ASSOCIATION OF
AMERICAN RAILROADS

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June 22, 2011

Honorable Cynthia T. Brown
Chief, Section of Administration
Surface Transportation Board
395 E St., S.W.
Washington, DC 20423

Re: STB Ex Parte No. 558 (Sub-No.14), Railroad Cost of Capital—2010

Dear Ms. Brown:

Pursuant to the Decision served by the Board on February 22, 2011 (as amended May 18, 2011), attached please find the Rebuttal Comments of the Association of American Railroads in the above proceeding. Please note that the work papers for this filing are included in Mr. Gray's Verified Statement as Tables A-E.

Respectfully submitted,

Louis P Warchot

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Counsel for the Association of
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Enclosures

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BEFORE THE
SURFACE TRANSPORTATION BOARD

RAILROAD COST OF CAPITAL — 2010	)	EX PARTE NO. 558 (Sub- No. 14)

REBUTTAL COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS AND ITS MEMBER RAILROADS

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June 22, 2011

SURFACE TRANSPORTATION BOARD

RAILROAD COST OF CAPITAL — 2010	)))))	EX PARTE NO. 558 (Sub- No. 14)

REBUTTAL COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS AND ITS MEMBER RAILROADS

By order served February 22, 2011, the Board instituted this proceeding to determine the railroad industry's cost of capital for the year 2010. In its order, the Board sought comment "on the following issues: (1) the railroads' 2010 current cost of debt capital; (2) the railroads' 2010 current cost of preferred equity capital (if any); (3) the railroads' 2010 cost of common equity capital; and (4) the 2010 capital structure mix of the railroad industry on a market value basis." *See* Ex Parte No. 558 (Sub-No. 14), *Railroad Cost of Capital – 2010* (Served February 22, 2011) (Slip Op. at 1).

In its February 22, 2011 order, the Board specifically required that the longstanding existing criteria established in Railroad Cost of Capital—1984, 1 I.C.C. 2d 989 (1985) be used for determining whether a rail carrier qualified for inclusion in the sample base of railroads used to calculate the rail industry's 2010 cost of capital.[1] *Id.* at 2. The Board also noted its

[1] These criteria are as follows: (1) the company is a Class I line-haul railroad; (2) if the Class I railroad is controlled by another company, the controlling company is primarily a railroad company and is not already included in the study frame; (3) the company's bonds are rated at least BBB by Standard & Poor's and Baa by Moody's; (4) the

expectation that BNSF Railway Company would not be included in the 2010 sample base because it did not meet the above criteria.[2] *Id.* The Board's February 22, 2011 order further specified that "[c]omments should focus on the various cost of capital components listed above using the methodology followed in Railroad Cost of Capital—2009." *Id.*

On April 29, 2011, in response to the Board's February 22, 2011 order, the railroads, through the Association of American Railroads ("AAR"), submitted their calculation of the 2010 cost of capital using the criteria and methodology specified by the Board. BNSF was not included in the sample base because the AAR found that BNSF failed to meet the criteria for inclusion prescribed by the Board.[3] The AAR calculated the railroads' overall cost of capital for 2010 at 11.03 percent, including a cost of common equity of 12.99 percent and a cost of debt of 4.61 percent.

On June 2, 2011, the Western Coal Traffic League ("WCTL") filed reply comments in this proceeding. In its reply comments WCTL concurred in the AAR's calculation of the cost of equity under the Capital Asset Pricing Model (CAPM) of 11.84 % using the AAR's three-railroad composite for the sample base.[4] WCTL also agreed that the AAR's calculation of the cost of equity under the MSDCF methodology of 14.13 % was correctly made "in a manner

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company's stock is listed on either the New York or the American Stock Exchange; and (5) the company has paid dividends throughout 2010.

[2] As noted by the Board: "Due to the acquisition of BNSF Railway Company (BNSF) by Berkshire Hathaway, Inc., in the beginning of 2010, it is our expectation that BNSF will not be included in the 2010 sample base because BNSF does not meet the above criteria." *Id.*

[3] The data sample used by the AAR is based on a three-railroad composite (CSX Corporation ("CSX"), Norfolk Southern Corporation ("NS") and Union Pacific Corporation ("UP")) that is representative of the railroad industry. *See* Opening V.S. Gray at p. 5; Gray Rebuttal V.S. at 9-11.

[4] *See* Reply Verified Statement of Thomas D. Crowley and Daniel L. Fapp ("Crowley/Fapp VS") at 5.

consistent with the STB's prior decisions."[5] WCTL further agreed with the AAR's calculation of the cost of debt (4.61 %),[6] the cost of preferred equity (0%),[7] and the capital structure mix of the railroad industry (23.37 % debt / 76.63% common equity).[8]

WCTL, however, claimed that: (1) the AAR used "stale" growth rates in calculating the cost of equity under the Multi-Stage Discounted Cash Flow model ("MSDCF") and that there should be an "adjustment" to the AAR's calculation that excludes all Institutional Brokers Estimate System (a/k/a "IBES") growth estimates originally prepared before 2010[9] and (2) the AAR should have included BNSF Railway Company ("BNSF") in the sample of railroads used to calculate one portion of the 2010 cost of capital even though BNSF no longer qualified for inclusion in the sample under the existing criteria as a result of its acquisition by Berkshire Hathaway in the beginning of 2010.[10] (Moreover, under the guise of a proposed "BNSF Adjustment", WCTL also included an additional adjustment to the CAPM methodology that would serve to lower the railroad industry's cost of capital even if BNSF were properly excluded

[5] *See* Crowley/Fapp VS at 9-11; WCTL, however, claimed that "the use of I/B/E/S consensus growth estimates has a flaw that leads to inaccurate results." *Id.* at 9. As discussed infra at 6, WCTL's alleged "flaw" (i.e., the use of allegedly "stale" growth rates in the IBES consensus growth estimates) is without foundation.

[6] *See* Crowley/Fapp VS at 16.

[7] *See* Crowley/Fapp VS at 18.

[8] *Id.*

[9] WCTL Comments at 4; Crowley/Fapp VS at 10-15.

[10] *See* WCTL Comments at 4-5 (conceding that "BNSF no longer qualifies for inclusion in the sample because BNSF represents less than 50 percent of the assets of Berkshire and Berkshire does not pay a dividend on its Class A or Class B common equity"); Crowley/Fapp VS at 22, 38. (contending nevertheless that "the STB should use one or more of the recognized methodologies for including BNSF in its cost of capital determinations" and that WCTL believes " including the BNSF in the STB's cost of capital calculation makes sense from both a financial and policy perspective").

from the sample.)[11] The proposed "adjustments" would reduce the 11.03 % overall cost of capital as calculated by the AAR to 10.60% and 10.45% respectively.

In its Rebuttal Comments (including the attached rebuttal verified statement ("V. S.") of Mr. Gray), the AAR shows: (1) that it correctly followed the methodology approved by the Board for calculating the growth rates used in the MSDCF cost of equity calculation and that the IBES growth rates used by the AAR were not "stale" and (2) that WCTL's effort to include BNSF in the sample base fails to follow the methodology adopted by the Board for the annual cost of capital proceeding and should be rejected by the Board. As the Board has made clear in previous cost of capital proceedings, reply comments that challenge the cost of capital methodology adopted by the Board for use in the annual cost of capital proceeding are improper and will not be considered by the Board.

For the reasons stated in the AAR's Rebuttal Comments, WCTL's challenges to the AAR's 2010 cost of capital calculations are without merit and should be rejected.

Discussion

1. The AAR Correctly Used the Methodology Approved by the Board in Relying on IBES Consensus Growth Rates in Calculating the Cost of Equity under the MSDCF Model; Moreover, the IBES Consensus Growth Rates Used by the AAR in the MSDCF Calculation Were All Based on Analysts' 2010 Estimates and Were Not "Stale"

WCTL contends that, although the AAR's calculation of the cost of equity under the MSDCF methodology was correctly made "in a manner consistent with the STB's prior decisions …the use of I/B/E/S consensus growth estimates has a flaw that leads to inaccurate results."[12] The "flaw" alleged by WCTL is that the IBES consensus growth rates used by the

[11] As explained by Mr. Gray, WCTL added a "Blume adjustment" to the industry beta used in the CAPM that would cause the model to calculate a lower cost of equity. See Gray Rebuttal V.S. at 6-9.

[12] Crowley/Fapp V.S. at 9.

AAR in its calculations were “stale” because “many of the growth rates were developed well before 2010.”[13]

As explained by Mr. Gray, all of the analysts’ growth rate projections used by the AAR in its MSDCF calculation were in effect at the end of 2010 and are taken from the Institutional Brokers Estimate System (a/k/a “IBES”) analyst growth rate estimates distributed by Thomson Financial through its Thompson ONE Investment Management Service. Gray Rebuttal V.S. at 2. As such, they are not only all-inclusive but current. Moreover, this is the same methodology approved by the Board in Ex Parte No. 558 (Sub-No. 13), *Railroad Cost of Capital – 2009* (Served October 29, 2010) (Slip Op. at 9-10). The AAR cannot be challenged for correctly following the methodology prescribed by the Board for calculating the cost of equity under the MSDCF model. Nor is the annual cost of capital proceeding the appropriate forum for challenging the Board’s approved methodology for calculating the cost of equity under the MSDCF model.[14]

Moreover, there is no “flaw” in the IBES consensus analysts’ growth estimates. As Mr. Gray notes, “[a]ll growth rates were reviewed by the analysts during 2010, as was stated in the far right column for all rates shown in my original Appendix L, and are therefore not ‘stale’. The oldest review date was September 24, 2010 (NS, BB&T)….” Gray Rebuttal V.S. at 2.

As Mr. Gray further notes, “[w]ithout the manipulation [of the growth rates], the WCTL MSDCF and overall cost of capital match the AAR.” *Id.* at 3.

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[13] Crowley/Fapp V.S. at 9.

[14] *See* discussion infra at 6-10.

2. WCTL's Effort to Include BNSF in the Sample Base Conflicts with Both the Board's Established Criteria for Inclusion in the Sample Base and the CAPM Methodology Adopted by the Board and Should be Rejected as Improper

The Board's February 22, 2011 order initiating this proceeding specifically required the parties to use the longstanding criteria adopted in Railroad Cost of Capital—1984, 1 I.C.C. 2d 989 (1985), for determining the railroads to be included in the sample base for the 2010 cost of capital calculation. See Ex Parte No. 558 (Sub-No. 14), *Railroad Cost of Capital – 2010* (Served February 22, 2011) (Slip Op. at 2). The Board's February 22, 2011 order also directed that "[c]omments should focus on the various cost of capital components listed above using the methodology followed in Railroad Cost of Capital—2009." *Id.*

The AAR, in its April 29, 2010 submission, followed the applicable criteria as directed by the Board and correctly excluded BNSF from the sample base because it did not meet the applicable criteria. *See* Gray V.S. at 4-5.[15] WCTL specifically acknowledges in its reply comments that BNSF is no longer qualified for inclusion in the sample railroads under the Board's applicable criteria.[16] Contrary to the Board's directives, however, WCTL nevertheless contends that BNSF should be included in the sample through such means as : (1) ignoring the Board's established criteria for inclusion in the sample base adopted by the Board in Railroad Cost of Capital—1984, 1 I.C.C. 2d 989 (1985) and (2) making a series of highly selective and inappropriate adjustments to the CAPM methodology adopted by the Board in STB Ex Parte No. 664, *Methodology to be Employed in Determining the Railroad Industry's Cost of Capital* (served January 17, 2008) and used by the Board in all successive annual cost of capital

[15] The AAR also followed the Board's prescribed methodology for calculating the cost of equity under the CAPM methodology. *See* Gray V.S. at 29-37.

[16] WCTL Comments at 4-5 ("BNSF was acquired by …Berkshire …in 2010. BNSF no longer qualifies for inclusion in the sample because BNSF represents less than 50 percent of the assets of Berkshire and Berkshire does not pay a dividend…."); Crowley V.S. at 20 ("With its acquisition by Berkshire and its delisting from the NYSE, BNSF no longer met the criteria to be included in the STB's cost of capital calculation").

proceedings.[17] WCTL's proposals to change the Board's established criteria and methodology for use in the annual cost of capital proceeding should be rejected as improper.

As the Board has repeatedly stressed, the annual cost of capital proceeding is not the proper forum for a party to propose changes to the Board's established cost of capital methodology (including the specific criteria to be used in selecting the sample base). As expressly emphasized by the Board:

> We have established a procedural framework whereby in the Ex Parte No. 558 sub-numbered proceedings (558 proceedings) to determine the annual cost-of-capital figure, we are limited to applying the cost-of-capital methodology in place at the time, as determined in the Ex Parte No. 664 proceeding (664 proceeding). See Methodology To Be Employed In Determining The Railroad Industry's Cost Of Capital, STB Ex Parte 664, slip op. at 18 (STB served Jan. 17, 2008) (Cost of Capital CAPM). Proposed changes to the cost-of-capital model will be entertained only in the 664 proceeding. This allows the Board to complete its annual cost-of-capital determination in a timely manner and to provide all stakeholders with a meaningful opportunity to comment on any proposed methodological changes. *Id* at 18.
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> We will not consider here the arguments presented by WCTL or AECC challenging our cost-of-capital methodology. It is settled administrative law that an agency need not, and as a matter of sound procedure should not, permit parties to relitigate generic rules in individual proceedings that apply those rules. See New Jersey Dept. of Environ. Protection v. NRC, 561 F.3d 132 (3d Cir. 2009) (state agency's attempt to relitigate generic environmental findings in an individual NRC proceeding amounted to a collateral attack on the NCR's licensing renewal regulations); Massachusetts v. NRC, 522 F.3d 115, 129-130 (1st Cir. 2008) (NRC reasonably refused to allow a state to intervene in an individual licensing proceeding to relitigate issues decided in a separate generic proceeding); Tribune Co. v. FCC, 133 F.3d 61, 68 (D.C. Cir. 1998) ("An agency need not – indeed should not – entertain a challenge to a regulation, adopted pursuant to notice and comment, in an adjudication or licensing proceeding"). Under our rules, WCTL and AECC must raise any challenges to our cost-of-capital methodology in a petition for a rulemaking. See Cost of Capital CAPM at 18 ("While in the past we have entertained challenges to the agency's model in the 558 proceedings, we will no longer do so. As such, future

[17] *See* Gray Rebuttal V.S. at 6-9, 11.

requests to [change our methodology] must be brought (in the form of a petition for rulemaking) in a 664 proceeding, not in the annual 558 proceeding, in which we calculate the cost of capital for a particular year.”).

Ex Parte No 558 (12), *Cost of Capital—2008*, Slip Op. at 2 (served Sept. 25, 2009). As in past cost of capital proceedings where the Board’s admonishment to the parties against proposing methodological changes in the annual cost of capital proceeding was ignored, such proposals should be given no consideration by the Board.[18]

Indeed, WCTL’s efforts to change the Board’s established criteria and methodology for calculating the cost of capital in this annual cost of capital proceeding is an especially egregious violation of the Board’s directives and procedures. WCTL was well aware from almost a year *before* the outcome of the Cost of Capital—2009 proceeding (served October 29, 2010) that it was highly probable that BNSF would be excluded from the sample base in post-2009 annual cost of capital proceedings as a result of the Berkshire acquisition (announced November 3, 2009).[19] Indeed, in its reply comments in Cost of Capital—2009 WCTL explicitly noted, in objecting to the suggestion by Kansas City Southern (“KCS”) that the Board promptly initiate a rulemaking to consider adding three additional rail carriers to the sample base in light of BNSF’s likely exclusion from the sample in future proceedings, that the “issue of how to calculate the

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[18] *See*, e.g., Ex Parte No. 558 (Sub-No. 12), *Railroad Cost of Capital – 2008,* Slip Op. at 2 (served Sept. 25, 2009) (“WCTL and AECC have mounted a broad-based collateral attack on our cost-of-capital methodology in this 558 proceeding. Most of their evidence and argument relate to the claim that we should change our cost-of-capital methodology just adopted in Cost of Capital MSDCF/CAPM, particularly the decision to utilize the Morningstar/Ibbotson multistage discounted cashflow model (MSDCF) as part of our estimate….We will not consider here the arguments presented by WCTL or AECC challenging our cost-of-capital methodology. It is settled administrative law that an agency need not, and as a matter of sound procedure should not, permit parties to relitigate generic rules in individual proceedings that apply those rules.”); *see also* Ex Parte No. 558 (Sub-No. 11), *Railroad Cost of Capital – 2007,* Slip Op. at 7 (served Sept. 26, 2008) (rejecting a beta calculation methodology used by WCTL that was a departure from the Board’s cost of capital methodology); *Cf*. Ex Parte No. 558 (Sub-No. 13), *Railroad Cost of Capital – 2009,* Slip Op. at 2 (served Oct. 29, 2010) (rejecting comments of parties on issues not raised in the Board’s order initiating the annual cost of capital proceeding).

[19] *See* Crowley V.S. at 20.

cost of capital in future years, when BNSF might no longer be considered in the analysis because it ceased to be traded earlier in 2010, was not included in the Board's Notice" and "that the issue is [not] properly noticed or implicated in the 2009 cost of capital determination." June 15, 2010 WCTL Reply Comments at 4. Thus, not only are the methodological issues that WCTL seeks to raise in this proceeding improper (and similarly beyond the scope of the Board's February 22, 2011 order), but also WCTL had ample time prior to the commencement of this proceeding to request the Board to initiate a rulemaking proceeding to consider its proposals. Despite the ample opportunity to properly bring its proposals to the Board prior to this annual cost of capital proceeding, however, WCTL simply declined to do so.

Further, as explained in Mr. Gray's verified statement, exclusion of BNSF from the sample base because it no longer qualifies for inclusion under the Board's criteria does not render the sample base non-representative of the industry. The purpose of the sample base is not to replicate a particular result but to serve as a representative proxy for the industry as a whole. As noted by Mr. Gray, the current sample base is composed of a three-railroad composite that includes three of the four largest U.S. Class I railroads (CSX, NS and UP). The three-railroad composite also accounts for 62.7 percent of the operating revenues and 54.2 percent of the assets of all Class I railroads.[20] Moreover, as demonstrated by Mr. Gray based on past cost of capital proceedings, the results from using the three-railroad composite do not differ significantly from those including BNSF in the sample base.[21] As such, there is no doubt that the three-railroad composite serves as a representative sample for the railroad industry as a whole.

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[20] *See* Gray V.S. at 4-5.

[21] *See* Gray V.S. at 5-7; see also Gray Rebuttal V.S. at 10-11 ("After the WCTL manipulation of the MSDCF [and CAPM] are removed, the WCTL "BNSF Adjustment" results in a cost of capital only 0.01 percentage points different from the AAR's three-firm calculation.").

WCTL's blatant and improper effort to manipulate the applicable methodology used in the annual cost of capital proceeding to produce a particular result favorable to WCTL should be rejected by the Board.

Conclusion

The Board should determine that the railroads' cost of capital for 2010 is 11.03 percent.

Respectfully submitted,

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Counsel for the Association of American Railroads
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June 22, 2011

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of June, 2011, I served by first class mail, postage prepaid, a copy of the forgoing on the following:

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BEFORE THE

SURFACE TRANSPORTATION BOARD

EX PARTE NO. 558 (Sub-No. 14)

RAILROAD COST OF CAPITAL — 2010

REPLY VERIFIED STATEMENT

OF

JOHN T. GRAY

SENIOR VICE PRESIDENT — POLICY AND ECONOMICS

ASSOCIATION OF AMERICAN RAILROADS

June 22, 2011

Table of Contents

Page

I. Introduction 1

II. General Comments 1

III. Detailed Comments 4

A. Thomson/IBES Growth Rate Estimates are Not Stale. 4

B. WCTL’s BNSF Adjustment. 6

C. Miscellaneous Comments 9

IV. Summary 13

Verified Statement

of

John T. Gray

I. Introduction

My name is John T. Gray. I am Senior Vice President – Policy and Economics of the Association of American Railroads (AAR), with offices at 425 Third Street, S.W., Washington, DC 20024. The AAR is the trade association of the Nation's major railroads, as well as the railroads of Canada and Mexico. The AAR's United States railroad members, which include all of the Class I railroads, account for about 95 percent of our Nation's total railroad freight operating revenue.

When appropriate, the AAR represents the railroad industry before government bodies, including economic regulatory proceedings before the Surface Transportation Board ("STB" or "Board"). In particular, the AAR has participated in all of the STB proceedings addressing revenue adequacy standards and the annual cost of capital determinations.

I submitted a verified statement on behalf of the Association of American Railroads in this proceeding on April 29, 2011, and a summary of my qualifications and experience appears at the end of that statement. In this submission, I am responding to comments filed by the Western Coal Traffic League (WCTL) on June 2, 2011.

II. General Comments

As an initial matter, I would like to make some summary observations about the Western Coal Traffic League (WCTL) reply comments. First, WCTL has ignored the Board's February 22, 2011 order in this proceeding that specifically requires the parties to use the longstanding criteria adopted in *Railroad Cost of Capital – 1984,* 1 I.C.C. 2d 989 (1985), for determining the railroads to be included in the sample base for the 2010 cost of capital calculation.[1] The AAR, in its April 29, 2011 submission, followed the applicable criteria as directed by the Board and correctly excluded BNSF from the sample base because it did not meet the applicable criteria. WCTL, by contrast, although it specifically acknowledges in its reply comments that BNSF is no longer qualified for inclusion in the sample railroads under the applicable criteria, simply ignores the Board's directive and contends that BNSF should nevertheless be represented in the sample by means of a series of improper "adjustments" to the Board's established methodology and criteria.[2] In addition, WCTL has improperly added a *new adjustment* to the Capital Asset Pricing Model's (CAPM) beta.[3] As the Board has stressed, the annual cost of capital proceeding is not the proper place for a party to propose methodological changes to the established requirements, and WCTL should be admonished to follow the Board's specific directives.

Second, this is the *second consecutive year* that WCTL has tried to manipulate the analyst growth rate inputs for the Multi-Stage Discounted Cash Flow model (MSDCF) used as one of two models for estimating the cost of common equity. The AAR growth rates are appropriate and all-inclusive. All growth rates were reviewed by the analysts during 2010, as was stated in the far right column for all rates shown in my original Appendix L, and are therefore not "stale". The oldest review date was September 24, 2010 (NS, BB&T). Review dates were discussed in my reply verified statement for *last* year, on pages 5 and 6 – and an example of the review date's location on the Thomson ONE printout was shown and circled on page 6 of last year's rebuttal. Without this manipulation, the WCTL MSDCF and overall cost of capital match the AAR.

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[1] Ex Parte No. 558 (Sub-No. 14), Railroad Cost of Capital – 2010, served February 22, 2011.
[2] Reply Verified Statement, Crowley and Fapp, pp. 20-22.
[3] Reply Verified Statement, Crowley and Fapp, pp. 36-37. WCTL's Blume Adjustment is a way to adjust a beta closer to 1.0 – resulting in a lower cost of equity when betas are above 1.0.

Third, the Blume adjustment, which artificially moves a CAPM beta closer to 1.0, was not proposed by WCTL when the railroad industry beta was *below* 1.0. This beta adjustment is not related to the inclusion or exclusion of BNSF from the industry calculation, and appears to be an attempt at justifying the lowering of the *entire industry's* beta value. Without the Blume adjustment, the WCTL CAPM (even with an inappropriate and unsupportable beta value for BNSF) results in an 11.81 percent cost of equity – very close to the AAR's CAPM value of 11.84 percent.

Fourth, in spite of WCTL's criticism concerning BNSF's exclusion from the 2010 cost of capital, WCTL offers no analytically rigorous alternative to the AAR's computation (that followed STB procedure) for other aspects of the cost of capital calculation, such as the MSDCF, cost of debt, and capital structure. The inclusion of any type of BNSF proxy is inappropriate and vulnerable to manipulation. The fact that WCTL chose a BNSF adjustment for only one portion of the cost of capital calculation causes one to suspect that the adjustment was selective and self-serving.

Finally, after numerous pages of WCTL criticism about excluding BNSF (even though STB rules and procedure mandate the exclusion), the WCTL calculation almost matches the AAR calculation – after the WCTL manipulations are removed from the MSDCF and CAPM. Without the WCTL data manipulation in the MSDCF, and without the inappropriate Blume adjustment to the CAPM, the WCTL cost of capital is 11.02 percent. *This is a difference of 0.01 percentage points from the AAR.* Effectively, all WCTL has done with their reply filing is confirm AAR's contention that, computed correctly, the absence of BNSF has little or no impact on the final cost of capital.

III. Detailed Comments

A. Thomson/IBES Growth Rate Estimates are Not "Stale"

WCTL claims that half of the Thomson/IBES growth rates used as inputs to the MSDCF are too old to be used because they were originally developed before 2010.[4] By eliminating these selected "stale" growth rate estimates, median growth rates become lower, and the WCTL version of the MSDCF estimates a lower cost of equity. Similar to last year, WCTL has tried to eliminate some of the higher growth rate inputs to the MSDCF equation.[5]

The table below shows WCTL and AAR growth rates. WCTL has eliminated many of the higher rates.

Table A
2010 Median Growth Rates for MSDCF

WCTL Growth Rates

	Analyst Growth Rates from IBES December 31						
Company	**Rate 1**	**Rate 2**	**Rate 3**	**Rate 4**	**Rate 5**	**Rate 6**	**Median**
CSX	7.9	--	2.5	--	17.3	--	**7.90**
NSC	0.7	--	2.5	--	15.2	--	**2.50**
UNP	29.1	--	2.5	--	18.5	--	**18.50**

Simple Average of WCTL Medians = 9.63 percent.

AAR Growth Rates (from Gray's Appendix L)

	Analyst Growth Rates from IBES December 31						
Company	**Rate 1**	**Rate 2**	**Rate 3**	**Rate 4**	**Rate 5**	**Rate 6**	**Median**
CSX	7.9	15.0	2.5	10.0	17.3	13.0	**11.50**
NSC	0.7	15.0	2.5	12.0	15.2	12.0	**12.00**
UNP	29.1	10.0	2.5	15.0	18.5	15.0	**15.00**

Simple Average of AAR Medians = 12.83 percent.

The claim that the AAR is using "stale" or inappropriate growth rates is misleading and wrong. What WCTL fails to report is that all of the growth rate estimates they contest were

[4] Reply Verified Statement of Thomas D. Crowley and Daniel L. Fapp on behalf of the Western Coal Traffic League, June 2, 2011, pp. 11-13.
[5] See pages 5 – 7 in my reply statement for last year, dated July 15, 2010.

reviewed in 2010 by the analysts responsible for their maintenance and accuracy. As can be easily seen in the source documents from my April 29 Appendix L, all of the rates on the downloaded data pages were reviewed during 2010. As an example, I have a portion of the CSX growth rate estimates from my April 29 Appendix L shown below. The review dates are on the far right. The CSX review dates are all from October, November, or December of 2010. None of the review dates are for a year different than 2010.

Estimate Detail

View: Normal

Filter	Broker	Analyst	Current	Date	Prior	Date	Review
☑	BB&T CAPITAL MARKETS	MIMS J	7.90 ↑	Sep 24, 10	7.60	Jun 16, 10	Oct 15, 10
☑	BOFA MERRILL LYNCH	HOEXTER K	15.00 ↑	Jul 16, 08	12.00	Sep 13, 02	Dec 20, 10
☐	MACQUARIE RESEARCH	FLOWERS	2.50	Jul 01, 10	NA	NA	Oct 15, 10
☑	MORGAN, KEEGAN & COMPANY, INC.	HATFIELD A	10.00	May 18, 07	NA	NA	Oct 15, 10
☑	MORNINGSTAR, INC.	SCHOONMAKER K	17.30 ↓	Nov 22, 10	17.40	Oct 15, 10	Nov 22, 10
☑	WELLS FARGO SECURITIES, LLC	GALLO A	13.00	Dec 17, 09	NA	NA	Oct 13, 10
☐	BMO CAPITAL MARKETS-CANADA		PERMISSION DENIED				

There is no reason to exclude any growth rate numbers. If there was a problem with a number, Thomson would not have included it in the publication. Clearly, since Thomson has published these growth rate estimates as "stand alone" growth estimates, they have passed all "quality control" processes that Thomson found necessary. There is no problem with the quality of the growth rate projections – they are not "stale".

To summarize, the AAR has correctly included all Thomson growth rates available, all rates were reviewed during 2010, and all rates were made available in Appendix L in my April 29 statement. WCTL has manipulated results by using the claim that Thomson was publishing stale data as justification for omitting some of the higher growth rates. Without WCTL's selective omission of growth rate projections, WCTL's MS-DCF matches the AAR's 14.13 percent.

B. WCTL's BNSF Adjustment

WCTL says "Inclusion of some adjustment for the exclusion of BNSF is appropriate…."[6] While WCTL devotes numerous pages arguing for *including* some type of *adjustment* to proxy for BNSF, in their reply statement for the 2009 cost of capital, they devoted numerous pages arguing *against adding* other railroads to the composite group.[7] WCTL also found it appropriate to manipulate the CAPM process, using BNSF as the excuse for doing so, but did not find it useful to adjust the MSDCF, cost of debt, or capital structure. WCTL devotes several pages to the importance of BNSF – first for the inclusion of BNSF in the calculation, and then for an adjustment to BNSF's beta value if BNSF is included in the cost of capital. However, the WCTL industry beta that includes a proxy for BNSF does not produce a cost of equity that is significantly different from the AAR's calculation. The WCTL adjustment appears to have two main steps: estimate a beta that includes a proxy for BNSF, then adjust downward. For the first step, WCTL uses a questionable method to estimate "a weighted-average beta for the railroad industry, including the impact of BNSF", which equals 1.1576."[8] Since WCTL did not provide the cost of equity that results from their 1.1576 beta, I have completed this calculation below. This WCTL industry beta of 1.1576 results in a CAPM cost of equity of 11.81 percent (see Table B) – not much different than the AAR's 11.84 percent. The resulting cost of equity using both the MSDCF (without inappropriately removing any growth rate estimates) and the WCTL beta is 12.97 percent – very little difference from the AAR's 12.99 percent that does not use an artificial adjustment for BNSF.

[6] WCTL reply Statement, p. 7.
[7] Reply Verified Statement of Thomas Crowley and Daniel Fapp on behalf of Western Coal Traffic League, July 15, 2010, pp. 27-34.
[8] Reply Verified Statement of Thomas D. Crowley and Daniel L. Fapp, June 2, 2011, p. 36.

Table B
WCTL Cost of Common Equity
Using STB's Capital Asset Pricing Model

Inputs to Model			
Risk-Free Rate	4.03	%	AAR Table No. 13
Market Risk Premium	6.72	%	SBBI, p.54
Beta	1.1576		WCTL, p. 36
Calculation			
Risk-Free Rate	4.03	%	Given
Plus: Beta Adjusted Risk Premium	7.78	%	Beta x MRP
WCTL CAPM Cost of Equity	11.81	%	RF Rate + Prem.

WCTL Cost of Common Equity Capital

Model			
Capital Asset Pricing Model	11.81	%	WCTL
Multi-Stage Discounted Cash Flow	14.13		AAR Table No. 18
Cost of Common Equity	12.97	%	Average

The word "adjust" is the important word in WCTL's BNSF exercise. After WCTL's BNSF adjustment derives a 1.1576 beta (and a cost of equity similar to the AAR's calculation), WCTL conducts a second step that makes an additional "adjustment". Although it purports to be, this is not a BNSF-focused adjustment – it is merely a way for WCTL to attempt to lower the beta of the entire rail industry. WCTL said "because we are using an estimated beta for BNSF, we applied a Blume Adjustment to the beta estimate." [9] However, the Blume Adjustment was then applied to the *industry* beta instead of their estimated BNSF beta.[10]

The Blume Adjustment is inappropriate for rail industry purposes, and is not part of the Board's CAPM procedure. WCTL says that the purpose of the Blume Adjustment is "to account for the fact that returns tend to shift toward the market over time". However, by recalculating

[9] Crowley and Fapp, p. 36.
[10] Crowley and Fapp, p. 37.

beta each year, the STB approach is already accounting for any trends in the beta value. WCTL cites Ibbotson as a source for the Blume Adjustment, possibly in an attempt to gain credibility.[11] However, WCTL does not mention Ibbotson's comments about the Blume Adjustment, and does not mention the fact that the Blume Adjustment *is not used by Ibbotson.* Ibbotson uses the Vasicek adjusted beta for single-company betas, "which seeks to overcome one weakness of the Blume model by not applying the same adjustment to every security; rather, a security-specific adjustment is made depending on the statistical quality of the regression."[12] The Vasicek adjusted beta modifies individual company betas toward that *particular industry's average* instead of toward the market average of 1.0, and each company will have a different adjustment. This adjustment compensates for individual-company beta regressions that have low statistical quality – not any tendency toward the market average.

Both the Blume and Vasicek adjustments are for the *beta of an individual firm.* They were not meant to adjust betas for a particular industry. WCTL is trying to indiscriminately apply a single-company beta adjustment to an industry beta. They provide no arguments for why an adjustment should be appropriate – only that it is used by some analysts in some undefined circumstances. If it is appropriate for any adjustment to be utilized (and there is no evidence that any adjustment of any kind is appropriate), then the circumstances of this proceeding would seem to dictate an adjustment which drives the beta of an individual stock in question closer to its industry peers.[13] This is moot however, because the composite railroad is used to calculate the Board's beta, and this beta is already an industry beta – not an individual company beta. Even to

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[11] Crowley and Fapp, p. 36, footnote 51.
[12] Ibbotson SBBI 2011 Valuation Yearbook, p. 76.
[13] Only in cases where the statistical quality of the individual stock's beta calculation is poor.

apply the Vasicek adjustment to the composite railroad would not make sense, since an industry beta would be adjusted to be closer to itself.

To summarize, WCTL's BNSF adjustment is not really a BNSF adjustment – it is merely a way for WCTL to add an inappropriate method to reduce the cost of equity estimated by the CAPM. Without WCTL's manipulations (Blume Adjustment and improper elimination of higher growth rate estimates used by the MSDCF), their cost of capital would be 11.02 percent (see Table C) – very close to the AAR's 11.03 percent.

Table C
WCTL Weighted Current Cost of Capital for 2010

	Source Table	Capital Structure Weight	Current Cost
Debt	11	23.37 %	4.61 %
Common Equity	B	76.63	12.97
Preferred Equity	(Text)	0.00	n/a
Total		100.00 %	
Weighted Current Cost of Capital			**11.02 %**

C. Miscellaneous Comments

My major points in this rebuttal are that WCTL has used inappropriate manipulations to the MSDCF and CAPM, and their results without the manipulations almost exactly match the AAR calculation that used the Board's procedures. However, there are several additional aspects of WCTL's reply that merit attention.

Relative Size of the Railroad Composite Sample - WCTL's Table 7, "Class I Railroad Market Caps – January 2010", is somewhat misleading. First, WCTL is critical of my Table No. 2, which shows that the three-firm-composite accounts for 63 percent of Class I railroad revenue, and 54 percent of Class I railroad assets.[14] The purpose of my Table No. 2 is to show how the composite railroad compares to all Class I railroads in the United States – the railroads regulated by the Board. WCTL's Table 7 includes market capitalization that represents both U.S., Canadian, and Mexican assets. Notice that WCTL's CN is larger than NS and KCS combined, which is not representative of the situation in the United States. By including capitalization that represents additional assets instead of only U.S. assets, WCTL has artificially inflated the denominator of the equation. The inflated denominator results in a lower percentage (49.5 percent) for the composite railroad. If one were to shrink the WCTL market capitalization to exclude non-U.S. assets, then the resulting percent of total for the composite railroad would be closer to my Table No. 2. In Tables D and E below, I have used a simple method to remove the non-U.S. portion of WCTL's market capitalization figures.[15] The adjusted number shows 58.6 percent – much closer to the AAR numbers in my Table No. 2.

[14] Crowley and Frapp, p. 22.

[15] Operating Revenue for 2009 from the AAR's *Railroad Facts, 2010 Edition*, was used for simplicity and availability. Other methods should provide similar results: the denominator of the percentage equation will be smaller, and the percentage for the composite railroad will increase away from the WCTL 49.5 percent.

Table D
U.S. Portion of Railroad Companies

Railroad	Railroad Operating Revenue ($000)	Parent Operating Revenue ($000)	Pct. U.S.
BNSF	$16,929,321		
CN/CNGT	2,533,991	$6,450,963	39.28%
CSX	10,181,605		
KCS/KCSM	1,015,887	1,631,888	62.25%
NS	9,516,435		
CP/SOO	1,293,832	3,828,000	33.80%
UP	16,934,844		
Total	$58,405,915		

Operating Revenue from AAR's Railroad Facts, 2010 edition.

Table E
WCTL's Market Capitalization

	US-Only	WCTL Mkt Capitalization	
	Portion	Report	Corrected
BNSF	100.00%	$33.8	$33.8
CN	39.28%	25.0	9.8
CP	33.80%	7.8	2.6
CSX	100.00%	17.6	17.6
KCS	62.25%	3.0	1.9
NS	100.00%	18.3	18.3
UP	100.00%	32.2	32.2
Total		$137.7	$116.2
CSX + NS + UP		$68.1	$68.1
% Total		**49.46%**	**58.59%**

An artificial BNSF is not necessary - Despite all of the WCTL criticism concerning BNSF, WCTL has, in effect, confirmed the AAR's contention that the three-firm composite should represent the railroad industry as well as the four-firm composite does. After the WCTL manipulation of the MSDCF and Blume Adjustment are removed, the WCTL "BNSF Adjustment" results in a cost of capital only 0.01 percentage points different from the AAR's three-firm calculation.

Inappropriateness of a BNSF Adjustment - In addition to the fact that WCTL's BNSF Adjustment, stripped of their manipulations, essentially results in a cost of capital that is no different from the three-firm calculation, I question the appropriateness of the adjustment. The use of unlevered betas has never been embraced in cost of capital proceedings. A debt/equity ratio is only one, and certainly a very incomplete, measure of financial risk. The capital structure of Berkshire Hathaway is very different from BNSF, and its market capitalization represents a conglomerate of industries with risk profiles vastly different from that of the rail industry. I question the appropriateness of using financial data for a conglomerate – one that gets a significant portion of its earnings from insurance companies and consumer products – for any part of the capital-intensive railroad industry's cost of capital calculation. Using proxies, adjustments, and business segments is a process that is very subjective – and can "open the door", as WCTL has demonstrated with its Blume Adjustment, to artificially-created mischief. These subjective modifications are in no manner appropriate in a proceeding whose intent is to replicate the rail industry's cost of capital. The cost of capital process deserves the most fact-based analysis available, not a self-serving, artificial construct. In contrast to the methods used in the WCTL filing, AAR has consistently and rigorously applied the rules and methodologies specified by the STB. WCTL acknowledges as much in their filing. The STB method was determined through a thoughtful process designed to ensure the analysis reasonably captures a difficult concept in a way that attempts to be fair to all parties in the proceeding. The fact that WCTL does not like the results of a process that was determined to be fair provides no justification for their attempts to manipulate the process to achieve a pre-determined outcome.

<u>WCTL Tables 8 and 9 - Impact of Removing BNSF</u> - The small 0.01 percentage point difference between the AAR cost of capital for 2010 and WCTL's version without the manipulations adds to the irrelevance of WCTL's Tables 8 and 9 that make comparisons to the cost of capital with and without BNSF – since an adjustment to "include" BNSF makes no difference without some type of manipulation. In addition, WCTL's with/without BNSF cost of capital tables contain results back to 1998 using the methodology applicable during each year.[16] However, any cost of capital calculations using old methodology are irrelevant for the purpose of demonstrating the impact of removing BNSF from the composite railroad – since we are not using the old methodology anymore. What is relevant to an analysis of the impact of BNSF's

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[16] WCTL, p. 5; and WCTL's Crowley and Fapp, p. 27.

removal from the cost of capital calculation is how that removal will influence the results going forward. This can only be estimated by applying current methods. WCTL itself did not support the old cost of capital methodology, and submitted an alternative calculation method in its reply comments for the 2005 cost of capital.[17] Therefore, WCTL's Tables 8 and 9 are mostly extraneous, and the AAR has not verified any of the calculations. The AAR's "with/without" comparisons of cost of capital calculations for 2006 through 2010 use the CAPM and MSDCF for determining the cost of equity, and these are the relevant comparisons.

IV. Summary

The original April 29, 2011, AAR calculation for the cost of capital appropriately yields a cost of capital of 11.03 percent. No adjustments, surrogates, omissions, or changes to the STB methodology were made by the AAR in its calculation. We believe that the types of adjustments proposed by WCTL are simply an attempt to manipulate numbers in order to achieve a desired result. After stripping away these manipulations, WCTL's own numbers agree with the AAR calculation.

[17] Ex Parte No. 558 (Sub-No. 9), Reply Comments of the Western Coal Traffic League, April 28, 2006.

VERIFICATION

WASHINGTON, D.C.)
) SS.

I, John T. Gray, being duly sworn, state that I have read the foregoing statement, that I know its contents, and that those contents are true as stated.

____
JOHN T. GRAY

Subscribed and sworn to before me this 21st day of June 2011.

____
Notary Public

My Commission expires:

Pamela C. Nwosu
Notary Public, District of Columbia
My Commission Expires 2/14/2012

PAMELA C. NWOSU NOTARY PUBLIC DISTRICT OF COLUMBIA