benefit to accelerated depreciation since, over time, every asset will pay taxes at the statutory rate. However, the time value of money aspect does not invalidate the fact that, as shown in Exhibit 6, continued investment and use of accelerated deprecation leads to effective tax rates lower than statutory tax rates.

22/ See Baranowski VS at 5.

VI. TAXES ON RSAM REVENUES

As I stated in my Opening VS, it is not possible to calculate the actual impact of taxes on the additional revenue generated by any RSAM adjustment with generally available financial data. Rather, to effectively calculate the impact of the additional revenue would require a complete set of railroad income tax returns. Without this data, one cannot truly determine the tax impact, if any, of the additional revenue. [23]

Baranowski provided no proof in his verified statement that any revenues attributable to RSAM adjustments would be taxed at the Federal and State statutory rates. Without detailed tax information, the best assumption that can be made is that this revenue will be taxed at the railroad's effective tax rate, and not at the combined Federal and state statutory rates for each railroad.

23/ See Opening VS at 13.

Impact On Effective Tax Rate From Continuous Investment

Assumptions:

1. Initial Investment $10,000,000
2. Asset Life 25
3. Salvage Percentage 0.00%
4. Constant Statutory Tax Rate 35%
5. Annual Income $2,000,000
6. New Investment Is Placed In Service Annually

	Year (1)	Income 1/ (2)	Straight Line Depreciation 2/ (3)	Taxable Income 3/ (4)	Taxes Based On Accelerated Depreciation 4/ (5)	Effective Tax Rate 5/ (6)
7.	1	$2,000,000	$400,000	$1,600,000	$525,000	33%
8.	2	$4,000,000	$800,000	$3,200,000	$892,500	28%
9.	3	$6,000,000	$1,200,000	$4,800,000	$1,293,250	27%
10.	4	$8,000,000	$1,600,000	$6,400,000	$1,723,750	27%
11.	5	$10,000,000	$2,000,000	$8,000,000	$2,181,200	27%
12.	6	$12,000,000	$2,400,000	$9,600,000	$2,663,150	28%
13.	7	$14,000,000	$2,800,000	$11,200,000	$3,156,650	28%
14.	8	$16,000,000	$3,200,000	$12,800,000	$3,650,150	29%
15.	9	$18,000,000	$3,600,000	$14,400,000	$4,143,300	29%
16.	10	$20,000,000	$4,000,000	$16,000,000	$4,636,800	29%
17.	11	$22,000,000	$4,400,000	$17,600,000	$5,129,950	29%
18.	12	$24,000,000	$4,800,000	$19,200,000	$5,623,450	29%
19.	13	$26,000,000	$5,200,000	$20,800,000	$6,116,600	29%
20.	14	$28,000,000	$5,600,000	$22,400,000	$6,610,100	30%
21.	15	$30,000,000	$6,000,000	$24,000,000	$7,103,250	30%
22.	16	$32,000,000	$6,400,000	$25,600,000	$7,700,000	30%
23.	17	$34,000,000	$6,800,000	$27,200,000	$8,400,000	31%
24.	18	$36,000,000	$7,200,000	$28,800,000	$9,100,000	32%
25.	19	$38,000,000	$7,600,000	$30,400,000	$9,800,000	32%
26.	20	$40,000,000	$8,000,000	$32,000,000	$10,500,000	33%
27.	21	$42,000,000	$8,400,000	$33,600,000	$11,200,000	33%
28.	22	$44,000,000	$8,800,000	$35,200,000	$11,900,000	34%
29.	23	$46,000,000	$9,200,000	$36,800,000	$12,600,000	34%
30.	24	$48,000,000	$9,600,000	$38,400,000	$13,300,000	35%
31.	25	$50,000,000	$10,000,000	$40,000,000	$14,000,000	35%
32	Total 6/			$520,000,000	$163,949,100	32%

1/ Line 5 x Column (1). This assumes each new asset added contributes $2 million in income.

2/ Line 1 ÷ Line 2 x Column (1). This assumes each new asset has costs $10 million and has a 25 year life.

3/ Column (2) - Column (3).

4/ The cumulative sum of Baranowski's Exhibit No. 4, Column (6). This represents the taxes payable each year with the benefits of accelerated depreciation.

5/ Column (5) ÷ Column (4).

6/ Sum of Lines 7 to 31.

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

I, THOMAS D. CROWLEY, verify under penalty of perjury that I have read the foregoing Rebuttal 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 22nd day of September, 2008

Diane R. Kavounis
Notary Public for the State of Virginia

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