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BEFORE THE

SURFACE TRANSPORTATION BOARD

STB Ex Parte No. 646 (Sub-No. 2)

SIMPLIFIED STANDARDS FOR RAIL RATE CASES – TAXES IN REVENUE SHORTFALL ALLOCATION METHOD

REPLY COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS

Louis P Warchot
Association of American Railroads
50 F Street, N W
Washington, D C 20001
(202) 639-2502

Kenneth P Kolson
10209 Summit Avenue
Kensington, M D 20895

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

Counsel for the Association of American Railroads

September 2, 2008

BEFORE THE
SURFACE TRANSPORTATION BOARD

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AAR submits these reply comments in response to the joint comments submitted by a group of shippers and shipper associations who call themselves the "Interested Parties" AAR submitted opening comments in this proceeding In its opening comments, AAR urged the Board to correct the obvious flaw of overlooking railroad tax obligations in the current RSAM formula and to use a railroad's statutory tax rate to adjust the RSAM formula to account for a railroad's federal and state tax liability

In their opening comments, the Interested Parties do not dispute the fact that the Board's RSAM formula contains an error in its treatment of a railroad's tax liability Instead, Interested Parties argue that a supposed overstatement of a railroad's tax costs in the Board's URCS model offsets the impact of the flaw in the RSAM treatment of railroad taxes Interested Parties also argue that if the Board makes an adjustment to the RSAM formula to account for railroads' tax liabilities, the Board should use what they refer to as a railroad's "effective tax rate" rather than its statutory tax rate

As AAR explained in its opening comments, the validity of the Board's treatment of taxes in URCS is not and should not be an issue in this proceeding, which addresses only the

RSAM formula While AAR believes there are serious flaws in Interested Parties' discussion of URCS, the URCS issues raised by Interested Parties are not relevant to the issue in this proceeding, which is the improper use of after-tax revenue in the RSAM calculation Since there is an obvious flaw in the RSAM formula, the Board should correct that flaw regardless of the merits of any concerns Interested Parties may have about the treatment of taxes in URCS In addition, the correction to the RSAM formula should be based on a railroad's statutory tax rate since any incremental revenues that a railroad would need to earn to become revenue adequate would be taxed at the statutory rate As AAR explains below, Interested Parties' claim that use of the statutory tax rate to make an adjustment to the RSAM formula would provide railroads with a "windfall" is wrong.

I. Interested Parties' Argument About URCS' Treatment Of Railroad Taxes Is A Red Herring.

Interested Parties do not dispute the fact that the RSAM formula is flawed because it improperly mixes pre-tax and after-tax revenues while all other revenue values in the rate reasonableness analysis are pre-tax. Instead, Interested Parties argue that the understatement of a railroad's revenue requirement that results from this flaw is offset by a supposed overstatement of railroads' tax-related costs in URCS Interested Parties' witness Mr Crowley purports to demonstrate the offset by showing that if URCS' treatment of railroad taxes was changed to reflect what Mr Crowley calls a railroad's "effective tax rate," the RSAM ratio would be the same or lower than that yielded by the current RSAM formula even if the flaw in the RSAM formula were corrected [1]

[1] As discussed below, Mr Crowley's definition of a railroad's "effective tax rate" is inconsistent with the GAAP specification of that term in railroads' financial statements

Most of Mr Crowley's statement describes the numerous assumptions that he must make to show the supposed impact of a change in URCS' treatment of taxes on the calculation of R/VC ratios and on the amount of traffic that would be subject to regulation if URCS were changed But it is unnecessary to address Mr Crowley's numerous assumptions because the premise of Mr Crowley's calculations – that there is a problem with URCS' treatment of railroad taxes – is unfounded

Mr Crowley claims that URCS' treatment of taxes is flawed because the tax costs implicit in URCS' variable return on investment exceed a railroad's actual tax payments in a particular year Crowley Exhibit 2 sets out the calculations purporting to demonstrate URCS' overstatement of a railroad's tax payments, which he limits to cash payments in a particular calendar year. But as AAR's expert witness Michael Baranowski explains in the statement supporting these comments, Mr Crowley's argument misses the point URCS is designed to measure intermediate-term costs, not cash payments in a single year A railroad's actual tax costs include the total tax liability URCS seeks to identify the return on investment costs that a railroad would incur if the railroad were revenue adequate, not just the taxes paid by a railroad in a particular year

In addition, Interested Parties assume that URCS' treatment of taxes is changed for the express purpose of expanding the number of shippers that would be subject to Board regulation *See* Crowley V S at 3-4 ("If the STB were to calculate a railroad's URCS variable costs using a pre-tax WACC taking into consideration effective tax rates instead of a statutory tax rate, the size of the REV>180 traffic group would most likely be larger, and produce a more accurate Revenue Adequacy Adjustment Factor ") But when the ICC adopted URCS in 1989, it expressly sought to prevent any increase in the amount of traffic subject to regulation to the amount of traffic subject to regulation under the prior Rail Form A costing methodology *See Modifications To General Purpose Costing System -- GPCS*, Ex Parte No 477, 5 I C C 2d 880, 885-87 (1989) (adopting a linking mechanism to ensure that the amount of traffic subject to regulation would not be expanded, in accordance with congressional guidance) Any expansion of the group of shippers potentially subject to Board regulation by changing URCS' treatment of tax costs would directly conflict with the ICC's conclusion that changes in the costing methodology should not be used to expand the amount of traffic subject to regulation

In any event, it is unnecessary and would be inappropriate to get into the details of URCS here because it is the RSAM formula and not URCS that is the subject of this proceeding Since the RSAM formula improperly combines pre-tax and after-tax revenues, the RSAM formula should be corrected without regard to Interested Parties' arguments about the proper treatment of taxes in URCS

II. The Statutory Tax Rate Should Be Used To Account For Railroads' Tax Liability.

Interested Parties also argue that if the Board decides to adjust the RSAM formula to account for railroads' tax liability on the revenue they would need to earn to achieve revenue adequacy, the Board should use what Interested Parties refer to as the railroads' "effective tax rate" in making the adjustment. Interested Parties claim that "each railroad's individual effective tax rate would be a much more appropriate measure of income tax liability" than the statutory tax rate, although they present no reason or explanation for this conclusion Interested Parties' Comments at 6 Mr Crowley defines "effective tax rate" as "the amount of tax an individual or firm pays when all other governmental tax offsets or payments are applied, divided by the tax base " Crowley V S at 11-12 Table 4 in Mr Crowley's Verified Statement sets out his calculations of the railroads' "effective tax rate "

As a preliminary matter, Mr Crowley's definition of "effective tax rate" is incorrect The railroads present their "effective tax rate" as required by GAAP each year in their financial reports The "effective tax rate" in railroads' financial reports is not based on the amount of taxes paid by a railroad in a particular year but on the tax liability that the railroad incurs based on the statutory tax rates Exhibit 2 to Mr Baranowski's Verified Statement sets out the railroads' "Effective tax rate" as presented in their annual reports

More important, the amount of taxes that a railroad pays in a particular year is not an appropriate measure of a railroad's tax liability because it ignores a railroad's deferred tax liability A railroad's tax liability for a particular year is the combination of the federal and state taxes actually paid in that year and the deferred taxes for that year Deferred taxes cannot be ignored They are tax liabilities that are incurred by the railroads and included on the railroads' books If the Board were to consider only the taxes actually paid, the Board would ignore a substantial portion of a railroad's actual tax liability for the year

Mr Crowley's calculations of railroads' "effective tax rate" ignore deferred taxes and state taxes and focus only on federal taxes paid in a particular year Mr Baranowski corrected Mr Crowley's "effective tax rate" calculations to include the railroads' liability for deferred taxes and their liability for state taxes. Mr Baranowski shows that when deferred taxes and state taxes are added to the federal taxes actually paid in a particular year, the revised "effective tax rate" is close to the railroads' "effective tax rate" as set out in their annual statements *See* Baranowski Exhibits 2 and 3.

Interested Parties also claim that "marginal tax rates are the most precise indicators of tax liability on incremental revenues " Interested Parties' Comments at 7 Mr Crowley defines the "marginal tax rate" as "the tax rate that applies to the last dollar of the tax base " Crowley V S at 13. But under the existing progressive federal and state tax structures, the marginal tax rate for Class I railroads should in most cases be identical to the statutory tax rate As AAR noted in its opening comments, any incremental revenue earned by a railroad above the $18 3 million threshold incurs federal tax liability at the statutory 35% rate State tax systems are similarly progressive in their treatment of incremental revenue The "effective tax rate" calculated by Mr Crowley has no relation whatever to the "marginal tax rate" which Interested Parties claim would be the most "precise" way to adjust the RSAM

III. The Railroads' Continuing Investment In Infrastructure Only Affects The Timing Of Tax Payments, Not The Amount Of Tax Liability.

As the Interested Parties acknowledge, the most significant difference between the amount of taxes that a railroad pays in a particular year and a railroad's tax liability for that year involves deferred taxes Interested Parties' Comments at 7. Deferred tax liability is generally the result of tax incentives on capital investment that allow bonus or accelerated depreciation of capital assets in the early years of an asset's life But the use of bonus or accelerated depreciation does not reduce or forgive a railroad's tax liability It only affects the timing of tax payments Accelerated depreciation defers the payment of taxes until later years, but the railroad's total tax liability is unaffected Deferred taxes are actually paid by the railroads at a later date, which is why a tax liability is incurred

Mr Baranowski shows with a simple example that over the life of an asset, a railroad's tax liability is the same with or without the benefits of accelerated depreciation When accelerated depreciation is available, reduced tax payments in the early years of the asset are offset by increased tax payments in the later years of the asset *See* Baranowski Exhibits 4 through 6 Deferred taxes affect only the timing of a railroad's tax payments While railroads realize a time value of money benefit in deferring tax payments, they nonetheless remain liable for the full amount of the tax obligation incurred at the statutory tax rate [2]

Thus, Interested Parties' claim that the use of the statutory tax rate in an RSAM adjustment would produce a "double windfall" for railroads as long as railroads continue to invest in infrastructure is clearly wrong *See* Interested Parties' Comments at 9 Their argument appears to be that the additional revenues needed by a railroad to become revenue adequate would likely be reinvested in capital assets, producing more deferred taxes through accelerated depreciation. But the reinvestment in infrastructure, which the Board clearly encourages (and shippers are calling upon railroads to increase), would not produce any windfall in reduced tax liability The reduced tax payments in the early years of an asset's life would be made up through higher payments in the later years of the asset's life

In conclusion, the Board should correct the obvious and undeniable flaw in the RSAM formula without regard to Interested Parties' arguments about the proper treatment of taxes in URCS In addition, a railroad's statutory tax rate should be used to adjust the RSAM formula to account for a railroad's federal and state tax liability.

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[2] As Mr Baranowski notes, while the railroads enjoy the time-value benefit in the real world, the time-value benefit is excluded from the Board's RSAM and URCS calculations because deferred taxes are excluded from a railroad's investment base both for the development of the ROI component of URCS costs and the calculation of the revenue shortfall or overage

Respectfully submitted,

Samuel M Sipe Jr AJL

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

Counsel for the Association of American Railroads

Louis P Warchot
Association of American Railroads
50 F Street, N W
Washington, D C 20001
(202) 639-2502

Kenneth P Kolson
10209 Summit Avenue
Kensington, M D 20895

September 2, 2008

CERTIFICATE OF SERVICE

I, Anthony J LaRocca, hereby certify that on September 2, 2008, I caused a true and correct copy of the foregoing Reply Comments of the Association of American Railroads to be served by hand delivery on the following

Nicholas J DiMichael
Jeffrey O Moreno
Thompson Hine LLP
1920 N Street, N W Suite 800
Washington, DC 20036

Andrew P Goldstein
John M Cutler, Jr
McCarthy, Sweney & Harkaway, P C
2175 K Street, N W , Suite 600
Washington, DC 20037

Anthony J LaRocca

VERIFIED STATEMENT
OF
MICHAEL R. BARANOWSKI

My name is Michael R Baranowski I am a Senior Managing Director of FTI Consulting I provide a wide range of economic and consulting services, primarily to clients in the transportation and telecommunications industries I have submitted written expert testimony before the Surface Transportation Board, the Federal Communications Commission, federal courts, arbitrators, and a number of state agencies A complete listing of my prior testimony is included in my curriculum vitae, which is attached to this statement as Exhibit 1

I have been asked by the Association of American Railroads (AAR) to respond to certain of the points raised in this proceeding in the opening submission of Interested Parties' witness Thomas D Crowley regarding the need to correct the error in the Board's current RSAM formulation of the treatment of a railroad's tax liability Specifically I have been asked to address Mr Crowley's conclusions that (1) the treatment of taxes in the Board's Uniform Rail Costing System (URCS) offsets the need to correct the obvious error in the current RSAM, and (2) that if the Board were to determine that the RSAM correction is indeed warranted, the correction should be made with what he refers to as the "effective" tax rate

I. Mr. Crowley's Argument About URCS' Treatment Of Railroad Taxes.

Mr Crowley does not dispute the fact that the treatment of railroad taxes in the RSAM formula is flawed Instead, Mr Crowley discusses URCS' treatment of railroad taxes and attempts to show that a supposed overstatement of railroad tax costs in URCS offsets the effect of the flaw in the RSAM formula In his report, Mr Crowley devotes considerable verbiage to explaining URCS and the RSAM process, concluding ultimately that adequate data are not available for him to quantify properly the impact of the treatment of taxes in URCS on the

Board's RSAM calculations He then enumerates the multiple assumptions he had to make to analyze the impact of the supposed overstatement of railroad tax costs in URCS

However, Mr Crowley's starting premise that there is a problem with URCS' treatment of railroad taxes is unfounded Mr Crowley claims that URCS' treatment of taxes is flawed because the tax costs implicit in URCS' variable return on investment exceed a railroad's actual tax cash payments *See* Crowley Exhibit 2 But Mr Crowley has neglected to consider that URCS is designed to measure intermediate costs incurred by a railroad to provide service, including its cost of capital As such, URCS is not intended to recover only the taxes paid by a railroad in a particular year Instead, the income tax allowance computed in URCS is part of the return on investment component which solves for the total return on investment necessary to achieve revenue adequacy, adjusted properly to include an allowance for income taxes at the statutory tax rate, and allocates that return on investment to individual shipments [1] The specific formulation for the return on investment component is virtually the same as the Board's revenue adequacy formula and is based on net investment less the liability associated with accumulated deferred taxes multiplied by the current cost of capital The only difference is that the cost of capital used in URCS includes an adjustment to account for income taxes, whereas the revenue adequacy formulation uses the after-tax industry current cost of capital

To correct his imaginary URCS deficiency, Mr Crowley changes the URCS return on investment tax adjustment formula to substitute for the statutory tax rate each railroads' "effective tax rate "[2] The merits of Mr Crowley's suggested alteration to the URCS

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[1] URCS includes other costs that are not based on cash payments made during a given year, such as depreciation and casualty reserves

[2] As noted below, Mr Crowley's definition of the railroads' "effective tax rate" is inconsistent with the GAAP specification of that term in the railroads' financial statements

formulation is outside the scope of this proceeding, which is addressed to changes in the RSAM formula More critically, his proposed alteration would lower overall URCS variable costs and, as a result, increase the number of shipments with revenue to variable cost ratios above the STB jurisdictional threshold of 180 percent, thus increasing the number of railroad movements subject to Board jurisdiction Such an expansion in the amount of traffic potentially subject to Board jurisdiction was rejected specifically by the ICC in its adoption of URCS as the railroad General Purpose Costing System in 1989 and would be equally improper today As the ICC explained

> *In our October NPR, we recognized that changes in the general purpose costing system would change the variable cost (denominator) in any calculation of revenue-to-variable cost ratios (R/VC ratios) Since the statutorily prescribed jurisdictional threshold for our authority to regulate rail rates is expressed as such a ratio, modifications to the GPCS could change the amount of traffic subject to the Commission's rate regulation We stated in the October NPR that a "bridge" or linking mechanism relating the new costing system to the jurisdictional results that would have obtained under Rail Form A seemed to be an appropriate modification – one intended to maintain an approximation of equality between the amount of traffic subject to our rate reasonableness jurisdiction before and after the change in costing systems* [footnote omitted] (Ex Parte No 477, Modifications to General Purposed Costing System – GPCS, Decided September 8, 1989, 5 I C C 2d at 885-6)

The ICC noted Congress' concern that the ICC should not use changes to its costing methodology to "expand its jurisdiction " *Id*

II. Mr. Crowley's Calculations Of Railroads' "Effective Tax Rate"

Mr Crowley also argues that if the Board were to determine that an RSAM correction is warranted, the correction should be made with what Mr Crowley refers to as the railroads' "effective" tax rate Mr Crowley defines "effective tax rate" as "the amount of tax an individual or firm pays when all other governmental tax offsets or payments are applied, divided by the tax base " Crowley V S at 11-12 Mr Crowley's definition of "effective tax rate" is incorrect and inconsistent with GAAP instructions on that term The railroads present their "effective tax rate" each year in their financial reports in accordance with GAAP The "Effective tax rate" in railroads' annual reports reflects the tax liability that the railroad incurs based on the statutory tax rates Exhibit 2 sets out the railroads' "Effective tax rate" as presented in their annual reports for the years 2005 through 2007

Mr Crowley's calculations of railroads' "effective tax rate" are also flawed because they focus only on federal taxes paid in a particular year and ignore deferred taxes and state taxes I corrected Mr Crowley's "effective tax rate" calculations to include the railroads' liability for deferred taxes and their liability for state taxes *See* Exhibit 3 When deferred taxes and state taxes are added to the federal taxes actually paid in a particular year, the revised "effective tax rate" is close to the railroads' "effective tax rate" as set out in their annual statements

III. Deferred Taxes Affect Only The Timing Of Tax Payments.

Mr Crowley states that the most important factor that "can drive a firm's effective tax rate below its statutory tax rate" is deferred income taxes *See* Crowley V S at 14-15 Mr Crowley further notes that "[d]eferred taxes result because there is a difference between what a company can deduct for tax accounting purposes and what it can deduct for financial accounting purposes" *Id* at 15 Deferred tax liability is generally the result of tax incentives on capital investment that allow bonus or accelerated depreciation of capital assets in the early years of an asset's life That liability is reduced in the later years of an asset's life after the bonus or accelerated depreciation benefits have been exhausted, ultimately ending at zero at the end of the asset's life

Mr Crowley claims that the use of the statutory tax rate, which incorporates deferred tax liability, in any adjustment to the RSAM formula would somehow provide railroads with a "double windfall" Crowley V S at 18 But Exhibit 4 shows, using a simple example, that even after taking deferred taxes into consideration, railroads still pay taxes at the statutory tax rate over an asset's life cycle Accelerated depreciation defers the payment of taxes until later years, but the railroad's total tax liability is unaffected Accelerated depreciation only affects the timing of tax payments The example in Exhibit 4 shows that when accelerated depreciation is available, reduced tax payments in the early years of the asset are offset by increased tax payments in the later years of an asset's life

In addition, while it is true that the ratio of taxes actually paid in the early years of an asset's life using the benefits of accelerated depreciation to book-based taxable income is below the statutory tax rate, the opposite is true after the benefits of accelerated depreciation have been consumed Exhibits 5 and 6 show that the ratio of actual taxes paid to taxable income for a hypothetical 25 year asset transition from a low of 23 percent in the second year of service, to a high of 44 percent – well above the statutory rate – for years 17 through 25

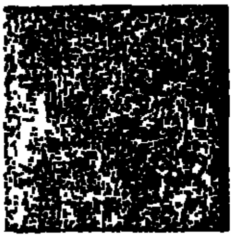
Moreover, while the deferral of taxes provides railroads with a time-value of money benefit in the real world, the RSAM calculations exclude the time-value benefit of deferred taxes because deferred taxes are excluded from a railroad's investment base both for the development of the ROI component of URCS costs and the calculation of the revenue shortfall or overage

I declare under penalty of perjury that the foregoing is true and correct. I further certify that I am qualified and authorized to sponsor and file this testimony

Executed on September 1, 2008

Michael R Baranowski

Michael R Baranowski



Michael R. Baranowski

Senior Managing Director - Economic Consulting

mike.baranowski@fticonsulting.com

1101 K Street NW
Suite 3100
Washington, DC 20005
Tel (202) 312 9100
Fax (202) 312 9101

Education
B S in Accounting
Fairfield University

Supplemental Finance Studies, Kean College

Mike Baranowski provides financial and economic consulting services to the telecommunications and transportation industries He has special expertise in analyzing and developing complex computer costing models, operations analysis, and transportation engineering Much of his work involves providing oral and written expert testimony before courts and regulatory bodies

Some of Mr Baranowski's representative accomplishments include

- Overseeing the development of computer cost modeling tools designed to simulate the cost of competive entry into local telecommunications markets and directing the efforts of a nationwide team of testifying experts presenting the cost model results in multiple proceedings across the country
- Directing the analysis, critique and restatement of a variety of complex cost models developed by major telecommunications companies designed to simulate the forward-looking cost of competitive entry into local telecommunications markets
- Designing multiple PC-based spreadsheet models for use in calculating the stand-alone cost of competitive entry into the railroad and pipeline markets These models have been used to assist clients in all three network industries in making internal pricing decisions that are in compliance with governing regulatory standards
- Conducting detailed analyses of railroad operations and developing the associated capital requirements and operating expenses attributable to specific movements and the incremental capital and operating expense requirements attributable to major changes in anticipated traffic levels
- Calculating marginal and incremental costs for a major petroleum products pipeline company, an approach that is now used regularly by the company in making internal day-to-day pricing decisions

Mr Baranowski holds a B S in Accounting from Fairfield University in Fairfield, Connecticut and has pursued supplemental finance studies at Kean College in Union, New Jersey

TELECOMMUNICATIONS TESTIMONY

Federal Communications Commission

February 1998	File No E-98-05 AT&T Corp v Bell Atlantic Corp Affidavit of Michael R Baranowski
March 13, 1998	File No E-98-05 AT&T Corp v Bell Atlantic Corp Supplemental Affidavit of Michael R Baranowski
June 10, 1999	CC Docket No 96-98 Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 Reply Affidavit of Michael R Baranowski John C Klick and Brian F Pitkin

July 25, 2001	CC Docket No 00-251 00-218 In the Matter of Petition of AT&T Communications of Virginia, Inc and WorldCom Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon-Virginia Inc Panel
June 13, 2005	WC Docket No 05-25,RM-10593 In the Matter of Special Access Rates for Price Cap Local Exchange Carriers, AT&T Corp Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Joint Declaration on Behalf of SBC Communications, Inc
July 29, 2005	WC Docket No 05-25,RM-10593 In the Matter of Special Access Rates for Price Cap Local Exchange Carriers, AT&T Corp Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Joint Reply Declaration on Behalf of SBC Communications, Inc

Public Service Commission of Delaware

February 4, 1997	PSC Docket No 96-324 In the Matter of Bell Atlantic - Delaware Statement of Terms and Conditions Under Section 252(F) of the Telecommunications Act of 1996 Testimony of Michael R Baranowski

Public Service Commission of the District of Columbia

March 24, 1997	Formal Case No 962 In the Matter of the Implementation of the District of Columbia Telecommunications Competition Act of 1996 Testimony of Michael R Baranowski
May 2, 1997	Formal Case No 962 In the Matter of the Implementation of the District of Columbia Telecommunications Competition Act of 1996 Rebuttal Testimony of Michael R Baranowski

Public Service Commission of the State of Maryland

March 7, 1997	Docket No 8731, Phase II In the Matter of the Petitions for Approval of Agreements and Arbitration of Unresolved Issues Arising Under Section 252 of the Telecommunications Act of 1996 Direct Testimony of Michael R Baranowski
April 4, 1997	Docket No 8731, Phase II In the Matter of the Petitions for Approval of Agreements and Arbitration of Unresolved Issues Arising Under Section 252 of the Telecommunications Act of 1996 Rebuttal Testimony of Michael R Baranowski
May 25, 2001	Case No 8879 In the Matter of the Investigation into Rates for Unbundled Network Elements Pursuant to the Telecommunications Act of 1996 Panel Testimony on Recurring Cost Issues

Public Service Commission of the State of Michigan

January 20, 2004	Case No U-13531 In the Matter, on the Commission's Own Motion to Review the Costs of Telecommunication Service Provided By SBC Michigan Initial Testimony of Michael R Baranowski and Julie A Murphy
May 10, 2004	Case No U-13531 In the Matter, on the Commission's Own Motion to Review the Costs of Telecommunication Service Provided By SBC Michigan Final Reply Testimony of Michael R Baranowski and Julie A Murphy

New Jersey Board of Public Utilities

December 20, 1996	Docket No TX 95120631 Notice of Investigation Local Exchange Competition for Telecommunications Services Rebuttal Testimony of John C Klick and Michael R Baranowski

North Carolina Utilities Commission

March 9, 1998	Docket No P-100, Sub 133d In the Matter of Establishment of Universal Support Mechanisms Pursuant to Section 254 of the Telecommunications Act of 1996 Rebuttal Testimony of Michael R Baranowski

Pennsylvania Public Utility Commission

January 13, 1997	Docket Nos A-310203F0002 et al MFS-III Application of MFS Intelenet of Pennsylvania, Inc et Al (Phase III) Rebuttal Testimony of Michael R Baranowski
February 21, 1997	Docket Nos A-310203F0002 et al MFS-III Application of MFS Intelenet of Pennsylvania, Inc et Al *(Phase III) Surrebuttal Testimony of Michael R* Baranowski
April 22, 1999	Docket Nos P-00991648, P-00991649 Petition of Senators and CLECs for Adoption of Partial Settlement and Joint Petition for Global Resolution of Telecommunications Proceedings Direct Testimony of Michael R Baranowski
January 11, 2002	Docket No R-00016683 Generic Investigation of Verizon Pennsylvania, Inc 's Unbundled Network Element Rates Panel Testimony on Recurring Cost Issues

State Corporation Commission Commonwealth of Virginia

April 7, 1997	Case No PUC970005 Ex Parte to Determine Prices Bell Atlantic - Virginia, *Inc Is Authorized To Charge Competing Local Exchange Carriers In* Accordance With The Telecommunications Act of 1996 And Applicable State Law Affidavit of Michael R Baranowski
April 23, 1997	Case No PUC970005 Ex Parte to Determine Prices Bell Atlantic - Virginia, Inc Is Authorized To Charge Competing Local Exchange Carriers In Accordance With The Telecommunications Act of 1996 And Applicable State Law *Direct Testimony of Michael R Baranowski*

June 10, 1997 — Case No PUC970005 Ex Parte to Determine Prices Bell Atlantic - Virginia, Inc Is Authorized To Charge Competing Local Exchange Carriers In Accordance With The Telecommunications Act of 1996 And Applicable State Law Rebuttal Testimony of Michael R Baranowski

Washington State Utilities and Transportation Commission

December 22, 2003 — Docket No UT-033044 In the Matter of the Petition of Qwest Corporation To Initiate a Mass-Market Switching and Dedicated Transport Case Pursuant to the Triennial Review Order Direct Testimony of Michael R Baranowski

February 2, 2004 — Docket No UT-033044 *In the Matter of the Petition of Qwest Corporation To Initiate a Mass-Market Switching and Dedicated Transport Case Pursuant to the Triennial Review Order* Response Testimony of Michael R Baranowski

Public Service Commission of West Virginia

February 13, 1997 — Case Nos 96-1516-T-PC, 96-1561-T-PC, 96-1009-T-PC, 96-1533-T-T Petition to establish a proceeding to review the Statement of Generally Available Terms and Conditions offered by Bell Atlantic in accordance with Sections 251, 252, and 271 of the Telecommunications Act of 1996 Testimony of Michael R Baranowski

February 27, 1997 — Case Nos 96-1516-T-PC, 96-1561-T-PC, 96-1009-T-PC, 96-1533-T-T Petition to establish a proceeding to review the Statement of Generally Available Terms and Conditions offered by Bell Atlantic in accordance with Sections 251, 252, and 271 of the Telecommunications Act of 1996 Rebuttal Testimony of Michael R Baranowski

June 3, 2002 — Case No 01-1696-T-PC, Verizon West Virginia, Inc Petition For Declaratory Ruling That Pricing of Certain Additional Unbundled Network Elements (UNEs) Complies With Total Element Long-Run Incremental Cost (TELRIC) Principles Direct Testimony of Michael R Baranowski

July 1, 2002 — Case No 01-1696-T-PC, Verizon West Virginia, Inc Petition For Declaratory Ruling That Pricing of Certain Additional Unbundled Network Elements (UNEs) Complies With Total Element Long-Run Incremental Cost (TELRIC) Principles Supplemental Direct Testimony of Michael R Baranowski

RAILROAD TESTIMONY

Interstate Commerce Commission

March 9, 1995 — Finance Docket No 32467 National Railroad Passenger Corporation and Consolidated Rail Corporation – Application Under Section 402(a) of the Rail Passenger Service Act for an Order Fixing Just Compensation

October 30, 1995 — Docket No 41185 Arizona Public Service Company and Pacificorp v The Atchison, Topeka and Santa Fe Railway Company

Surface Transportation Board

July 11, 1997	Docket No 41989 *Potomac Electric Power Company v CSX* Transportation, Inc Reply Statement and Evidence of Defendant CSX Transportation, Inc
August 14, 2000	Docket No 42051 Wisconsin Power and Light Company v Union Pacific Railroad Company, Reply Verified Statement of Christopher D Kent and Michael R Baranowski
September 20, 2002	STB Docket No 42070 Duke Energy Corporation v CSX Transportation, Inc , Reply Evidence and Argument of CSX Transportation, Inc
September 30, 2002	STB Docket No 42069 Duke Energy Corporation v Norfolk Southern Railway Company, Reply Evidence and Argument of Norfolk Southern Railway Company
October 11, 2002	STB Docket No 42072 Carolina Power & Light v Norfolk Southern Railway Company, Reply Evidence and Argument of Norfolk Southern Railway Company
November 12, 2002	Docket No 42070 Duke Energy Corporation v CSX Transportation, Rebuttal Evidence and Argument of CSX Transportation
November 19, 2002	Docket No 42069 Duke Energy Corporation v Norfolk Southern Railway Company, Rebuttal Evidence and Argument of Norfolk Southern Railway Company
November 27, 2002	Docket No 42072 Carolina Power & Light Company v Norfolk Southern Railway Company, Rebuttal Evidence and Argument of Norfolk Southern Railway Company
January 10, 2003	STB Docket No 41185 Arizona Public Service Co And Pacificorp v The Atchison, Topeka and Santa Fe Railway Company, Petition of the Burlington Northern and Santa Fe Railway Company to Reopen and Vacate Rate Prescription
February 19, 2003	STB Docket No 42077 Arizona Public Service Co And Pacificorp v The Burlington Northern and Santa Fe Railway Company, and STB Docket No 41185, Arizona Public Service Co And Pacificorp v The Burlington Northern and Santa Fe Railway Company, Reply of the Burlington Northern Santa Fe Railway Company in Opposition to Petition for Consolidation
April 4, 2003	*Docket No 42057 Public Service Company of Colorado D/B/A Xcel Energy* v The Burlington Northern and Santa Fe Railway Company, Reply Evidence and Argument of The Burlington Northern and Santa Fe Railway Company
October 8, 2003	Docket No 42071 Otter Tail Power Company v The Burlington Northern and Santa Fe Railway Company, Reply Evidence of The Burlington Northern and Santa Fe Railway Company
October 24, 2003	Docket No 42069 Duke Energy Corporation v Norfolk Southern Railway Company, Supplemental Evidence of Norfolk Southern Railway Company

October 31, 2003	Docket No 42069 Duke Energy Corporation v Norfolk Southern Railway Company, Reply of Norfolk Southern Railway Company to Duke Energy Company's Supplemental Evidence
November 24, 2003	Docket No 42072 Carolina Power & Light Company v Norfolk Southern Railway Company, Supplemental Evidence of Norfolk Southern Railway Company
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December 12, 2003	Docket No 42069 Reply of Norfolk Southern Railway Company to Duke Energy Corporation's Petition to Correct Technical Error and Affidavit of Michael R Baranowski
January 5, 2004	Docket No 42070 Duke Energy Corporation v CSX Transportation, Inc , Supplemental Evidence of CSX Transportation, Inc
January 26, 2004	Docket No 42058 Arizona Electric Power Cooperative, Inc v The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company, Joint Supplemental Reply Evidence and Argument of The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company
March 22, 2004	Docket No 42071 Otter Tail Power Company v The Burlington Northern and Santa Fe Railway Company, Supplemental Reply Evidence of The Burlington Northern and Santa Fe Railway Company
April 9, 2004	Docket No 41185 Arizona Public Service Company and Pacificorp v The Burlington Northern and Santa Fe Railway Company, The Burlington Northern and Santa Fe Railway Company's Reply Evidence on Reopening
May 24, 2004	Docket No 41191 (Sub-No 1) AEP Texas North Company v The Burlington Northern and Santa Fe Railway Company, Reply Evidence of The Burlington Northern and Santa Fe Railway Company
June 23, 2004	Docket No 42057 Public Service Company of Colorado d/b/a Xcel Energy v The Burlington Northern and Santa Fe Railway Company, Petition to Correct Technical and Computational Errors
March 1, 2005	Docket No 42071 Otter Tail Power Company v BNSF Railway Company, Supplemental Evidence of BNSF Railway Company
April 4, 2005	Docket No 42071 Otter Tail Power Company v BNSF Railway Company, Reply of BNSF Railway Company to Supplemental Evidence
July 20, 2005	Docket No 42088 Western Fuels Association, Inc and Basin Electric Power Cooperative, Inc v BNSF Railway Company, Reply Evidence of BNSF Railway Company

May 1 2006	Docket No Ex Parte 657 (Sub-No 1) Major Issues in Rail Rate Cases, Verified Statement Supporting Comments of BNSF Railway Company
May 31, 2006	Ex Parte 657 (Sub-No 1) Major Issues in Rail Rate Cases, Verified Statement Supporting Reply Comments of BNSF Railway Company
June 15, 2006	Docket No 42088 Western Fuels Association, Inc and Basin Electric Power Cooperative, Inc v BNSF Railway Company, Reply Supplemental Evidence of BNSF Railway Company
June 15, 2006	Docket No 41191 (Sub 1) AEP Texas North Company v BNSF Railway Company, Reply Supplemental Evidence of BNSF Railway Company
June 30, 2006	Docket No Ex Parte 657 (Sub-No 1) Major Issues in Rail Rate Cases, Verified Statement Supporting Rebuttal Comments of BNSF Railway Company
February 4, 2008	*Docket No 42099 E I DuPont De Nemours and Company v* CSX Transportation, Inc Opening Evidence of CSX Transportation, Inc
February 4, 2008	Docket No 42100 E I DuPont De Nemours and Company v CSX Transportation, Inc , Opening Evidence of CSX Transportation, Inc
February 4, 2008	*Docket No 42101 E I DuPont De Nemours and Company v CSX* Transportation, Inc , Opening Evidence of CSX Transportation, Inc
May 1, 2008	Docket No Ex Parte 679 Petition of the AAR to Institute a Rulemaking Proceeding to Adopt a Replacement Cost Methodology to Determine Railroad Revenue Adequacy, Verified Statement of Michael R Baranowski
July 14, 2008	Docket No 42088 Western Fuels Association, Inc and Basin Electric Power Cooperative, Inc v BNSF Railway Company, Third Supplemental Reply Evidence of BNSF Railway Company
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US District Court for Northern District of Oklahoma

January 2, 2007	Case No 06-CV-33 TCK-SAJ, *Grand River Dam Authority v* BNSF Railway Company, Report of Michael R Baranowski
February 2, 2007	Case No 06-CV-33 TCK-SAJ, Grand River Dam Authority v BNSF Railway Company, Reply Report of Michael R Baranowski

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March 7, 2005	Arbitration Case #181 Y 00490 04 BNSF Railway Company and J B Hunt Transport, Inc , Expert Report on behalf of BNSF Railway Company
March 28, 2005	Arbitration Case #181 Y 00490 04 BNSF Railway Company and J B Hunt Transport, Inc , Rebuttal Expert Report on behalf of BNSF Railway Company
April 12, 2005	Arbitration Case #181 Y 00490 04 BNSF Railway Company and J B Hunt Transport, Inc Supplemental Expert Report on behalf of BNSF Railway Company
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April/May 2005	Arbitration Case #181 Y 00490 04 BNSF Railway Company and J B Hunt Transport, Inc , Hearings before Arbitration Panel
February 20, 2007	In the Matter of the Arbitration between the Detroit Edison Company, et al, and BNSF Railway Company, Expert Report of Michael R Baranowski
March 19, 2007	In the Matter of the Arbitration between the Detroit Edison Company, et al, and BNSF Railway Company, Supplemental Expert Report of Michael R Baranowski

Exhibit 2

Railroad Effective Tax Rates From Annual Reports

Year	BNSF	CSX	KCS	NS	UP
2005	37 5%	30.0%	-9.3%	25 0%	28.6%
2006	36.9%	29.0%	29.4%	34.0%	36.4%
2007	38 2%	37.0%	30.3%	35.0%	38.4%

Class I Railroad Effective Tax Rates (All Tax Liability) -- 2000 to 2007

	Item (1)	BNSF (2)	CSX (3)	CN-GTW (4)	KCS (5)	NS (6)	CP-SOO (7)	UP (8)
	2000							
1	Income (Loss) from Continuing Operations 1/	$1 811 713	$170 135	$172 555	$28 408	$277 552	$16 543	$1 419 663
2	Federal Income Taxes 2/	$288 319	($32 934)	$50 318	($28 395)	$69 725	($1 556)	$36 192
3	State Income Taxes 3/	42 671	5 640	$ 117	$ (337)	$ 7 514		$ 3 238
4	Other Income Taxes 4/		118		$ 171			
5	Deferred Annual Taxes 5/	362 588	99 843	$ 20 222	$ 27 549	$ 19 745	$ 11 577	$ 454 393
6	Total Tax Liability	$ 693 578	$ 72 667	$ 70 657	$ (992)	$ 97 294	$ 10 021	$ 493 823
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	38 3%	42 7%	39 8%	-3 5%	35 1%	21 5%	34 8%
	2001							
1	Income (Loss) from Continuing Operations 1/	$1,550 111	$124 162	$174 508	$45 519	$535 576	$71 465	$1 653 146
2	Federal Income Taxes 2/	$249 597	($10 558)	($20 307)	($20 890)	$110 485	$2 087	[illegible]
3	State Income Taxes 3/	29 264	573	$ 160	$ (1 253)	$ 18 120		$ 10 115
4	Other Income Taxes 4/	0	46		$ 103			
5	Deferred Annual Taxes 5/	319 288	130 977	$ 31 804	$ 27 490	$ 68 776	$ 18 556	$ 410 873
6	Total Tax Liability	$ 598 149	$ 121 028	$ 11 657	$ 5 450	$ 197 681	$ 20 643	$ 595 452
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	38 6%	37 3%	6 7%	12 0%	36 9%	28 9%	36 0%
	2002							
1	Income (Loss) from Continuing Operations 1/	$1 531 115	$479 373	$39 738	$61 752	$700 202	$90 932	$2 113 228
2	Federal Income Taxes 2/	$114,672	($21 488)	($21 990)	($25 628)	$84 794	$6 726	$192 960
3	State Income Taxes 3/	$ 14 785	$ (152)	$ 1 029	$ (40)	$ 5 508	$ 2 463	$ 17 407
4	Other Income Taxes 4/		$ 78	$ 1 998				
5	Deferred Annual Taxes 5/	$ 440 817	$ 204 896	$ 34 399	$ 32 692	$ 182 257	$ 23 132	$ 528 831
6	Total Tax Liability	$ 570 274	$ 183 334	$ 18 426	$ 6 924	$ 272 559	$ 32 321	$ 739 198
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	37 2%	38 2%	46 4%	9 8%	38 9%	35 5%	35 0%
	2003							
1	Income (Loss) from Continuing Operations 1/	$1 520 484	$223 439	$113 278	$26 647	$503 461	$74 671	$1 715 167
2	Federal Income Taxes 2/	$96 843	($52 704)	$4 303	$0	$53 483	$7 838	$208 064
3	State Income Taxes 3/	$ 17 864	$ 2 197	$ 1 273	$ 22	$ 7 637	$ 691	$ 43 321
4	Other Income Taxes 4/		$ 104	$ 175				
5	Deferred Annual Taxes 5/	$ 114 958	$ 29 978	$ 24,468	$ 7 073	$ 129 541	$ 6 439	$ 357 701
6	Total Tax Liability	$ 559 665	$ 79 575	$ 33 219	$ 7 095	$ 190 661	$ 14 968	$ 609 099
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	36 8%	35 6%	29 3%	26 6%	37 9%	20 0%	35 5%
	2004							
1	Income (Loss) from Continuing Operations 1/	$1 562 569	$511 043	$274 009	$73 133	$1 147 620	$18 528	$823 068
2	Federal Income Taxes 2/	$323 745	$10 092	($8 154)	$14 942	$147 137	$3 909	($78 461)
3	State Income Taxes 3/	$ 49 876	$ 5 002	$ 8 055	$ 5	$ 42 932	$ (560)	$ 2 031
4	Other Income Taxes 4/		$ 26	$ 107		$		
5	Deferred Annual Taxes 5/	$ 219 055	$ 169 949	$ 96 899	$ 16 229	$ 200 101	$ 3 965	$ 315 751
6	Total Tax Liability	$ 592,676	$ 185 169	$ 96 907	$ 31 176	$ 390 170	$ 7 314	$ 239 321
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	37 9%	36 2%	35 4%	42 6%	34 0%	39 5%	29 1%
	2005							
1	Income (Loss) from Continuing Operations 1/	$2 789 258	$962 736	$469 604	$14 299	$1 412 758	$125 391	$1 306 931
2	Federal Income Taxes 2/	$762 945	$220 345	$95 513	($2 079)	$320 984	$3 317	$313 447
3	State Income Taxes 3/	$ 100 499	$ 29 058	$ 13 491	$ (2 379)	$ 49 344	$ 483	$ 40 955
4	Other Income Taxes 4/		$ 15	$ 354				
5	Deferred Annual Taxes 5/	$ 185 441	$ 20 846	$ 48 172	$ 2 437	$ (44 843)	$ 46 153	$ 19 943
6	Total Tax Liability	$1 048 885	$ 270 264	$ 157 530	$ (2 021)	$ 325 485	$ 49 953	$ 374 345
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	37 6%	28 1%	33 5%	14 1%	23 0%	39 8%	27 4%
	2006							
1	Income (Loss) from Continuing Operations 1/	$3,476 342	$1 464 780	$668 186	$104 619	$1 846,273	$181 585	$2 383 116
2	Federal Income Taxes 2/	$869 232	$370 403	$147 439	$1 376	$490 190	$33 460	$459 739
3	State Income Taxes 3/	$ 114 430	$ 4 868	$ 17 555	$ 432	$ 63 004	$ 7 151	$ 55 456
4	Other Income Taxes 4/		$ 242	$ 1 887				
5	Deferred Annual Taxes 5/	$ 301 329	$ 126 250	$ 97 359	$ 28 280	$ 40 315	$ 32 347	$ 160 303
6	Total Tax Liability	$1 284 991	$ 501 763	$ 264 240	$ 30 088	$ 613 509	$ 72 958	$ 675 527
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	37 0%	34 3%	39 5%	28 8%	33 2%	40 2%	36 7%
	2007							
1	Income (Loss) from Continuing Operations 1/	$3,509 311	$1 600 811	$675 516	$103 191	$1,916 142	$219 146	$2 861 405
2	Federal Income Taxes 2/	$918 305	$378 165	$122 811	$0	$480,175	$36 731	$751 638
3	State Income Taxes 3/	$ 132 319	$ 40 636	$ 23 053	$ 545	$ 62 842	$ 5 775	$ 68 136
4	Other Income Taxes 4/							$ (25 651)
5	Deferred Annual Taxes 5/	$ 275 214	$ 190 156	$ 95 602	$ 27 017	$ 137 584	$ 13 253	$ 304 795
6	Total Tax Liability	$1 355 838	$ 609 277	$ 241 [illegible]	$ 27 562	$ [illegible]	$ [illegible]	$1 098 851
7	Post-(State, Other, and Deferred) Effective Tax Rate 6/	38 6%	38 1%	35 8%	26 7%	36 1%	38 4%	38 1%

1/ Annual Report Form R-1 Schedule 210 Line 46 (b)
2/ Annual Report Form R-1 Schedule 210 Line 47 (b)
3/ Annual Report Form R-1 Schedule 210 Line 48 (b)
4/ Annual Report Form R-1 Schedule 210 Line 49 (b)
5/ Annual Report Form R-1 Schedule 210 Line 51 (b)
6/ Total Tax Liability / Income (Loss) from Continuing Operations
Source: R-1 Reports from STB's website

Exhibit 4

Tax Liability is the Same Over the Life of an Asset With or Without the Benefits of Accelerated Depreciation

Assumptions	
Initial Investment	$10 000 000
Asset Life	25
Tax Life	15
Salvage Percentage	0 0%
Constant Statutory Tax Rate	35 0%
Annual Income	$2 000 000

Tax Payment Schedule Including Benefits of Accelerated Depreciation

Year	Income	Annual Depreciation %	Accelerated Depreciation	Taxable Income	Taxes	Straight Line Depreciation	Annual Deferred Taxes	Accumulated Deferred Taxes
1	$2 000 000	5 00%	$500 000	$1 500 000	$525 000	$400 000	$35 000	$35 000
2	$2 000 000	9 50%	$950 000	$1 050 000	$367 500	$400 000	$192 500	$227 500
3	$2 000 000	8 55%	$855 000	$1 145 000	$400 750	$400 000	$159 250	$386 750
4	$2 000 000	7 70%	$770 000	$1 230 000	$430 500	$400 000	$129 500	$516 250
5	$2 000 000	6 93%	$693 000	$1 307 000	$457 450	$400 000	$102 550	$618 800
6	$2 000 000	6 23%	$623 000	$1 377 000	$48 950	$400 000	$78 050	$696 850
7	$2 000 000	5 90%	$590 000	$1 410 000	$493 500	$400 000	$66 500	$763 350
8	$2 000 000	5 90%	$590 000	$1 410 000	$493 500	$400 000	$66,500	$829 850
9	$2 000 000	5 91%	$591 000	$1 409 000	$493 150	$400 000	$66 850	$896 700
10	$2 000 000	5 90%	$590 000	$1 410 000	$493 500	$400 000	$66 500	$963 200
11	$2 000 000	5 91%	$591 000	$1 409 000	$493 150	$400 000	$66 850	$1 030 050
12	$2 000 000	5 90%	$590 000	$1 410 000	$493 500	$400 000	$66 500	$1 096 550
13	$2 000 000	5 91%	$591 000	$1 409 000	$493 150	$400 000	$66 850	$1 163 400
14	$2 000 000	5 90%	$590 000	$1 410 000	$493 500	$400 000	$66 500	$1 229 900
15	$2 000 000	5 91%	$591 000	$1 409 000	$493 150	$400 000	$66 850	$1 296 750
16	$2 000 000	2 95%	$295 000	$1 705 000	$596 750	$400 000	($36 750)	$1 260 000
17	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$1 120 000
18	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$980 000
19	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$840 000
20	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$700 000
21	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$560 000
22	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($110 000)	[illegible]
23	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	[illegible]
24	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$140 000
25	$2 000 000	0 00%	$0	$2 000 000	$700 000	$400 000	($140 000)	$0
Total				$40 000 000	$14 000 000		$0	
Ratio of Taxes to Taxable Income					35 0%			

Tax Payment Schedule Without Benefits of Accelerated Depreciation

Year	Income	Straight Line Depreciation	Taxable Income	Taxes
1	$2 000 000	$400 000	$1 600 000	$560 000
2	$2 000 000	$400 000	$1 600 000	$560 000
3	$2 000,000	$400 000	$1 600 000	$560 000
4	$2 000 000	$400 000	$1 600 000	$560 000
5	$2 000 000	$400 000	$1 600 000	$560 000
6	$2 000 000	$400 000	$1 600 000	$560 000
7	$2 000 000	$400,000	$1 600 000	$560 000
8	$2 000 000	$400 000	$1 600 000	$560 000
9	$2 000 000	$400 000	$1 600 000	$560 000
10	$2 000,000	$400 000	$1 600 000	$560 000
11	$2 000 000	$400 000	$1 600 000	$560 000
12	$2 000 000	$400 000	$1 600 000	$560 000
13	$2 000 000	$400 000	$1 600 000	$560 000
14	$2 000 000	$400 000	$1,600 000	$560 000
15	$2 000 000	$400 000	$1 600 000	$560 000
16	$2 000 000	$400 000	$1 600 000	$560 000
17	$2 000 000	$400 000	$1 600 000	$560 000
18	$2 000 000	$400 000	$1 600 000	$560 000
19	$2 000 000	$400 000	$1 600 000	$560 000
20	$2 000 000	$400 000	$1 600 000	$560 000
21	$2 000 000	$400 000	$1 600 000	$560 000
22	$2 000 000	$400 000	$1 600 000	$560 000
23	$2 000,000	$400 000	$1 600 000	$560 000
24	$2 000 000	$400 000	$1 600 000	$560 000
25	$2 000 000	$400 000	$1 600 000	$560 000
Total			$40 000 000	$14 000 000
Ratio of Taxes to Taxable Income				35 0%

Tax Liability is the Same Over the Life of an Asset With or Without the Benefits of Accelerated Depreciatior

Assumptions	
Initial Investment	$10 000,000
Asset Life	25
Tax Life	15
Salvage Percentage	0 0%
Constant Statutory Tax Rate	35 0%
Annual Income	$2,000 000

Tax Rate Using Book Based Taxable Income and Actual Tax Payments Reflecting Benefits of Accelerated Depreciat.on

Year	Income	Straight-Line Depreciation	Taxable Income	Taxes Based on Accelerated Depreciation	Cash Tax Rate
1	$2,000,000	$400,000	$1,600 000	$525,000	33%
2	$2,000,000	$400,000	$1 600,000	$367 500	23%
3	$2,000,000	$400 000	$1,600,000	$400 750	25%
4	$2,000,000	$400,000	$1,600,000	$430 500	27%
5	$2,000 000	$400 000	$1,600,000	$457,450	29%
6	$2,000,000	$400 000	$1,600,000	$481,950	30%
7	$2,000 000	$400 000	$1,600,000	$493 500	31%
8	$2,000,000	$400 000	$1,600 000	$493,500	31%
9	$2 000 000	$400,000	$1,600,000	$493,150	31%
10	$2,000,000	$400,000	$1,600,000	$493,500	31%
11	$2,000,000	$400,000	$1,600,000	$493,150	31%
12	$2 000,000	$400 000	$1 600,000	$493,500	31%
13	$2,000,000	$400,000	$1,600,000	$493,150	31%
14	$2,000,000	$400,000	$1,600,000	$493,500	31%
15	$2,000 000	$400,000	$1,600,000	$493,150	31%
16	$2 000,000	$400 000	$1,600,000	$598,750	37%
17	$2,000 000	$400,000	$1,600,000	$700 000	44%
18	$2,000 000	$400,000	$1,600 000	$700 000	44%
19	$2,000 000	$400 000	$1,600,000	$700 000	44%
20	$2,000,000	$400,000	$1,600,000	$700,000	44%
21	$2,000,000	$400,000	$1,600,000	$700,000	44%
22	$2,000,000	$400 000	$1,600,000	$700 000	44%
23	$2,000,000	$400,000	$1,600,000	$700,000	44%
24	$2,000,000	$400,000	$1,600,000	$700,000	44%
25	$2,000,000	$400,000	$1,600,000	$700,000	44%
Total			$40,000,000	$14,000,000	
Ratio of Taxes to Taxable Income				35 0%	

Exhibit 6

Comparison of Statutory Tax Rate to Cash Tax Rate Reflecting Accelerated Depreciation Benefits Over the Life of an Asset