

STEPTOE & JOHNSON^{LLP}
ATTORNEYS AT LAW

228290

NOV 22 2010
1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Tel 202.429.3000
Fax 202.429.3902
steptoe.com

Samuel M Sipe Jr.
202 429 6486
ssipe@steptoe.com

November 22, 2010

VIA HAND DELIVERY

ENTERED
Office of Proceedings

NOV 22 2010

Part of
Public Record

Ms. Cynthia Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, SW
Washington, DC 20423-0001

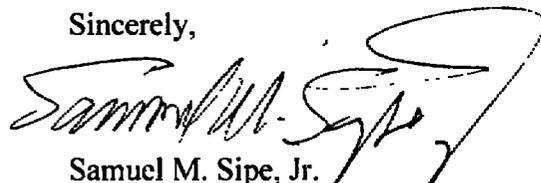
Re: ***AEP Texas North Company v. BNSF Railway Company,***
STB Docket No. 41191 (Sub-No. 1)

Dear Ms. Brown:

Enclosed are an original and ten copies of Comments of BNSF Railway Company on Remand in the above-referenced proceeding. Also enclosed is a CD containing a PDF version of the filing. Please note that the filing contains two color exhibits, which are attached to the Verified Statement of Robert S. Hamada and Rajiv B. Gokhale. The filing is public. We have included one unbound copy of the public filing to be uploaded onto the Board's webpage.

Please address any questions concerning this filing to the undersigned.

Sincerely,



Samuel M. Sipe, Jr.
Counsel for BNSF Railway Company

Enclosures

cc: Parties of Record (with enclosures)

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

228290
NOV 22 2010
H.L.

AEP TEXAS NORTH COMPANY

Complainant,

v.

BNSF RAILWAY COMPANY

Defendant.

Docket No. 41191 (Sub-No. 1)

ENTERED
Office of Proceedings

NOV 22 2010

Part of
Public Record

COMMENTS OF BNSF RAILWAY COMPANY ON REMAND

In *AEP Texas North Company v. Surface Transportation Board*, 609 F.3d 432 (June 18, 2010) (“*AEP Texas v. STB*”), the United States Court of Appeals for the District of Columbia Circuit (“D.C. Circuit”) remanded the Board’s May 15, 2009 decision in *AEP Texas North Company v. BNSF Railway Company*, STB Docket No. 41191 (Sub-No. 1) (May 15, 2009) (“*May 2009 Decision*”) for further consideration of the 2005 cost of capital used in the stand-alone cost (“SAC”) analysis. For the reasons set out in these remand comments and in the verified statement of Professor Robert S. Hamada and Rajiv B. Gokhale attached to these remand comments (“*Hamada/Gokhale V.S.*”), the Board should not depart from its original treatment of the 2005 cost of capital in the *May 2009 Decision*.

I. SUMMARY OF ARGUMENT

The Board correctly found in its *May 2009 Decision* that a retroactive restatement of any prior year cost of capital determination would be inappropriate. The Board’s cost of capital determinations are important to railroad investors because they let investors know the returns on

railroad capital investments that the Board will allow in a particular year. A retroactive restatement of a prior year cost of capital determination would undermine investor expectations as to the permissible level of returns on investments and have an adverse impact on the willingness of investors to make future capital investments in the railroad industry. For several reasons, the Board's conclusion was appropriate as specifically applied to the 2005 cost of capital determination as well as to the cost of capital determinations for prior years. That conclusion should not be disturbed on remand.

First, as explained by Professor Hamada and Mr. Gokhale, substantial railroad investments were made in 2005, before there was any indication that the Board's longstanding discounted cash flow ("DCF") methodology would be challenged. The 2005 investors had a valid basis for assuming that the Board would continue using the model that had been in place since 1981 and their expectations would be undermined by the use of a new model that was not even under consideration at the time the investments were made.

Second, post-2005 investors may have known about the shippers' challenge to the 2005 cost of capital determination, but those investors also had a reasonable basis for assuming that the Board would not reach back and restate the 2005 cost of capital. The Board has never found that the 2005 DCF-based cost of equity capital determination was erroneous or invalid. The Board replaced the DCF model to determine the cost of equity capital because the Board concluded that the Capital Asset Pricing Model ("CAPM") had become the preferred, modern model, not because it found that the existing model was flawed. But investors know that cost of capital models are constantly evolving and being developed and they would not expect the Board to reach back and restate prior year cost of capital determinations simply because a particular model has gained currency.

Third, and perhaps most important, Professor Hamada and Mr. Gokhale explain that the Board would create an atmosphere of confusion and uncertainty for future investors if it were to make an *ex post* change to the 2005 cost of capital determination simply because the Board has now concluded that the CAPM model (or the current CAPM/DCF model) is a preferable model to the single-stage DCF model that the Board originally used in 2005. New cost of capital models are constantly emerging. By signaling a willingness to adopt new models on an *ex post* basis, the Board would leave future investors uncertain as to what return the Board would ultimately allow for a particular year's investments. Such regulatory uncertainty would likely discourage future investment.

In its *May 2009 Decision*, the Board reasonably found that there was no objective basis for concluding that its 2005 cost of capital determination was incorrect or invalid. The Board properly referred to a chart that included the cost of capital estimates produced by a number of widely used cost of capital models to support its conclusion. The chart demonstrated that all models produced results that differed significantly in particular years from the results of the other models. There was nothing about the 2005 DCF-based results to indicate that those results were unreliable or erroneous. Moreover, as explained by Professor Hamada and Mr. Gokhale, the reasonableness of a model's results is best evaluated over time, and it is clear that over time the DCF results are well within the boundaries of estimates produced by other commercially available models.

II. BACKGROUND

The question on remand involves the Board's treatment of the year 2005 cost of capital in the SAC analysis underlying the Board's *May 2009 Decision* in this rate case brought by AEP Texas North Company ("AEP Texas"). The stand-alone railroad's ("SARR") cost to obtain

capital for the construction of the SARR is an important element in the SAC analysis. The Board's longstanding practice in SAC cases is to assume that the SARR has the same cost of capital as the railroad industry. Thus, for the historical years of the SAC analysis, the Board's SAC calculations use the Board-determined railroad industry cost of capital for each historical year. For future years, the Board uses an average of the historical years' cost of capital.

The Board's railroad industry cost of capital determination for a particular year is generally made relatively late in the following year when the data needed for the cost of capital determination have become available. For example, the Board's year 2005 cost of capital determination was not made until September 20, 2006. *See Railroad Cost of Capital – 2005*, STB Ex Parte No. 558 (Sub-No. 9) (STB served Sept. 20, 2006) (“*2005 Cost of Capital*”). In an April 2006 pleading in the 2005 cost of capital proceeding, Western Coal Traffic League (“WCTL”) asked the Board to determine the 2005 cost of equity capital using a different methodology from the discounted cash-flow (“DCF”) methodology that the Board and the Interstate Commerce Commission (“ICC”) had used since 1981. The Board declined to adopt a new methodology to determine the cost of equity capital for 2005, a year which was already in the past. The Board noted that the “norm of regularity in government conduct” counseled strongly against “swing[ing] back-and-forth between parties’ preferred methodologies.” *2005 Cost of Capital*, slip op. at 7. However, the Board indicated that it would consider changing its cost of capital methodology going forward.

On September 10, 2007, the Board issued a decision in this case, finding that AEP Texas had failed to show that the challenged rates exceeded maximum reasonable rates. *AEP Texas North Company v. BNSF Railway Company*, STB Docket No. 41191 (Sub-No. 1) (September 10, 2007) (“*September 2007 Decision*”). The Board's SAC calculations followed the Board's

practice of using the railroad industry cost of capital for historical years and an average of the historical years' cost of capital for future years. AEP Texas sought reconsideration of that decision on the ground, among others, that the Board should not have used the railroad industry's 2005 cost of capital in the SAC calculations since the Board was considering changes to the methodology that it would use to make future railroad industry cost of equity capital determinations. According to AEP Texas, the Board's consideration of a new methodology was a tacit acknowledgment that the old methodology was flawed. *See* AEP Texas' Petition for Reconsideration, at pages 6-10 (filed October 22, 2007). A month before the *September 2007 Decision*, the Board had issued a Notice of Proposed Rulemaking in which the Board proposed to replace the existing DCF methodology for determining the railroad industry cost of equity capital in future years with a new methodology based on the Capital Asset Pricing Model. *Methodology To Be Employed In Determining The Railroad Industry's Cost Of Capital*, STB Ex Parte No. 664 (STB served Aug. 20, 2007).

While AEP Texas' Petition for Reconsideration was pending before the Board, the Board decided to adopt the CAPM methodology in determining the railroad industry cost of capital for 2006 and subsequent years. *Methodology To Be Employed In Determining The Railroad Industry's Cost Of Capital*, STB Ex Parte No. 664 (STB served Jan. 17, 2008) ("*CAPM Decision*"). The Board did not base its decision to adopt the CAPM methodology on a finding that the prior model had produced erroneous or invalid results for any prior year, including 2005, but rather it concluded that "the time has come to modernize our approach to address concern over continued use of the 1981 DCF model." *Id.*, slip op. at 7. *See also Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital*, STB Ex Parte No. 664 (Sub-No.1), slip op. at 2 (STB served Feb. 11, 2008) ("We concluded that the time

had come to modernize our regulatory process and replace the aging single-stage DCF model that had been employed since 1981.”)

At the same time that AEP Texas’ Petition for Reconsideration was pending before the Board, WCTL was pursuing an appeal to the D.C. Circuit of the Board’s 2005 cost of capital determination. WCTL argued that the Board should have used the CAPM model to determine the 2005 cost of capital because CAPM was superior to the DCF model and it produced a better cost of capital estimate. Shortly after the Board issued its *CAPM Decision*, the D.C. Circuit dismissed WCTL’s appeal. See *Western Coal Traffic League v. STB*, No. 07-1064, 264 F. App’x 7, 2008 WL 441813 (D.C. Cir. Feb. 1, 2008). The Court ruled that if WCTL wished to maintain a challenge to the Board’s 2005 cost of capital determination in light of the Board’s *CAPM Decision*, WCTL should pursue such a challenge through a reopening of the Board’s 2005 cost of capital decision. WCTL did not pursue a reopening.

In the course of proceedings in the WCTL appeal of the *2005 Cost of Capital* decision, the Board stated to the Court that the Board would consider in the context of an individual rate reasonableness case whether it would be appropriate to restate the 2005 cost of capital determination using a newly adopted methodology. Consistent with this representation to the Court, on May 29, 2008, the Board ruled on AEP Texas’ Petition for Reconsideration and called for briefing by the parties on the proper treatment of the cost of capital in the SAC calculations in light of the Board’s adoption of a new cost of capital methodology. Both parties submitted supplemental evidence and argument.

While the Board was considering the parties’ evidence and argument on reconsideration, the Board modified once again the methodology used to calculate the railroad industry cost of equity capital. *Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad*

Industry's Cost of Capital, STB Ex Parte No. 664 (Sub-No.1) (STB served Jan. 28, 2009) (“*CAPM/DCF Decision*”). The new methodology, which was intended to be used for 2008 and subsequent years, made cost of equity calculations using an average of the figures derived from the CAPM and multi-stage DCF models. As in 2008, when the Board had adopted the CAPM methodology, the Board did not base its decision to adopt a hybrid methodology on a finding that prior determinations were erroneous or invalid. Indeed, the Board noted that “if our exploration of this issue has revealed nothing else, it has shown that there is no single simple or correct way to estimate the cost of equity for the railroad industry, and countless reasonable options are available.” *Id.*, slip op. at 15.

On May 15, 2009, the Board issued its decision on reconsideration in this case and denied AEP Texas’ request that the Board restate prior year cost of capital determinations using the CAPM methodology. The Board explained that it declined to restate prior year cost of capital determinations for three basic reasons.

First, the Board stated that its cost of capital determinations “let the railroads and their investors know the target rate of return on the railroad’s capital investments in that year.” *May 2009 Decision*, slip op. at 8. The Board noted that BNSF alone had invested over \$9 billion between 2004 and 2007. The expectations of railroads and their investors as to the allowable rate of return would be undermined by retroactive changes to prior year cost of capital determinations. *Id.*

Second, the Board noted that if it were to make retroactive changes to prior year determinations, “we not only undermine settled expectations but we erode investor confidence in future cost-of-capital findings.” *Id.* (emphasis in original). Citing the verified statement of BNSF’s witnesses Professor Hamada and Mr. Gokhale, the Board noted that future railroad

investors would be discouraged from investing in railroad infrastructure if they thought that the Board was willing to reach back and modify decisions that were previously made on the return on investment that would be allowed on railroad investments in a particular year.

Finally, the Board reiterated the conclusion it had previously reached that there was no reason to believe that its prior 2005 cost of capital determination was erroneous or invalid. The Board referred to a chart containing the cost of capital estimates produced by its DCF methodology and four different commercially available cost of capital models. The Board explained that while the 2005 DCF-based cost of capital was higher than the cost of capital estimates produced by other models for that year, single-year fluctuations in the cost of capital estimate are common. The Board concluded that the DCF-based 2005 cost of capital estimate was within a reasonable range of estimates produced by the other models. *Id.*, slip op. at 10.

AEP Texas appealed the *May 2009 Decision* to the D.C. Circuit. AEP Texas' primary argument was that the Board's focus on investor reliance and the reasonableness of the 2005 cost of capital results was not consistent with precedent in cases involving the retroactive application of new agency rules. AEP Texas also challenged the Board's evidence on the reasonableness of the 2005 cost of capital results as depicted in the Board's comparison chart, arguing that under certain statistical tests the year 2005 DCF-based cost of capital was an anomaly.

On June 18, 2010, the D.C. Circuit issued a decision upholding the Board's decision not to restate the cost of capital for all years except 2005. The Court ruled that the Board's basic framework for deciding whether to make a retroactive restatement of a prior year cost of capital determination was valid. However, the Court concluded that, with respect to the 2005 cost of capital determination, the Board had not adequately considered the impact on investor expectations of the shippers' challenge to the 2005 DCF-based cost of capital determination.

The Court also found too cursory the Board's discussion of the chart comparing the 2005 cost of capital results of various models. Therefore, the Court remanded the *May 2009 Decision* to the Board for further consideration of the proper treatment of the 2005 cost of capital in the SAC analysis.

III. ARGUMENT

A. **The Board Correctly Concluded That An *Ex Post* Change In The 2005 Cost Of Capital Determination Would Undermine Settled Expectations And Erode Investor Confidence In Future Cost Of Capital Findings.**

The Board's conclusion in the *May 2009 Decision* that an *ex post* change to prior year cost of capital determinations would undermine settled expectations and erode investor confidence in future cost of capital findings was appropriate as applied to the 2005 cost of capital determination as well as to the cost of capital determinations for prior years. By 2006, when the Board issued its 2005 cost of capital determination, the Board and the ICC before it had used a DCF model to determine the railroad industry cost of capital for 25 years. Shippers had raised concerns about the DCF methodology in the late 1990s, but no change was made to the cost of capital methodology at that time and the shippers did not follow up on their concerns with the DCF model in subsequent cost of capital proceedings prior to 2005. Therefore, for investors making investments in the railroad industry during the year 2005, there was no reason at all to expect that the returns allowed by the Board on those investments would be determined using anything other than the existing DCF methodology.

The Board implicitly recognized and sought to protect the interests of these investors by rejecting WCTL's request in the 2005 cost of capital proceeding that the Board immediately adopt a new methodology for 2005. The "norm of regularity in government conduct" would lead investors during 2005 to assume that the longstanding approach used by the ICC and the Board

to determine the railroad industry cost of capital would not be changed without some advance notice. *See 2005 Cost of Capital*, slip op. at 7. It was reasonable for investors in 2005 to assume that the Board would continue to apply its settled methodology. *See Atchison, Topeka & Santa Fe Ry. v. Wichita Bd. of Trade*, 412 U.S. 800, 807-08 (1973) (“A settled course of behavior embodies the agency’s informed judgment that, by pursuing that course, it will carry out the policies committed to it by Congress. There is, then, at least a presumption that those policies will be carried out best if the settled rule is adhered to.”). Therefore, the Board properly decided that it would adopt a new cost of capital methodology only on a prospective basis. *See 2005 Cost of Capital*, slip op. at 8 (stating that the Board would initiate a rulemaking to consider a future change to its cost of capital methodology).

The expectations of year 2005 investors would be undermined by the Board’s restatement of the 2005 cost of capital using either the CAPM or the hybrid CAPM/DCF methodology. While the year 2005 investors did not rely on the Board’s specific cost of capital determination for 2005, which was not issued until September 2006, those investors had a reasonable expectation that the Board would follow the “norm of regularity in government conduct” and continue to apply the DCF approach. As explained by Professor Hamada and Mr. Gokhale, “investors, railroads, and shippers making investments in 2005 would not have expected the Board to apply a new methodology retroactively to 2005.” *Hamada/Gokhale V.S.* at ¶ 13. No one had raised a question about the use of the DCF model until well into the year 2006. Year 2005 investors had reasonable and legitimate expectations that the permissible level of returns on railroad equity capital in 2005, including their investments, would be determined using the model that had been in use for 25 years.

The Court in its remand decision appeared to focus on the expectations of a different group of investors – those who made investments after the shippers raised in 2006 their concerns about the DCF model. While those investors would have had some uncertainty as to how the Board would determine the 2005 cost of capital after the DCF model was challenged by shippers, they would nevertheless have continued to have a reasonable expectation that the Board would decline to apply any new model it adopted retroactively to 2005. As explained by Professor Hamada and Mr. Gokhale, numerous cost of capital models have been developed by academics, financial economists and investors over the years to assess a firm’s cost of capital. Hamada/Gokhale V.S. at ¶¶ 17-18. Rational investors would not expect the Board to make *ex post* changes in its prior cost of capital determinations just because a preferable cost of capital model had been identified. Given the constant evolution of cost of capital models, the Board would create considerable uncertainty for investors if it signaled a willingness to make such *ex post* changes. Investors would not expect the Board to create a climate of regulatory uncertainty surrounding railroad investments and their reaction to such uncertainty would be to refrain from investments in the railroad industry.

New models often improve upon existing models, even though the new models may have their own limitations. Professor Hamada and Mr. Gokhale explain that “[m]odels come and go [A] model that might have been well-accepted, and most appropriate for a particular period of time, may no longer be relevant.” Hamada/Gokhale V.S. at ¶ 18. Indeed, in 2008, the Board concluded that the CAPM model was an improvement over the existing DCF model, but less than a year later the Board concluded that yet another approach – its current hybrid

CAPM/Multistage DCF approach – was an improvement over the prior CAPM approach.¹ If the Board were to make *ex post* changes to prior year cost of capital determinations every time it concluded that an improved model was available, investors would never have any idea what returns would be allowed by the Board on investments made in the railroad industry.

It is important to emphasize that the year 2005 cost of capital determination was never found to be erroneous. The Board repeatedly rejected the suggestion that the DCF model was invalid just because it produced results different from those produced by the newly adopted CAPM model. *See, e.g., Cost of Capital – 2005*, STB Ex Parte No. 558 (Sub-No. 9), slip op. at n.2 (STB served Feb. 12, 2007) (“Our decision to conduct a broader rulemaking is not an admission that the existing approach is flawed, but instead a prudent exercise of our regulatory responsibility to explore whether there are superior alternatives available.”) Thus, the question for investors that were considering investments while WCTL was pursuing its challenge to the 2005 cost of capital determination was whether the Board was likely to change retroactively the 2005 cost of capital determination not because it was wrong but because a supposedly superior model had been identified. Investors would not expect the Board to make such a change under those circumstances. While investors would have to recognize the possibility that the Board would restate a prior year cost of capital determination that was later shown to be invalid, they

¹ AEP Texas seeks a restatement of the 2005 cost of capital determination based on the subsequent emergence of what the Board identified as a preferable model and the uncertainty created by the Board’s review of its cost of capital methodology that supposedly undermined investor reliance on the prior model. But this rationale would suggest that if any restatement were made to a prior year cost of capital determination, the Board would have to use the current hybrid methodology to restate the 2005 cost of capital, since the Board has now determined that the hybrid model is superior to either the DCF or the CAPM model standing alone, and the Board would also have to restate the cost of capital determinations for 2006 and 2007, since both determinations were made with a now obsolete model and they were made while the Board was considering the adoption of an alternative model. The better approach is for the Board to leave all prior year determinations alone and implement new cost of capital models only on a prospective basis.

would not expect the Board to change a prior year cost of capital determination based on the emergence of a superior model.

In focusing on investors making investments while the WCTL challenge to the 2005 cost of capital determination was pending, the Court overlooked the reasonable expectations of future investors and the impact of any retroactive change to a prior year cost of capital determination on those expectations. The Board's decision not to restate the 2005 cost of capital determination was based in substantial part on the expectations of future investors. As the Board explained in the *May 2009 Decision*:

If we change [the cost of capital] figure retroactively here, we not only undermine settled expectations but we erode investor confidence in future cost-of-capital findings. A lack of confidence can severely affect the incentive of investors to make the necessary private investment in the railroad industry to meet the forecast demand for railroad service.

May 2009 Decision, slip op. at 8. It was reasonable for the Board to be concerned about the impact of a retroactive change in the 2005 cost of capital determination on the willingness of future investors to make capital investments in the railroad industry. The Board's concern about future investors did not involve their reliance on a particular historical year cost of capital determination. Rather, the Board was legitimately concerned that a decision to restate the 2005 cost of capital determination just because a new model was subsequently adopted for cost of capital determinations would create a perception of unpredictability regarding the Board's treatment of the cost of capital in the future. The precedent that would be created by making the *ex post* change in the 2005 cost of capital determination would seriously undermine the ability of investors to predict what level of returns the Board would view as permissible and would thereby discourage investments in the railroad industry. As Professor Hamada and Mr. Gokhale explain, "establishing the principle of *ex post* adjustments will decrease predictability regarding the

regulatory return on railroad investments, and therefore could decrease railroads' and investors' willingness to undertake investments in all future years." Hamada/Gokhale V.S. at ¶ 21.

The Board recognized the importance of maintaining predictable regulatory standards and procedures in its decision adopting the CAPM model:

As we stated recently, "[p]redictability in regulation is an important goal. It serves the public good by permitting carriers to conform their conduct to a set of rules and assisting captive shippers in judging whether a particular rate could be challenged as unreasonably high." Predictability is particularly important with regard to the cost of capital, as this calculation reflects the return the Board will permit carriers to earn on their capital investments and will therefore influence their investment decision.

CAPM Decision, slip op. at 12 (citations omitted). If the Board made a retroactive change to the 2005 cost of capital decision and thereby signaled its willingness to make retroactive changes to its cost of capital determinations whenever it determined that its existing model for estimating the cost of capital could be improved upon, future investors would be discouraged from investing in the railroad industry because they would be unable to predict the returns that the Board would allow on their investments for historical years. Expectations about returns allowed by the regulator would be undermined if a new and supposedly superior model came along and the Board used it to restate prior year cost of capital determinations. The Board properly concluded that the impact on future investors of a restatement of the 2005 cost of capital determination would undermine the important policy goal of ensuring that railroads are able to attract capital necessary to maintain themselves and to expand to meet increasing demand.²

² If the Board were to restate the 2005 cost of equity capital in this case, the perception of uncertainty would be exacerbated by the fact that the Board would be using different 2005 cost of capital assumptions in different regulatory applications. For example, the railroad industry cost of capital as determined by the Board is an important element in determining URCS costs for particular years. URCS costs are used, among other things, to determine R/VC ratios that are relevant in rate reasonableness cases that use the three-benchmark methodology. The Board has established rate prescriptions in other cases that rely in part on the URCS results for 2005 that

In short, the Board properly concluded in the *May 2009 Decision* that a retroactive change to any cost of capital determination, including the 2005 determination, would undermine the settled expectations of current investors and would also undermine the expectations of future investors by injecting an unnecessary degree of unpredictability into the Board's cost of capital determinations for future years.

B. The Board Reasonably Concluded That There Was No Objective Evidence That The 2005 Cost Of Equity Estimate Was Invalid.

In addition to considering investor expectations regarding the use of the DCF model to determine the 2005 cost of capital, the Board's *May 2009 Decision* considered whether the results of the DCF model "appear to be within the bounds of reasonable predictions for the industry's cost of capital." *May 2009 Decision*, slip op. at 8. If the DCF results were clearly outside the bounds of cost of capital predictions made using other models, then the investors' expectations might be entitled to less weight in determining whether to restate the 2005 cost of capital determination. The Board presented a chart summarizing the results produced by five cost of capital models over a period of time and concluded that there was nothing about the results of the DCF cost of capital estimates, including the 2005 estimate, that indicated that the 2005 estimate was outside of "a reasonable range of the cost-of-equity estimates produced by the other models." *Id.* at 10.

In its remand decision, the Court expressed concern that the Board did not sufficiently explain its use of the comparison data. The Court first expressed concern that the Board did not

use the Board's DCF-based 2005 cost of equity capital determination. *See, e.g., U.S. Magnesium, L.L.C. v. Union Pacific Railroad Company*, Docket No. 42114 (STB served January 28, 2010).

explain why the cost of capital models used in comparison chart were chosen. But as explained by Professor Hamada and Mr. Gokhale, the models used by the Board are representative of cost of capital models commonly used by investors and financial analysts. The Board chose models that have been regularly reported by Morningstar/Ibbotson, a well recognized provider of inputs relating to cost of capital. Hamada/Gokhale V.S. at ¶ 23, n.13.

The Court also expressed concern that the Board's comparison of the 2005 DCF results to the results of other models was not supported by a detailed analysis of the model results. As Professor Hamada and Mr. Gokhale explain, the Board's conclusions were supported by the comparison data. As to the year 2005 DCF calculation, the Board concluded that "the figure does not vary significantly more than other models that produce the highest or lowest estimate in a given year." *Id.* at 10. Professor Hamada and Mr. Gokhale demonstrate that all of the models produce results for a particular year that are significantly higher or lower than the results of other models for that year. Hamada/Gokhale V.S. at ¶¶ 26, 28. The DCF model results are consistent with the results of the other models.

More important, Professor Hamada and Mr. Gokhale explain that

it would not be appropriate to judge the reasonableness of a model's estimate based on a single year's results. The reliability of a model must be assessed over a period of time. If a model performs reasonably over time, then it would not be appropriate to reject the model's estimate for a particular year just because that year's estimate appeared to be inconsistent with the estimates produced by other models for that year.

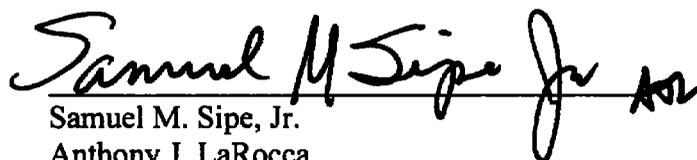
Hamada/Gokhale V.S. at ¶ 27. Professor Hamada and Mr. Gokhale show that nothing about the results of the DCF model over time as set out in the comparison chart should have led the Board to conclude that the DCF-results for 2005 or any other year were an aberration that justified an *ex post* change: "It is appropriate to look at the cost of capital values produced by these models

over a series of years and to view the 2005 DCF results in the context of this series of values. In that context, it was appropriate for the Board to conclude that the DCF value for 2005 was not an aberration.” Hamada/Gokhale V.S. at ¶ 29.

IV. Conclusion

The Board should decline to make any change in its 2005 cost of capital determination and should adhere to its *May 2009 Decision* in this case.

Respectfully submitted,

A handwritten signature in black ink that reads "Samuel M. Sipe, Jr." followed by a stylized flourish.

Richard E. Weicher
Jill K. Mulligan
BNSF Railway Company
2500 Lou Menk Drive
Fort Worth, TX 76131
(817) 352-2353

Samuel M. Sipe, Jr.
Anthony J. LaRocca
Steptoe & Johnson LLP
1330 Connecticut Avenue, N.W.
Washington, DC 20036
(202) 429-3000

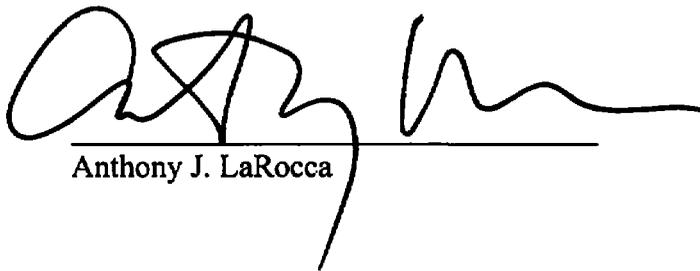
Attorneys for BNSF Railway Company

November 22, 2010

CERTIFICATE OF SERVICE

I hereby certify that this 22nd day of November, 2010, I served a copy of the Comments of BNSF Railway Company on Remand to the following by hand delivery:

William L. Slover
Kelvin J. Dowd
Christopher A. Mills
Daniel M. Jaffe
Slover & Loftus
1224 Seventeenth Street, N.W.
Washington, DC 20036



Anthony J. LaRocca

**VERIFIED STATEMENT OF
ROBERT S. HAMADA AND RAJIV B. GOKHALE**

I. Introduction and Assignment

1. My name is Robert S. Hamada. I am the Edward Eagle Brown Distinguished Service Professor Emeritus of Finance and former Dean at The University of Chicago Graduate School of Business ("GSB"). I have served as an Instructor, Assistant Professor, Associate Professor, and Professor of Finance at the GSB since 1966. I also have served in other positions at the GSB, including Director of the Center for Research in Security Prices (1980 - 1985), Deputy Dean for the Faculty (1985 - 1990), and Dean (1993 - 2001). While at the GSB, I have taught extensively on the subjects of corporate finance and corporate strategy. I have serve(d) on 11 business Boards of Directors and numerous non-profit Boards. My curriculum vitae, which also contains a list of my publications, is attached hereto as Appendix A.

2. My name is Rajiv B. Gokhale. I am a Senior Vice President of Compass Lexecon, a consulting firm that specializes in the application of economics to a variety of legal and regulatory issues. I have an MBA from the University of Chicago. I have specialized in the areas of financial economics and business valuation and my experience covers a wide array of industries. My curriculum vitae is attached as Appendix B.

3. We previously submitted a verified statement in the matter of AEP Texas North Company ("AEP") v. BNSF Railway Company ("BNSF"). In that matter, AEP argued that the Surface Transportation Board's (the "Board") decision to start using the CAPM model beginning in 2006, rather than the single-stage DCF model previously used, required the Board to restate the cost of equity in the Board's stand-alone cost ("SAC") analysis using the CAPM methodology for all prior years to determine the cost of capital for AEP's stand-alone railroad ("SARR"), the Texas & Northern Railroad ("TNR"). AEP further argued that, at a minimum, "it was a material error to rely on the 2005 cost-of-equity figure produced under the single-stage

DCF approach, given that the Board had initiated the change in methodology prior to the September 2007 Decision.”¹

4. In a decision served on May 15, 2009, the Board concluded that, with respect to cost of capital estimates for prior years, “it would be poor public policy to depart from [the Board’s] previously published figures.” The Board explained that two considerations were paramount to its analysis: (a) the extent to which investors rely on the Board’s prior findings, and (b) whether the prior findings are within the “bounds of reasonable predictions for the industry’s cost of equity” The Board concluded that railroads and investors make investment decisions based on the cost of capital figures published by the Board and that previously published cost of capital figures should only be set aside if they are “shown to clearly fall outside a reasonable range.” The Board further determined that its “prior determinations provide a reasonable estimate of the cost of equity” for the TNR, and that even though the estimate for 2005 was “above the norm for other finance models” it was “within a reasonable range of the cost-of-equity estimates produced by the other models.” Therefore, the Board decided that it would not “restate the cost of equity for prior years in this case.”²

5. The United States Court of Appeals for the District of Columbia Circuit (“Court”) upheld the Board’s decision to not restate the cost of capital for years prior to 2005, but found that “circumstances surrounding the 2005 cost of capital determination are different from other years.”³ In particular, the Court found that the Board “did not consider whether railroads and investors actually or reasonably could have relied on the permanence of the 2005 cost of capital determination when it was undermined by shippers in litigation and even by the Board itself.” Further, the Court found “problematic” the Board’s justification for the DCF-based cost of equity for 2005, noting that the Board’s analysis “consisted of nothing more than an estimation measured by a cursory glance at a graph,” and that, even in its presentation to the Court, the

1. The Board switched from its previously used single-stage DCF methodology to the CAPM methodology to calculate the cost of equity for years 2006 and 2007, and starting with 2008 uses the average of the CAPM and Morningstar/Ibbotson’s multi-stage (i.e., three stages) DCF methodology. STB Docket No. 41191 (Sub-No. 1); AEP Texas North Company v. BNSF Railway Company; Served: May 15, 2009 at 4.

2. STB Docket No. 41191 (Sub No. 1); May 15, 2009 at 8-10.

3. AEP Texas North Company, Petitioner v. Surface Transportation Board and United States of America, Respondents. BNSF Railway Company, Intervenor; Case No. 09-1202, Decided June 18, 2010 (“Court’s Decision”) at 15.

Board employed only a “perfunctory analysis.”⁴ ⁵ The Court vacated the Board’s decision with respect to 2005 and remanded to the Board to reassess its decision-making for the 2005 cost of equity estimate.⁶

6. In effect, the deliberations in this matter (especially the Court’s ruling) raise two questions:

- In light of the shippers’ challenges to the Board’s single-stage DCF model, is it reasonable to assume that investors would have expected the Board to apply any newly adopted model retroactively to 2005—i.e., make *ex post* methodological changes to the 2005 cost of equity?
- Was the Board’s DCF-based estimate of the railroad industry’s cost of equity for 2005 unreasonable (as AEP alleges), given the estimates based on other methods?

7. The investments (and investors who fund such investments) that would be affected by a decision to retroactively adopt a new model for determining the 2005 cost of equity fall into three groups: a) investments made in 2005, b) investments made after 2005 but prior to resolution of this matter; and c) future investments that will be made after the Board (and/or Courts) resolve this matter. In order to fully answer whether the Board should make *ex post* methodological changes to the 2005 cost of equity calculation, one must consider the impact that such a change would have on each of these three groups of investors.

8. Counsel for BNSF has asked us to comment on the questions raised in paragraphs 6 and 7 above. Specifically, we have been asked to address whether the Board should use the CAPM methodology to re-estimate the cost of equity for 2005, in lieu of the single-stage DCF methodology in use at the time. It is our conclusion that the Board should not restate the 2005 cost of capital using the CAPM methodology, as neither investor expectations, nor the alleged non-reasonableness of the Board’s DCF model, warrant such a change. We offer specific responses as follows:

4. Court’s Decision at 17-18.

5. We are repeating here the Court’s discussion. We note that the Board in its decision said that the 2005 “figure does not vary significantly more than other models that produce the highest or lowest estimate in a given year.” STB Docket No. 41191 (Sub No. 1); May 15, 2009 at 10.

6. Court’s Decision at 20-21.

Investor Expectations

- A. Investors making investments during 2005 would have had no reason to expect that the Board would not use the DCF model for that year because it was not until April 2006 that WCTL formally requested that the Board consider switching to the CAPM.
- B. Investors funding investments during the debate over this matter would not expect the Board to make *ex post* changes because doing so would introduce confusion and unpredictability into the regulatory system.
- C. Likewise, making *ex post* methodological changes would decrease future investors' incentive to invest in the railroad industry, because all participants—railroads, investors and shippers alike—would never know whether the emergence of a newer cost of capital model in the future would lead to changes in prior year cost of capital determinations.

Unreasonableness of 2005 Cost of Equity

- A. By definition, no model is perfect because the cost of equity cannot be observed directly. Each one of the models considered by the Board produces “unreasonable” estimates (per AEP’s methodology) in some past years. Therefore, discarding a model because it may have produced an “outlier” result in one year would create a precedent for discarding all existing models.
- B. Changing the 2005 cost of capital because of a subsequent change in methodology (i.e., adoption of a new model for the cost of equity) would be akin to establishing a new principle, namely that the adoption of a new and better model justifies restatement of all prior year cost of capital estimates. However, applying this principle every time the Board changes a methodology would create the risk of chaos in the regulatory system.

II. Investor Expectations

9. None of the three groups of investors discussed above would expect the Board to make *ex post* methodological changes to a previously determined cost of equity. As we discuss below, for each of these three groups in turn, making such changes would risk regulatory unpredictability and confusion.

A. During 2005, Investors Would Not Have Questioned the Board’s Continued Use of the DCF Model

10. The Board had used the DCF methodology to estimate the railroad industry’s cost of equity since 1981,⁷ and the Board has typically estimated the cost of equity for a given year after the end of that year. On April 28, 2006, as the Board was preparing to determine the cost of

7. WCTL first requested that the Board consider alternatives to the DCF methodology in 1997 but did not suggest alternatives. At the time the Board decided to continue using the DCF methodology.

capital for 2005, WCTL suggested that the Board consider switching to the CAPM methodology. Because there had been no formal motion asking the Board to change its methodology for calculating the cost of equity from the DCF methodology to the CAPM in 2005, prior to April 2006, there was no reason for railroads, shippers, or investors to expect a change in methodology for calculating the cost of equity for 2005.

11. Pursuant to WCTL's request that the Board investigate alternative cost of capital models, the Board asked for and accepted inputs from concerned parties regarding other methodologies for calculating the cost of equity. After considering alternatives, the Board instituted use of the CAPM methodology for determining the railroad industry's cost of equity for 2006 and 2007, and subsequently instituted use of an average of the CAPM and Morningstar/Ibbotson multi-stage DCF methodologies for 2008 and thereafter. The Board implemented these changes in accordance with its opinion that each new model presented a better estimate of the actual cost of equity.

12. Class I railroads (and their investors) made substantial capital investments in 2005. See Exhibit 1. Railroads made these investments without any reason to believe that the Board would replace the DCF model. The Board had not stated any such intention, nor had shippers formally requested the Board do so. Therefore, using the CAPM to now determine the cost of equity for 2005 would be akin to making a retroactive or *ex post* change.

13. The Board recognizes and has previously discussed the importance of making changes to the cost of capital methodology only on a prospective basis. Applying new cost of capital methodologies prospectively ensures that the expectations of investors during the year, who reasonably assume that the existing approach will be used, are not undermined. Given the Board's past recognition of the importance of not making methodological changes retroactively, and the Board's use of the DCF methodology since 1981, investors, railroads, and shippers making investments in 2005 would not have expected the Board to apply a new methodology retroactively to 2005.

B. Investors Funding Investments During the Resolution of this Matter Would Not Expect the Board to Make *Ex Post* Changes

14. Investors and railroads who invested during the debate over this matter had a reasonable basis for assuming that no *ex post* changes would be made to the 2005 cost of capital

determination, and that no financial rebates nor changes to the allowable rates of return would be required in later years due to a change in the 2005 cost of capital. We previously filed a statement in this matter in which we discussed why *ex post* adjustments to previously determined costs of equity might decrease investors' willingness to undertake future investments, and therefore are undesirable. The reasons we offered then remain applicable to this discussion.

15. As we discussed in our earlier report, the Board has repeatedly concluded that predictability with respect to the cost of capital determination in particular, and with respect to the application of regulatory rules and approaches in general, is beneficial. Some of the Board's earlier pronouncements on the issue are as follows:

- Predictability is particularly important with regard to the cost of capital, as this calculation reflects the return the Board will permit carriers to earn on their capital investments and will therefore influence their investment decisions.⁸
- Benefits of fixing a reasonable (if rough) methodology for forecasting future productivity of a SARR outweighs the substantial costs to the parties and unlikely benefits of quantifying a more precise estimate in an individual proceeding ... at some point, an elaborate and expensive search for a more precise estimate of future productivity must give way to the need for a uniform, manageable approach.⁹
- There is a norm of regularity in government conduct that presumes an agency's duties are best carried out by adhering to the settled rule.¹⁰

16. In this statement, we elaborate on the evidence related to the 2005 cost of equity calculation. When selecting the CAPM (and later the average of the CAPM and the multi-stage DCF model), the Board did not conclude that the previously used single-stage DCF methodology was incorrect or erroneous. Rather, the Board determined that the other methodologies provided better estimates of the industry's "true," but unobservable, cost of equity.

17. No model is perfect: Over the last few decades, several models have been proposed for measuring the cost of equity. Many of these models were developed well before 1997. Several of these models had been in regular use by academics, financial economists and investors by the time the Board actually switched to the CAPM methodology. Yet, there still

8. STB Ex Parte No. 664, Methodology to be Employed in Determining the Railroad Industry's Cost of Capital; January 17, 2008 at 12.

9. STB Ex Parte No. 657 (Sub No. 1), Major Issues in Rail Rate; October 20, 2006 at 46.

10. STB Ex Parte No. 558 (Sub No. 9), Railroad Cost of Capital—2005; September 15, 2006 at 7.

isn't universal agreement on which model best estimates the true cost of equity. The CAPM, which likely is the model used most often, is well-known to have some shortcomings.

18. Models come and go. For example, Fama and French developed a three-factor CAPM to include size and value/growth effects.¹¹ There is some evidence that the size effect may have gone away after publication of Fama and French's article, because many mutual funds incorporated knowledge from the article to take advantage of the size effect. Thus, a model that might have been well-accepted, and most appropriate for a particular period in time, may no longer be relevant. As such, there may be no single model that is "best" for every year over a long period.

19. Uncertainty is Not the Same Thing as Regulatory Unpredictability: In this context, it is worth distinguishing between uncertainty and regulatory unpredictability. The Board has generally finalized the cost of capital for any year after the end of that calendar year. Yet railroads and investors have had to make investments during the year before the Board's determination of the precise cost of capital number for that year. They have done so under some amount of uncertainty—even if they knew the model the Board would ultimately use, they could not have known the exact inputs to the Board's later calculation while they were undertaking these investments (e.g., the exact estimates, for example, for the risk free rate, the equity risk premium and the β used in the CAPM). This type of uncertainty, however, is different from the unpredictability which could result from not knowing which model the Board may switch to in the future, and whether the Board might retroactively apply different models. Railroads and investors can deal with uncertainty by making reasonable estimates of (or ranges for) the specific inputs to the chosen model, but would find it difficult to deal with this added regulatory unpredictability.

20. Therefore, the relevant question is what investors after 2005 would have expected regarding the regulatory cost of equity for 2005, knowing that the existing methodology had been challenged. The following reasons explain why it is likely that the challenge had little impact on investor expectations:

- The Board had not changed its methodology since 1981, even though it, railroads, investors and shippers realized that there were alternative models.

¹¹ Fama, Eugene F. and Kenneth R. French. "The Cross Section of Expected Stock Returns." *The Journal of Finance*, Vol. XLVII No 2 June 1992.

- AEP's basic argument for changing the 2005 cost of capital was that a more accurate estimate of the cost of capital would be produced if the Board used a new model that the Board found was an improvement over the old model. But since investors know that models used to estimate the cost of capital are constantly evolving, they would not expect the Board to make *ex post* changes to existing cost of capital determinations just because the Board concluded that a better model existed. The Board did not find that the 2005 cost of capital determination was wrong or invalid, so investors would not expect the Board to reach back and change that estimate just because a new model had become available.
- Investors knew that the Board understood the importance of regulatory reliability and predictability to railroad companies, investors, and shippers, and would have expected the Board to be averse to making arbitrary, *ex post* changes.¹²

C. Making *Ex Post* Methodological Changes Would Decrease Future Investors' Incentive to Invest in the Railroad Industry

21. For all the reasons discussed above, implementation of an *ex post* methodological change to the 2005 cost of equity calculation would introduce unpredictability into the regulatory system. An *ex post* change to the 2005 cost of capital determination would indicate a willingness by the Board to make retroactive changes to prior cost of capital determinations when it finds that a new or better model exists. Given the constant evolution of cost of capital models, investors would not be able to predict how the Board would treat the allowable returns in any particular year since the investors would not know whether the Board would conclude in the future that a superior model exists and then reach back and apply that new model to change prior year cost of capital determinations. This unpredictability would adversely affect railroads, investors, and shippers alike, because none of these parties would be able to develop reasonable estimates of shipping rates in the future. In other words, establishing the principle of *ex post* adjustments will decrease predictability regarding the regulatory return on railroad investments, and therefore could decrease railroads' and investors' willingness to undertake investments in all future years.

III. Alleged Unreasonableness of the Single-Stage DCF 2005 Cost of Equity

22. As we discuss below, AEP's statistical analysis of the reasonableness of the Board's estimate of the 2005 cost of equity is flawed. We also show that discarding a model

12. See citations in ¶ 15.

because it may have produced an “outlier” result in one year, as AEP suggests, likely would render all existing models useless.

23. AEP employs a statistical analysis to compare the Board’s 2005 cost of equity value against 2005 estimates produced by four other models (CAPM, 3-Factor Fama-French, 1-Stage DCF, and 3-Stage DCF)¹³ to support their conclusion that the Board’s 2005 estimate falls “far outside a reasonable range.” Exhibit 2 replicates the Board’s table which is reported in JA311, and adds AEP’s calculated confidence interval estimates for 2005. Exhibit 3 replicates the chart drawn from the Board’s table presented in our Exhibit 2.^{14, 15}

24. AEP’s method for calculating the 2005 confidence interval is fundamentally flawed. A reliable application of the “standard statistical methods” referred to by AEP requires that at least two conditions be met—that the observations are independent and that they are normally distributed. Neither one of these criteria are met in AEP’s statistical analysis. To begin with, the four cost of equity models used by AEP (and by the Board) employ many common inputs, such as the rate of inflation and the risk-free interest rate. These common assumptions are one reason why the cost of equity estimates from these models move together from one year to the next. See Exhibit 3. There is no reason to believe that the observations generated by these four different models are independent.

25. Second, the test used by AEP requires that the observations be normally distributed; i.e., with the majority of the observations clustered around the mean, and fewer observations farther away from the mean. Even if observations were independent, one would need a larger sample size (at least 15 observations, and typically more) in order to be able to

13. These four models used by the Board have been reported by Morningstar/Ibbotson in its Cost of Capital Yearbook. Morningstar/Ibbotson is a well-recognized, independent provider of inputs (e.g., risk free rates, size premiums, etc.) relating to the cost of capital. Morningstar/Ibbotson’s Cost of Capital Yearbook reports five different measures of the “composite” cost of capital by industry (as identified by SIC codes) over the 1995-2007 period. Essentially, the Board reports all five of Morningstar/Ibbotson methods because Morningstar/Ibbotson reports a “composite” size premium of zero for this industry and therefore the “CAPM + Size Premium” method yields the same answer as the CAPM method.

14. The Board’s Chart 1 is also presented as AEP’s “Chart 1” on pg. 39 of AEP’s 11/20/2009 brief. AEP cites the Board’s “workpaper for Chart 1,” which can be found in document #JA311, as their data source.

15. Note that AEP incorrectly cites the Board’s cost of equity figure for 2005. AEP cites 15.16%, while the value published in the Board’s chart is 15.18%. However, the difference between the two numbers is small enough that summary statistics reported by AEP using the (incorrect) 15.16% figure also hold for statistics calculated using the accurate 15.18% figure.

assume a normal distribution.¹⁶ If the sample data were normally distributed, application of their confidence interval analysis would, by definition, result in very few outliers. In contrast, however, AEP's method clearly results in a large number of outliers. Exhibit 2 replicates AEP's analysis, constructing a confidence interval around the four 2005 non-Board estimates. Exhibit 2 demonstrates that two of the five estimates for 2005 fall outside AEP's own confidence interval: the Board's DCF-based 15.18% cost of equity value and the CAPM estimate of 8.60%.

26. In Exhibit 4, we apply AEP's (erroneous) confidence interval analysis to every year from 1995 to 2007. This demonstrates more dramatically how AEP's method of establishing a "reasonable range" of values is flawed. Over the period 1995-2007, every single model fails (i.e., is outside the confidence interval) *at least* five times. Cost of equity estimates based on the Board's single-stage DCF model fail five times, less than or equal to the failure rate for the other models—the 1-Stage DCF model fails five times, the CAPM six times, the 3-Stage DCF model 6 times, and the 3-Factor Fama-French model 9 times. See the last row in Exhibit 4. Even if one were to accept AEP's (flawed) methodology, there is absolutely no evidence, as AEP suggests, that the Board's method performs worse than the other methods.

27. Indeed, the analysis in Exhibit 4 demonstrates why it would not be appropriate to judge the reasonableness of a model's estimate based on a single year's results. The reliability of a model must be assessed over a period of time. If a model performs reasonably over time, then it would not be appropriate to reject the model's estimate for a particular year just because that year's estimate appeared to be inconsistent with the estimates produced by other models for that year.

28. A simpler test for outliers, performed by excluding the high and low values in each year, also illustrates that, when compared to the other models presented by AEP over the time period analyzed, the Board's method of estimating the cost of equity is not unreasonable.¹⁷ See Exhibit 5. As this straightforward analysis indicates, the Board's single-stage DCF model results in an outlying value in only 1 year out of the 13 years considered, whereas the CAPM

16. Johnson, Robert and Patricia Kuby. *Elementary Statistics, 8th Edition*. Pacific Grove, California: Brooks/Cole, 2000, p. 325.

17. The upper range of the confidence band is placed at the midpoint between the highest value and the second highest value, while the lower range is placed at the midpoint between the lowest value, and the second lowest value.

presents outliers in 6 years, the 3-Factor Fama-French in 9 years, the 1-Stage DCF in 4 years, and the 3-Stage DCF in 6 years.

29. The above analysis does not indicate which model is the “best” model at any particular time. It is appropriate to look at the cost of capital values produced by these models over a series of years and to view the 2005 DCF results in the context of this series of values. In that context, it was appropriate for the Board to conclude that the DCF value for 2005 was not an aberration.

IV. Making an *Ex Post* Methodological Change to the 2005 Cost of Capital Because of a Subsequent Change in Methodology Would be Akin to Establishing a New Principle. However, Applying This Principle Every Time the Board Changed a Methodology Would Risk Chaos in the Regulatory System

30. It is extremely difficult (if not impossible) for the Board to establish a non-arbitrary rule that would govern its decisions about when to make *ex post* changes and still maintain regulatory reliability. For example, consider the Board’s decision to employ an average of the CAPM and Morningstar/Ibbotson multi-stage DCF methodologies for 2008 and beyond. What should the Board do about prior cost of equity determinations? Restate all prior years? Restate just one year? Restate only the years in which it had publicly requested comments on alternative methodologies? Any one of these options would cast doubt on all future cost of equity determinations by the Board.

31. It is interesting to note that AEP is not proposing that the Board use the average of the CAPM and the Morningstar/Ibbotson multi-stage DCF model (the most current model) for 2005, presumably the methodology now thought to give the most accurate estimate. If AEP were correct that the Board should apply the best available model, then the Board would have to use its current methodology.

32. Also, if it is appropriate to restate the 2005 cost of equity using a superior methodology that the Board has subsequently adopted, why is it not appropriate to use the current methodology for 2005, 2006 and 2007? If the logic for the former is that investors expected change, and therefore had no expectations regarding the regulatory cost of capital for 2005, why not use the current “appropriate” methodology for all past years?

V. Conclusion

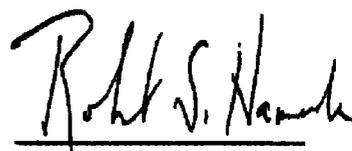
33. It is our conclusion that the Board should not restate the 2005 cost of capital using the CAPM methodology, as neither investor expectations, nor the alleged non-reasonableness of the Board's DCF model, warrant such a change.

34. This is more than a squabble between the two parties to this matter. If the Board makes *ex post* methodological changes to the 2005 cost of equity, this will have a deep and long-lived effect on many "real" investments (i.e., physical plant/equipment and working capital investments) made by railroads and will have a direct impact on investors, present and future. Furthermore, a decision to make *ex post* methodological changes will establish a new principle and create future regulatory uncertainty for all parties including shippers.

VERIFICATION

I, Robert S. Hamada, declare under penalty of perjury, that the foregoing statement is true and correct and that I am qualified and authorized to file this statement.

Executed on November 17, 2010

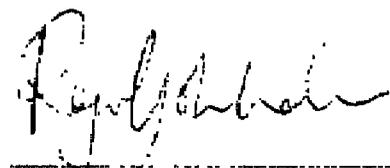
A handwritten signature in black ink, reading "Robert S. Hamada", written over a horizontal line.

Robert S. Hamada

VERIFICATION

I, Rajiv B. Gokhale, declare under penalty of perjury, that the foregoing statement is true and correct and that I am qualified and authorized to file this statement.

Executed on November 17, 2010

A handwritten signature in black ink, appearing to read 'Rajiv B. Gokhale', is written above a horizontal dashed line.

Rajiv B. Gokhale

Exhibit 1
Capital Expenditure
Fiscal Years 2005 - 2009
(\$ Millions)

Class I Railroad Companies ¹	2005	2006	2007	2008	2009	Total
1 BNSF Railway Company	1,750	2,014	2,285	3,178	2,721	11,948
2 CSX Corporation	1,136	1,639	1,773	1,740	1,447	7,735
3 Norfolk Southern Corporation	1,025	1,178	1,341	1,558	1,299	6,401
4 Union Pacific Corporation	2,169	2,242	2,496	2,484	2,484	11,875
Total	6,080	7,073	7,895	8,960	7,951	37,959

Source : Capital IQ.

¹ Class I carriers as defined by the Board in its cost of capital decisions from 2005 to 2009.

Exhibit 2
Replication of the Board's Table - "Cost of Equity Estimates"
Ibbotson/Morningstar Cost of Capital Yearbook- Industry Reports
Standard Industrial Code (SIC) 4011- Railroads, Line-Haul Operating; and
Replication of 2005 Confidence Interval Presented by AEP

Year	Model Estimates Presented in AEP's "Chart 1" ¹				AEP Confidence Interval Estimate ³	
	Ibbotson/Morningstar				Lower Bound	Upper Bound
	CAPM	3-Factor Fama-French	1-Stage DCF	3-Stage DCF	STB EP 558 ²	
1994	16.95%		16.44%		13.80%	
1995	16.15%	17.75%	14.37%	13.03%	13.40%	
1996	15.88%	16.86%	14.39%	10.76%	13.90%	
1997	14.27%	16.28%	14.64%	12.87%	13.80%	
1998	12.57%	13.84%	14.36%	13.41%	13.11%	
1999	11.78%	12.93%	11.56%	11.30%	12.90%	
2000	12.89%	15.25%	10.89%	13.60%	13.90%	
2001	9.32%	15.18%	11.38%	12.50%	12.80%	
2002	10.50%	14.92%	11.86%	12.10%	12.60%	
2003	8.37%	10.93%	11.30%	13.20%	12.70%	
2004	8.69%	10.50%	11.88%	13.40%	13.16%	
2005	8.60%	10.24%	12.12%	12.00%	15.18%	9.37%
2006	10.79%	10.37%	15.52%	12.50%	11.13%	12.11%
2007	10.76%	9.88%	15.02%	13.60%	12.68%	

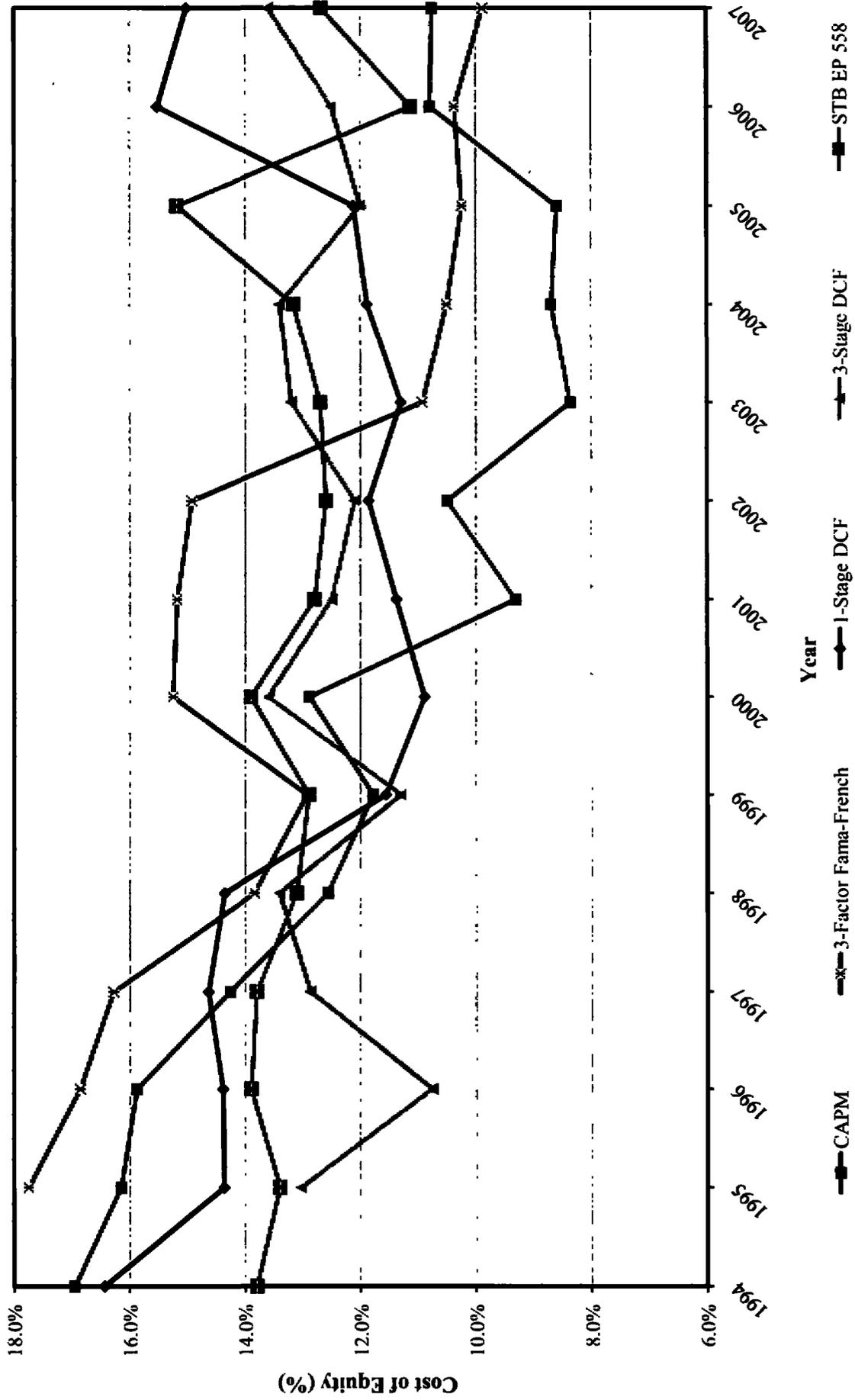
Sources: Document JA311, also referred to in footnote 62 of AEP's Brief filed on November 20, 2009.

Notes: ¹ Ibbotson did not publish a 3-Factor Fama-French or 3-Stage DCF cost of equity estimate in 1994.

² Starting in 2006, the STB Ex Parte 558 methodology changed from using a Single-Stage DCF methodology to a CAPM methodology.

³ Per AEP, the summary statistics for the four other methods for 2005 are: 10.74% average, 1.67% standard deviation, 1.37% confidence interval bound at $\alpha = 10\%$.

Exhibit 3
Replication of the Board's Chart 1: Cost of Equity Estimates
Comparison of Ibbotson/Morningstar and STB Methodologies



Source: STB Docket No. 41191 (Sub-No. 1); May 15, 2009. Also presented in AEP's Brief filed on November 20, 2009 at 37.

Exhibit 4
Cost of Equity Capital Estimates and Confidence Intervals Calculated Using AEP's Methodology

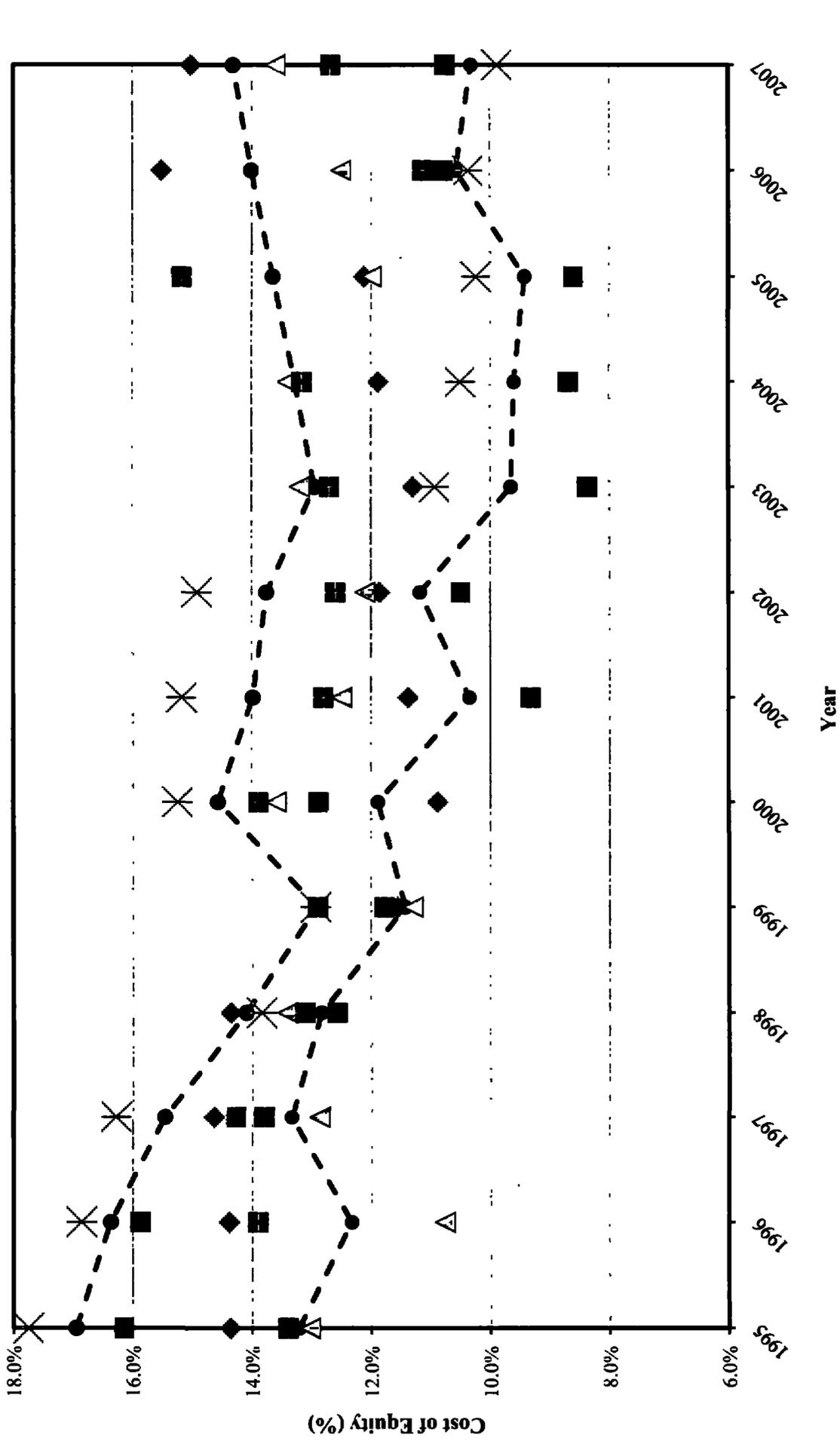
Model Estimates Presented in AEP's "Chart 1"										Values that Fall Outside of AEP's Confidence Interval Method							
Year	Ibbotson/Morningstar					Summary Statistics Across Non-STB Methods					Confidence Interval Using AEP Method		Ibbotson/Morningstar				
	3-Factor					Average	Std. Dev	CI bounds, $\alpha=10\%$	Lower Bound	Upper Bound	CAPM	3-Factor					
	CAPM	1-Stage DCF	3-Stage DCF	STB EP 558 ²	Fama-French							Fama-French	1-Stage DCF	3-Stage DCF	STB EP 558		
1995	16.15%	17.75%	14.37%	13.03%	13.40%	15.33%	2.1%	1.69%	13.63%	17.02%	17.75%	13.03%	13.03%	13.40%	13.40%		
1996	15.88%	16.86%	14.39%	10.76%	13.90%	14.47%	2.7%	2.20%	12.27%	16.67%	16.86%	10.76%	10.76%	13.90%	10.76%		
1997	14.27%	16.28%	14.64%	12.87%	13.80%	14.52%	1.4%	1.15%	13.36%	15.67%	16.28%	12.87%	12.87%	13.80%	12.87%		
1998	12.57%	13.84%	14.36%	13.41%	13.11%	13.55%	0.8%	0.62%	12.92%	14.17%	14.36%	13.41%	14.36%	13.11%	14.36%		
1999	11.78%	12.93%	11.56%	11.30%	12.90%	11.89%	0.7%	0.59%	11.30%	12.48%	12.93%	11.30%	11.30%	12.90%	11.30%		
2000	12.89%	15.25%	10.89%	13.60%	13.90%	13.16%	1.8%	1.49%	11.67%	14.64%	15.25%	13.60%	10.89%	13.90%	10.89%		
2001	9.32%	15.18%	11.38%	12.50%	12.80%	12.10%	2.4%	2.01%	10.09%	14.10%	15.18%	12.50%	9.32%	12.80%	15.18%		
2002	10.50%	14.92%	11.86%	12.10%	12.60%	12.35%	1.9%	1.53%	10.82%	13.87%	14.92%	12.10%	10.50%	12.60%	14.92%		
2003	8.37%	10.93%	11.30%	13.20%	12.70%	10.95%	2.0%	1.63%	9.32%	12.58%	8.37%	13.20%	8.37%	12.70%	12.70%		
2004	8.69%	10.50%	11.88%	13.40%	13.16%	11.12%	2.0%	1.65%	9.47%	12.77%	8.69%	13.40%	8.69%	13.16%	13.16%		
2005	8.60%	10.24%	12.12%	12.00%	15.18%	10.74%	1.7%	1.37%	9.37%	12.11%	8.60%	12.00%	8.60%	15.18%	15.18%		
2006	10.79%	10.37%	15.52%	12.50%	11.13%	12.30%	2.3%	1.92%	10.37%	14.22%	10.37%	12.50%	10.37%	11.13%	14.22%		
2007	10.76%	9.88%	15.02%	13.60%	12.68%	12.32%	2.4%	1.98%	10.34%	14.29%	9.88%	13.60%	9.88%	12.68%	14.29%		
Total Number of Outliers Across Years											6	9	5	6	5		

Sources: Document JA311, also referred to in footnote 62 of AEP's Brief filed on November 20, 2009

Notes: ¹ Ibbotson did not publish a 3-Factor Fama-French or 3-Stage DCF cost of equity estimate in 1994.

² Starting in 2006, the STB Ex Parte 558 methodology changed from using a Single-Stage DCF methodology to a CAPM methodology

Exhibit 5 Cost of Equity Estimates Outlier Bands Excluding the High and Low Values



Source: Original model estimates as presented by STB Docket No. 41191 (Sub No. 1); May 15, 2009. The outlier bands are placed at the midpoint of the highest and second highest value in each year, and the midpoint of the lowest and second lowest value of each year.

Qualifications

Appendix A

VITA

ROBERT S. HAMADA

Birthdate: August 17, 1937

Birthplace: San Francisco, California

Office Address:

Graduate School of Business
University of Chicago
5807 S. Woodlawn Ave.
Chicago, Illinois 60637 U.S.A.
312-541-9530 (phone)
773-834-1369 (phone)
773-834-8088 (fax)
Email: robert.hamada@gsb.uchicago.edu

Home Address:

50 East Bellevue Place, # 2305
Chicago, Illinois 60611
312-573-0605 (fax)

Wife: Danielle

Children: Matthew (born: 1967)

Janet (born: 1968)

Education

- 1963-1966 *Massachusetts Institute of Technology*. Ph.D. in Finance (completed in 1969) at the Sloan School of Management. Concentration in Business and Public Finance, Economics. Thesis: "Portfolio Analysis and Corporation Finance." Other major areas of investigation: The Empirical Incidence of the Corporation Income Tax in a Neoclassical Growth Economy.
- 1959-1961 *Massachusetts Institute of Technology*. S.M. (completed in 1961) at the Sloan School of Management. Thesis: "An Analysis of Diffusion Indexes of Insiders' Transactions."
- 1955-1959 *Yale University*. B.E. in Chemical Engineering (completed in 1959).

Employment

- 8/2003-present Edward Eagle Brown Distinguished Service Professor Emeritus of Finance, Graduate School of Business, University of Chicago
- 1993-7/2003 Edward Eagle Brown Distinguished Service Professor of Finance, Graduate School of Business, University of Chicago
- 7/2001 – 9/2002 Chief Executive Officer, Merchants' Exchange LLC, Chicago, Illinois
- 1993-2001 Dean, Graduate School of Business. University of Chicago
- 1993 Director, Center for International Business Education and Research, Graduate School of Business, University of Chicago
- 1989-1993 Edward Eagle Brown Professor of Finance, Graduate School of Business, University of Chicago
- 1985-1990 Deputy Dean for the Faculty, Graduate School of Business, University of Chicago

- 1980-1985 Director, Center for Research in Security Prices, Graduate School of Business, University of Chicago
- 1966-1989 Instructor, Assistant Professor, Associate Professor, and Professor of Finance, Graduate School of Business, University of Chicago
- 1979-1980 Baring Brothers Visiting Professor of Finance (September through August), London Graduate School of Business Studies, London, England
- 1976 Leslie Wong Distinguished Faculty Summer Research Fellow, University of British Columbia, Vancouver, Canada
- 1973 Visiting Senior Lecturer in Finance (January through June), London Graduate School of Business Studies, London, England
- 1971-1972 Visiting Associate Professor of Finance (September through June), University of Washington, Seattle, Washington
- 1971 Visiting Associate Professor of Finance (July through August), University of California at Los Angeles
- 1961-1963 Economic and Financial Analyst, Sun Oil Company, Philadelphia, Pennsylvania. Assignments included: acquisition and disposition studies, capital budgeting, mathematical programming, and exponential smoothing models.

Teaching, Research, Administrative, and Consulting Interests

Teaching areas included: Corporation Finance, Business Policy and Strategy, Portfolio and Security Analyses, Capital Markets, Applications of Financial Theory, Public Finance, Financing of Nonprofit Organizations, and Small Business Problems. Received the first "Outstanding Teacher Award" (1970) and the McKinsey Award for Excellence in Teaching (1981), Graduate School of Business, University of Chicago; *Fortune Magazine's* 8 Outstanding U.S. Business School Professors (January 1982).

Research interests in: effects of risk and taxes on the financing and capital budgeting decisions within the firm, on portfolio selection, and on the pricing of multiperiod capital assets; interface between finance, corporate strategy, and international business. Listed in Blaug, M. *Who's Who in Economics: A Biographical Dictionary of Major Economists 1700-1981*; MIT Press, 1982, 1986.

Administrative duties included: Dean, Graduate School of Business, University of Chicago (1993-2001); Director, Center for International Business Education and Research (1993); Deputy Dean, Graduate School of Business, University of Chicago (1985-1990); Director of Center for Research in Security Prices (1980-1985); finance faculty coordinator for Graduate School of Business, University of Chicago (1975-1985). Committee work included: Chair, University Committee on Retirement (1993-1999); Standing Committee on Retirement Issues (1993-1999); ARCH Development Corporation (1993-2000); Center for Health Administration Studies (CHAS) Oversight Committee (1993-1995); Chairman, Task Force on Faculty Retirement (1991-1992).

Consulting activities included: associate editor, *Journal of Finance* (1974-1977; 1981-1983); associate editor, *Journal of Financial and Quantitative Analysis* (1970-1983); referee for 16 journals; consulting editor in finance, Scott Foresman & Co.; advisory board, *Journal of Applied Corporate Finance*; State of Illinois (framing and implementing the Illinois state income tax); City of Chicago Economic Development Commission; Brown Brothers Harriman and Company; Harris Trust and Savings Bank; Continental Illinois Bank; First Chicago; Booz Allen; Touche Ross; FMC Corporation; Bradford National Corporation; UOP Inc.; Timken; and other firms. Expert witness for Mayer, Brown and Platt; Kirkland and Ellis; Jenner & Block; White and Case; Arnold & Porter; Winston & Strawn. etc.: speaker at innumerable conferences and universities.

Member of the Board of Directors (or Trustees): Federal Signal Corporation (10/2003-present); Fleming (2001-2004); Merchants' Exchange LLC (7/2001-9/2002); National Bureau of Economic Research (NBER) (1983-present); A. M. Castle & Co. (1984-present); Northern Trust Corporation (1988-2005); Chicago Board of Trade (public director, 1989-1992, 1993-1996, 1997-2000); Flying Food Group, Inc. (1992-present); WTTW Channel 11 (1996-present); Mayor Daley's Northerly Island Park Planning Committee (1996-1998); Riverwood International Corporation (1992-1993); the reorganized Manville Corporation (1988-1993); INFORMS (TIMS) (1986-1999); Teachers Insurance and Annuity Association (TIAA) (1984-1988); Van Straaten Chemical Company (1982-acquired in 1987); elected member of the Board of Directors, The American Finance Association (1982-1985); University of Chicago Laboratory Schools (1984-1991); Hyde Park Neighborhood Club (1970-present).

Member of the Advisory Committee (Board) of: founding member of the Advisory Board of the College of Management of National Taiwan University (1998-2000); the *Encyclopedia of American Business* advisory committee (1997-present); EVA® Institute.

Member of the Investments (or Finance) Committee of the Board of: INFORMS (TIMS) (1995-1999); National Bureau of Economic Research (1985-1995); American Economic Association (1988-1990, 1991-1993, 1997-1999).

Member of: American Economic Association; American Finance Association; Econometric Society; The Bond Club of Chicago; Chicago Committee of The Chicago Council of Foreign Relations; Commercial Club of Chicago; The Economic Club of Chicago; The Executives' Club of Chicago, Risk Management Center of Chicago.

Listed in Marquis' *Who's Who in America*; *Who's Who in the World*; *Who's Who in Finance and Industry*; *Who's Who in the Midwest*; *Who's Who in Science and Engineering*; *Who's Who in American Education*.

Publications and Working Papers

"Portfolio Analysis, Market Equilibrium and Corporation Finance," *Journal of Finance*, March, 1969; reprinted in: Stephen Archer and Charles A. D'Ambrosio (editors), *The Theory of Business Finance: A Book of Readings*, Macmillan Publishing Co., 1976.

“The Effects of Leverage and Corporate Taxes on the Shareholders of Regulated Utilities.” In Trebing and Howard (editors), *Rate of Return under Regulation: New Directions and Perspectives*, Michigan State University, 1969.

“Investment Decision with a General Equilibrium Mean-Variance Approach,” *Quarterly Journal of Economics*, November 1971.

“The Effect of the Firm’s Capital Structure on the Systematic Risk of Common Stocks,” *Journal of Finance*, May 1972, reprinted in: James L. Bicksler (editor), *Capital Market Equilibrium and Efficiency; Implications for Accounting, Financial and Portfolio Decision-Making*, D.C. Heath and Company,

1975; and reprinted in Stewart C. Myers (editor), *Modern Development in Financial Management*, the Dryden Press, 1976.

“Calculation of Present Value: The Multiperiod Case with Explicit Adjustment for Risk,” *Proceedings of the Seminar on the Analysis of Security Prices*, November 1975.

“Super Premium Security Prices and Optimal Corporate Financing Decision: Discussion,” *Journal of Finance*, May 1976.

“Corporate Finance and the Capital Asset Pricing Model: Discussion,” *Journal of Finance*, May 1977.

“Financial Theory and Taxation in an Inflationary World: Some Public Policy Issues,” *Journal of Finance*, May 1979.

“Taxes and Corporate Financial Management,” (with Myron Scholes), in Altman, E. and Subrahmanyam, M., (editors), *Recent Advances in Corporate Finance*, Irwin Press, 1985.

“Differential Taxes and the Structure of Equilibrium Rates of Return: Managerial Implications and Remaining Conundrums,” in *Advances in Financial Planning and Forecasting*, Vol. II, 1986.

“Making Statistics More Effective in Schools of Business: Interdisciplinary Cooperation,” (with James M. Patell, Richard Staelin, and William E. Wecker), *Proceedings of the Business and Economics Statistics Section--American Statistical Association*, 1986.

“Problems and Opportunities for Statistics in Accounting, Marketing, Finance, and Production,” (with James M. Patell, Richard Staelin, and William E. Wecker), *Journal of Business and Economic Statistics*, 1987.

Appendix B

RAJIV B. GOKHALE

May 2010

Senior Vice President

Business Address: Compass Lexecon
332 S. Michigan Ave.
Chicago, IL 60604
312/322-0275
rgokhale@compasslexecon.com

Home Address: 922 Windmere Court
Darien, IL 60561
630/971-9936

CONSULTING EXPERIENCE

Compass Lexecon (formerly Lexecon), (February 1992 to August 1998, April 2000 to Present)

Senior Vice President, 1/1/06 – Present

Vice President, 1/1/02 – 1/1/06

Economist, 02/27/92-08/14/98; 04/01/01 – 12/31/01

SCA Consulting, Principal (September 1998 to March 2000)

PROFESSIONAL & ACADEMIC EXPERIENCE

University of Chicago, Graduate School of Business; Research Assistant, Merger & Acquisition Analysis (April 1991 to April 1992).

Skidmore, Owings & Merrill, (Architects & Engineers), Associate (February 1986 to September 1990).

EDUCATION & PROFESSIONAL QUALIFICATIONS

University of Chicago, Graduate School of Business, Chicago, Illinois

Masters Degree in Business Administration, (With Honor's), April 1992

Vanderbilt University, School of Engineering, Nashville, Tennessee

Masters Degree in Mechanical Engineering, December 1985

University of Bombay, School of Engineering, Bombay, India

Bachelors Degree in Mechanical Engineering, June 1983

FIELDS OF SPECIALIZATION

Gokhale has developed an expertise in analyzing and identifying the determinants of corporate and business value. Gokhale's assignments cover a wide range of applications ranging from business valuations, damage calculations, analysis of expected efficiencies from mergers and analysis of the source and viability of entry into different industries.

Gokhale's valuation assignments include:

- Cable television network
- Changes in business practices by health insurer
- Cigarette manufacturer
- Department stores
- East Friesian and Beltex sheep
- Financial institutions
- Home healthcare provider
- Integrated steel manufacturer
- Intellectual Property/Intangible Assets
- Movie studio
- Other retail establishments (book stores, auto parts stores, etc.)
- Startup internet incubator
- Venture capitalist focused on biotech investments

Gokhale's experience in damage calculations include:

- Agreement to jointly market insurance products to bank and credit union customers
- Billing services to provider of wireless voice and data services
- Contract to market medical devices
- Dialysis provider's buyout of minority shareholders
- Investor in partnership designed to invest in corporate debt
- Proposed transaction involving European cable assets
- Provider of tax consulting services

TESTIMONY

Deposition of Rajiv B. Gokhale in Re: Coram Healthcare Corp. and Coram, Inc., Debtors, United States Bankruptcy Court for the District of Delaware, Case No. 00-3299 Through 00-3300, (MFW) (March 29, 2004)

Expert Report of Rajiv B. Gokhale and Daniel R. Fischel in Re: Hideji Jumbo Tanaka v. Cerberus Far East Management, L.L.C., et al., AAA Case No. 50 T 116 00284 03, (October 17, 2005).

Expert Report of Rajiv B. Gokhale in Re: Betty Lou Richards vs. United States of America, Case No. 05 CV 2044 GTV, (October 17, 2005)

Testimony of Rajiv B. Gokhale in Re: Hideji Jumbo Tanaka v. Cerberus Far East Management, L.L.C., et al., AAA Case No. 50 T 116 00284 03, (December 14-15, 2005)

Expert Report of Rajiv B. Gokhale and David B. Gross Copying Medical Records: An Analysis of the Release of Information Industry (November 11, 2004 Updated to Include Data on 2005 and 2006 Expense; April 10, 2007)

Expert Report of Rajiv B. Gokhale in Re: Robert A. Knarr, as Shareholder Representative on Behalf of the Shareholders of Cryogen, Inc., v. American Medical Systems, Inc., and Charlie Tribie, William Rutan, Jayne Little, Steve Kemper, Leon Hirsch, Robert Knarr & JHK Investments, LLC, Case No. 51 489Y 00421 06, (May 24, 2007)

Deposition of Rajiv B. Gokhale in Re: Robert A. Knarr, as Shareholder Representative on Behalf of the Shareholders of Cryogen, Inc., v. American Medical Systems, Inc., and Charlie Tribie, William Rutan, Jayne Little, Steve Kemper, Leon Hirsch, Robert Knarr & JHK Investments, LLC, Case No. 51 489Y 00421 06, (June 19, 2007)

Expert Report of Rajiv B. Gokhale in The Arbitration of Radian International LLC, The Lebanese Company For the Development and Reconstruction Of Beirut Central District, S.A.L. ("Solidere") and URS Corporation, Case No. 14208/EC (C-14236/EC), (July 13, 2007)

Testimony of Rajiv B. Gokhale in Re: Robert A. Knarr, as Shareholder Representative on Behalf of the Shareholders of Cryogen, Inc., v. American Medical Systems, Inc., and Charlie Tribie, William Rutan, Jayne Little, Steve Kemper, Leon Hirsch, Robert Knarr & JHK Investments, LLC, Case No. 51 489Y 00421 06, (July 25, 2007)

Reply Expert Report of Rajiv B. Gokhale in The Arbitration of Radian International LLC, The Lebanese Company For the Development and Reconstruction Of Beirut Central District, S.A.L. ("Solidere") and URS Corporation, Case No. 14208/EC (C-14236/EC), (October 8, 2007)

Expert Report of Rajiv B. Gokhale, Robert Blattberg, Richard Cooper and Roman Weil. The Analysis of the value of intangible property owned by [taxpayer] and associated buy in payments related to cost sharing agreements, (November 30, 2007). Retained by the Internal Revenue Service. Not permitted to disclose identity of taxpayer.

Expert Report of Rajiv B. Gokhale and David Ross, Loral Space & Communications Inc. Consolidated Litigation, Civil Action No. 2808-VCS, (January 21, 2008)

Deposition of Rajiv B. Gokhale, Loral Space & Communications Inc. Consolidated Litigation, Civil Action No. 2808-VCS, (February 12, 2008)

Declaration of Rajiv B. Gokhale, September 11 Litigation, Civil Action No. 21 MC 101 AKH, (June 20, 2008)

Verified Statement of Robert S. Hamada and Rajiv B. Gokhale, Western Fuels Association, Inc. and Basin Electric Power Cooperative Inc. v. BNSF Railway Company, Before the Surface Transportation Board STB Docket No. 42088, (July 1, 2008)

Verified Statement of Robert S. Hamada and Rajiv B. Gokhale, AEP Texas North Company v. BNSF Railway Company, Before the Surface Transportation Board STB Docket No. 41191, (August 5, 2008)

Expert Report of Rajiv B. Gokhale, M.D. Science Lab, LLC v. Fraserside Holdings Limited, a foreign Corporation; Private Media Group, Inc., a Nevada Corporation; DOES I – X; and ROE Business Entities XI through XX, Case No. A532271, (October 22, 2008)

Declaration of Rajiv B. Gokhale, November 10, 2008, Cordis Corporation v. Boston Scientific Corporation and Boston Scientific Systems, Inc., C.A. No. 08-779-SLR, (November 10, 2008)

Deposition of Rajiv B. Gokhale in Re: Cordis Corporation v. Boston Scientific Corporation and Boston Scientific Scimed, Inc., C.A. No. 08-779-SLR, (February 19, 2009)

Affirmation Linda Nash v. The Port Authority of New York and New Jersey Index No: 12907/93, (July 8, 2009)

Expert Report of Rajiv B. Gokhale, Peter Brinkerhoff v. Texas Eastern Products Pipeline Company, LLC, et al., C.A. No. 2427-VCL, (April 17, 2009)

Expert Report of Rajiv B. Gokhale, Aniplex, Inc. v. The Upper Deck Company, Case No. 2:08-cv-00442-HDM-PAL, (April 26, 2010)

Rebuttal Report of Rajiv B. Gokhale, Aniplex, Inc. v. The Upper Deck Company, Case No. 2:08-cv-00442-HDM-PAL, (June 4, 2010)

Deposition of Rajiv B. Gokhale, Aniplex, Inc. v. The Upper Deck Company, Case No. 2:08-cv-00442-HDM-PAL, (June 30, 2010)

OTHER SIGNIFICANT CASE WORK SINCE 2006

Chuck Ginsburg v. Philadelphia Stock Exchange, Inc., et al., 2006

American International Group Inc., v. Starr International Company, Inc. 2006

Cendant Corporation Securities Litigation, In the United States District Court for the District of New Jersey, Master File No. CV-98-1664, 2007

Ag-Innovations, Inc., Larry Faillace, Linda Faillace, and Houghton Freeman v. The United States of America, 2007

9/11 Litigation - Docket No. 21 MC 97, 2007

Rate Application of Allstate Insurance Company and Allstate Indemnity Company, Before The Insurance Commissioner of the State of California, File No. PA 2007-00004, 2007

BT Triple Crown Merger Co., Inc., B Triple Crown Finco, LLC and T Triple Crown Finco, LLC v. Deutsche Bank AG New York Branch, Deutsche Bank AG Cayman Islands Branch, and Deutsche Bank Securities, Inc. 2008

Lyondell Chemical Company, et al., Debtors, Official Committee of Unsecured Creditors, on behalf of the Debtors' Estates v. Citibank, N.A., et al., 2009