

**BEFORE THE
SURFACE TRANSPORTATION BOARD
Washington, DC 20423**

In the Matter of:

**METHODOLOGY TO BE EMPLOYED IN
DETERMINING THE RAILROAD INDUSTRY'S
COST OF CAPITAL**

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) **STB Ex Parte No. 664**
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**WRITTEN SUBMISSION OF
ARKANSAS ELECTRIC COOPERATIVE CORPORATION**

Pursuant to the Board's decision served October 24, 2007, Arkansas Electric Cooperative Corporation (AECC) respectfully submits the following information and comments regarding the Board's proposed capital asset pricing model (CAPM) methodology for calculating the railroad industry's cost of capital. AECC and its interests in this proceeding were described in AECC's comments submitted September 26, 2007.

In general, AECC defers to the Western Coal Traffic League (WCTL) and other parties to address detailed technical issues regarding CAPM and its implementation. However, in reviewing the information and arguments submitted by other parties in this proceeding, AECC has noted that at least some of the railroad parties have attempted to maintain positions that are inconsistent with (a) their own evidence and expert testimony; (b) their own operating practices and/or, (c) other established facts. Instances where this has occurred include the following:

- railroad claims regarding investment needs, including the Cambridge Systematics study;
- railroad arguments and evidence regarding specific CAPM parameters; and,
- railroad interpretations of recent beta increases.

Each of these is addressed below.

I. INVESTMENT NEEDS AND CAMBRIDGE SYSTEMATICS STUDY

Most of the railroad parties apparently hope or expect that the prospect of unmet future investment needs will dissuade the Board from undertaking the type of meaningful reform it has proposed in this proceeding. The \$148 billion figure developed in the analysis performed by Cambridge Systematics (hereafter, “CS Study”) certainly sounds impressive, and it is repeated like a mantra in a religious chant.

The problem is that in the railroads’ “religion”, the mantra leads to an inner falsehood rather than an inner truth. As outlined in AECC’s reply comments submitted October 29, 2007, the railroads’ own experts say that \$13 billion of the \$148 billion is going to come from shortlines and that on the order of \$70 billion is going to come from simply scaling up current Class I investment practices in proportion to the higher volumes that would be served using the needed facilities. Basically, the railroads turn up the amplifier when their experts say the big number, but pull the plug on the microphone before those same experts state their conclusion that most of this tab can be paid by continuing current practices.

Even the remaining $(148 - 13 - 70 =)$ \$65 billion of estimated investment need depends directly on the railroad-supplied assumption that future productivity improvements will produce no mitigation of future infrastructure requirements. The railroads simply don’t mention this critical and adverse assumption, despite the fact that it is highlighted by their experts and completely inconsistent with the railroads’ experiences of the past 27 years under the Staggers Act.

The egregious nature of the railroads' silence on this issue is underscored by the numerous ongoing rail initiatives that nullify the CS Study's explicit assumption that future operations will reflect a proportional "scaling up" of current operations. Examples of such initiatives that have been publicly reported just within the past 60 days include the following:

- Norfolk Southern has begun construction work on the "Heartland Corridor" project, which will reroute its double-stack container trains moving between the East Coast and the Midwest, saving 200 miles (and about a day's transit time) in comparison to the current route;¹
- BNSF has completed triple-tracking of the entire PRB Joint Line,² and further PRB capacity enhancements are programmed for near-term implementation;
- CN and CP have implemented a new routing protocol to direct the flows of their interline traffic through the most efficient gateway locations;³
- NS has awarded a contract for further development and initial field deployment (in 2009) of Optimized Train Control (its version of a safety-critical positive train control system), which is "designed to produce productivity and efficiency benefits";⁴
- CN applied to the STB for authority to acquire portions of the Elgin, Joliet and Eastern Railroad, claiming that the transaction "...would reduce rail traffic congestion in Chicago's inner core and increase rail capacity for carriers operating in the city..."
- KCS reported the completion of Phase I of an expansion project at the Port of Lazaro Cardenas (Mexico), which prospectively will alter the port distribution of international container and carload traffic flows to/from North America;⁵

¹ See http://www.railwayage.com/breaking_news.shtml (November 15, 2007).

² See http://www.railwayage.com/breaking_news_archive.shtml (November 2, 2007).

³ See http://www.railwayage.com/breaking_news_archive.shtml (November 1, 2007).

⁴ See http://www.railwayage.com/breaking_news_archive.shtml (November 1, 2007).

- UP expressed confidence regarding its future opportunities to improve productivity,⁶ which in the past have included substantial increases in tons per car and cars per train that boost effective throughput capacity;
- NS operated the first revenue service freight train in U.S. history equipped exclusively with electronically-controlled pneumatic (ECP) brakes, which (among many benefits) are expected to improve network capacity and efficiency. BNSF has obtained authority to conduct similar operations;⁷ and,
- UP and NS announced a new intermodal service that makes use of the “Meridian Speedway” project (via a connection at Shreveport, LA), and will cut 130 miles from the former route (via Memphis).⁸

In short, the railroads directed Cambridge Systematics to develop an estimate that does not reflect the types of efficiency and productivity improvements that the railroads have achieved and continue to achieve essentially on a continuous basis.

The railroads have chosen to highlight the \$148 billion estimate without disclosing the misleading assumptions upon which it rests. This calls into question the legitimacy of the entire railroad argument, as it suggests the railroads cannot make a persuasive case using realistic information. The expertise of the Board should enable it to see through the smoke and mirrors, and to proceed on the basis that the railroads have not demonstrated any unmet infrastructure needs that would be jeopardized by the Board’s proposed action.

⁵ http://www.railwayage.com/breaking_news_archive.shtml (October 25, 2007).

⁶ http://www.railwayage.com/breaking_news_archive.shtml (October 18, 2007).

⁷ http://www.railwayage.com/breaking_news_archive.shtml (October 11, 2007).

⁸ http://www.railwayage.com/breaking_news_archive.shtml (October 1, 2007).

II. CAPM PARAMETERS

AAR relies extensively on verified statements submitted on its behalf by Professor Stewart Myers of M.I.T. and by Dean R. Glenn Hubbard of Columbia University (jointly with Dr. Bruce Stangle of Analysis Group, Inc.). The issue with AAR's attempt to rely on these individuals is very similar to the problem with the CS Study described previously. Basically, AAR cites these individuals for arguments that it wants to make, while disregarding the fact that the text and data they present are to a great extent supportive of the Board's proposal. As described further below, specific examples of this can be seen in railroad arguments related to the market risk premium (MRP) and the value of beta.

A. MRP

AAR takes on an appearance of objectivity when it argues that the market risk premium should be within the range of reasonable values. However, Exhibit 2 on page 61 of the Hubbard/Stangle verified statement (submitted September 27, 2007) shows that the 5.2 percent value advanced by the Board is higher than values computed from recent data, and is, in fact, in the middle of the range of values that prospectively could be computed within the 50-year time frame proposed by the Board.

AAR then argues that the 50-year time frame is too short, and that it is important to include data from 1926-1955. However, the Hubbard/Stangle data show that the value endorsed by AAR is the highest value observable within the time frame AAR proposes. This is plainly inconsistent with the "middle of the range" concept supposedly embraced by AAR. Moreover, it

neglects Professor Myers' explicit acknowledgement that it may be "useful" to exclude data from the era of the Great Depression and World War II.⁹

Having disregarded the experts' guidance on the "middle of the range" and on the utility of the older data, AAR neglects to establish a credible reason why it is essential for the period of analysis to begin precisely in 1926. Professor Myers explicitly states that "the most commonly cited averages" run from 1900 as well as 1926, and shows how use of additional data from before 1926 would push the value back towards the Board's proposal.¹⁰ Indeed, other studies suggest that the market risk premium over the past 100 years – including the Great Depression and both World Wars – is approximately 5 percent.¹¹ These findings validate the Board's proposal, and further illustrate how AAR's insistence on selecting the analysis period that produces the biggest number has no foundation in rigorous analysis or in the objective principles AAR supposedly espouses.

Fittingly, a final attempt by AAR to undermine the Board's proposal results in a final corroboration of its reasonableness by Professor Myers' data. AAR disparages the Board's reliance on NYSE rather than S&P data. However, Professor Myers demonstrates that use of S&P data to implement the Board's proposal would yield an estimate of 5.0 percent.¹² This is slightly lower than the 5.2 percent figure reached by the Board, and basically identical to the 100-year results.

⁹ See Professor Myers' verified statement submitted September 27, 2007 (hereafter, "Myers V.S.") at page 6. Reasons why data from this period yield atypical results are discussed in further detail at <http://www.safehaven.com/article-419.htm>.

¹⁰ See Myers V.S. at page 6 and Table 3, respectively.

¹¹ See, for example, <http://eh.net/bookreviews/library/0533>.

¹² Myers V.S. at Table 3.

Ultimately, the testimony of AAR's experts corroborates the overall reasonableness of the Board's MRP estimate. If anything, it suggests that the Board's estimate may be slightly higher than the estimate that would result from application of the principles advocated by AAR.

B. Beta

AAR argues that the beta values presented by the Board are excessively low. However, the data presented in Exhibit 3a of the Hubbard/Stangle verified statement demonstrate that the Board's beta values for 2005 are generally comparable to or higher than the corresponding beta values developed by Ibbotson, a widely-referenced financial industry vendor. As was the case with the MRP, the data supplied by AAR's experts corroborate the reasonableness of the Board's proposal, and refute the criticisms advanced by AAR.

III. RECENT BETA INCREASE

Railroad parties cite the recent high computed values of railroad betas as if those values would enter a proper determination of the railroad cost of capital. However, the railroad parties have been virtually silent with respect to AECC's observation that "...the Board's proposed computation of carrier-specific "betas" from railroad stock returns may be affected by considerations other than financial risk that do not arise in most other sectors. In the duopolistic operating environment that has evolved for the Class I railroads, anything that has the effect of restricting competition may increase a carrier's stock performance relative to the market, and create the artificial appearance of a 'risk premium' under the contemplated methodology."¹³

The railroad parties have basically not addressed, let alone refuted, this point. In his verified statement submitted October 29, 2007, Professor Myers does assert (at page 7) that market power "...is as likely to reduce beta as it is to increase it." Presumably, Professor Myers was referring to the considerations summarized by The-Hiep Nguyen and Gilles Bernier in

¹³ See AECC comments submitted September 27, 2007 at page 3.

1988.¹⁴ To the extent that the exercise of market power creates a meaningful possibility of new market entry that would diminish a firm's expected returns from its long-run growth opportunities, market power may contribute to increased risk. However, in the absence of a realistic threat of new market entry, these same authors cite the "extensive theoretical and empirical work" which confirms that "...a firm's systematic risk at any point in time... falls with market power..."

The Board is well aware that new market entry is not a meaningful threat for most rail traffic. Even with the well-publicized service problems and rate increases¹⁵ that in recent years have wracked the largest single flow of rail traffic in the U.S. – PRB coal moving eastward from Wyoming – the financial markets have threatened Canadian Pacific with a downgrade to junk bond status if it pursues the PRB access project it is acquiring via its planned control of DME.¹⁶ For smaller and/or more dispersed traffic flows, the prospects for new entry are generally negligible.

Because the exercise of market power in the rail industry does not create a credible prospect of new entry, the Board can reasonably believe that the market power held by the railroads holds down the actual risk they face. If the Board observes an increasing beta, it should give careful consideration to the possibility that the higher stock returns driving the beta increase are caused by an increase in the exercise of market power, and not by any increase in the true risk faced by the railroad.

¹⁴ "Beta and q in a Simultaneous Framework with Pooled Data", *The Review of Economics and Statistics*, Vol. 70, No. 3 (Aug., 1988), pp. 520-524.

¹⁵ See Congressional Research Service (CRS) Report for Congress, Rail Transportation of Coal to Power Plants: Reliability Issues (September 26, 2007) Order Code RL34186 (hereafter, "CRS Report") at CRS-87 (Appendix 1) and CRS-55 (Figure 19), respectively.

¹⁶ A representative of Moody's Investment Services has indicated that the acquisition of DME will place downward pressure on CP's credit ratings, but that CP will remain investment grade as long as the PRB expansion project is not undertaken. This is echoed by a representative of UBS Investment Research, who highlights the remote probability that the economics of the expansion project would be favorable. See <http://www.canadaeast.com/rss/article/66461>.

Recent beta increases correlate closely with industry developments including the proliferation of public pricing, the embargo on new PRB coal movements imposed by UP during the Joint Line throughput problems that began in 2005 and the application of fuel surcharges that have subsequently been determined to be impermissible. Far from increasing risk, these developments have contributed to record earnings by increasing the differential between rail prices and variable costs¹⁷ (the fundamental indicator of market power).

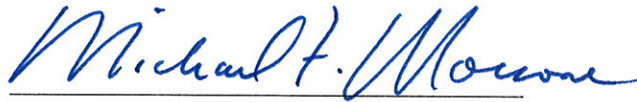
The railroads have offered no substantive response to the fact that the proposed method of measuring beta may give false indications of high risk as a result of increases in the exercise of market power that the railroads may achieve. If the Board does not address the market power issue, it runs the risk of creating a “feedback loop” in which the exercise of market power pushes up measured betas, which increase the measured cost of capital, which loosens constraints on rail rates, which increases the exercise of market power, etc. To help prevent this result, it would be useful for the Board to (a) apply a validation procedure that relies on an alternate methodology; and, (b) respond effectively to systematic increases in the exercise of rail market power it may observe.

¹⁷ CRS Report at CRS-24 (Figure 10).

AECC appreciates this opportunity to participate further in the development of information and dialogue regarding the Board's proposal.

Respectfully submitted,

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