BEFORE THE SURFACE TRANSPORTATION BOARD

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PETITION OF THE WESTERN COAL TRAFFIC LEAGUE TO INSTITUTE A RULEMAKING PROCEEDING TO ABOLISH THE USE OF THE MULTI-STAGE DISCOUNTED CASH FLOW MODEL IN DETERMINING THE RAILROAD INDUSTRY'S COST OF EQUITY CAPITAL

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PETITION OF THE WESTERN COAL TRAFFIC LEAGUE TO INSTITUTE A RULEMAKING PROCEEDING TO ABOLISH THE USE OF THE MULTI-STAGE DISCOUNTED CASH FLOW MODEL IN DETERMINING THE RAILROAD INDUSTRY'S COST OF EQUITY CAPITAL

WESTERN COAL TRAFFIC LEAGUE

Of Counsel:

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Dated: August 27, 2013

William L. Slover Robert D. Rosenberg Slover & Loftus LLP 1224 Seventeenth Street, N.W. Washington, D.C. 20036 (202) 347-7170

Its Attorneys

Office ENTERIED AUG 27 2013 Public Record

VERIFIED STATEMENT OF DANIEL L. FAPP

I am Daniel L. Fapp, an economist and a Vice President of L. E. Peabody & Associates, Inc., an economic consulting firm. A copy of my credentials is included as Exhibit No. 1 to this verified statement. My consulting assignments regularly involve railroad financial issues, including cost of capital determinations. In these assignments, I have calculated railroad capital structures, market values, cost of railroad debt, cost of preferred railroad equity and cost of common railroad equity. I am also well acquainted with and have used the commonly accepted models for determining a firm's cost of equity, including Single-Stage Discounted Cash Flow Models, Multi-Stage Discounted Cash Flow Models ("MS-DCF"), and the Capital Asset Pricing Model ("CAPM"). I have developed railroad industry average cost of capital and company specific cost of capital for use in litigation and for use in general business management.

I have been requested by Counsel for the Western Coal Traffic League ("WCTL") to review the railroad cost of equity developed by independent investment firms and financial reporting firms and to present the costs of equity produced by these independent companies.

In performing my assignment, I have reviewed the railroad research reports produced by several equity research firms, and I have reviewed valuation reports from investment banking firms to determine which of these firms listed their cost of equity ("COE") assumptions for the railroads included in the STB's annual cost of capital determination. My review included research and valuation reports from nine (9) large brokerage and investment banking firms,¹ six (6) financial reporting firms,² and ten (10) smaller research firms.³ My review found two different research firms, S&P and MarketGrader, that included their railroad cost of equity

¹ Deutsche Bank, Smith Barney, Goldman Sachs, Merrill Lynch, J. P Morgan, Credit Suisse, Edward Jones, UBS and Wells Fargo.

² Standard & Poor's ("S&P"), Reuters, Morningstar Equity Analysis Reports, Thompson's, Compustat and First Call.

³ New Constructs, MarketGrader, EVA Dimensions, Market Edge Research, Columbine Capital Services, Ativo Research, Ford Equity Research, Jefferson Research, Ned Davis Research and Zack's Investment Research.

estimates in their railroad company research reports.⁴ In every case where the railroad cost of equity was reported, the cost of equity estimate used by the research firm was lower than the MS-DCF and CAPM costs of equity determined and used by the STB.

S&P included its railroad company cost of equity estimates in its stock reports for the three current companies included in the STB's cost of capital determination. Table 1 below compares the S&P costs of equity to the STB's MS-DCF cost of equity estimates.

| Table 1 STB Multi-Stage Discounted Cash Flow Cost of Equity and Standard & Poor's Railroad Cost of Equity | | | | | | |
|---|--|--|---|---|---|--|
| CS STB MS-DCF (2) | $\frac{\mathbf{X}}{\mathbf{COE}^{1/}}$ (3) | NS STB MS-DCF (4) | $\frac{\mathbf{C}}{\mathbf{COE}^{1/}}$ | UN STB MS-DCF (6) | $\frac{\mathbf{P}}{\mathbf{COE}^{1/}}$ (7) | |
| 17.0% 13.6% 14.0% 16.7% 18.3% | 1/ 10.9% 10.9% 10.9% | 16.5% 14.8% 15.1% 16.8% 17.7% | 1/ 11.2% 10.8% 10.8% 10.8% | 15.5% 13.0% 13.8% 15.0% 15.5% | 1/ 10.5% 10.5% 10.5% | |
| | Cost of Equ CS STB MS-DCF (2) 17.0% 13.6% 14.0% 16.7% 18.3% | STB Multi-S Cost of Equity and Stand CSX STB S&P MS-DCF COE ^{1/} (2) (3) 17.0% 1/ 13.6% 10.9% 14.0% 10.9% 16.7% 10.9% 18.3% 10.9% | STB Multi-Stage Discounted Cost of Equity and Standard & Poor's H CSX NS STB S&P STB S&P STB S&P MS-DCF COE ^{1/} MS-DCF (2) (3) 16.5% 17.0% 1/ 16.5% 13.6% 10.9% 14.8% 14.0% 10.9% 15.1% 16.7% 10.9% 16.8% 18.3% 10.9% 17.7% | STB Multi-Stage Discounted Cash Flow Cost of Equity and Standard & Poor's Railroad Cos CSX NSC STB S&P MS-DCF COE ^{1/} MS-DCF COE ^{1/} (2) (3) 1/ STB S&P MS-DCF COE ^{1/} MS-DCF COE ^{1/} 1/ 17.0% 1/ 16.5% 1/ 1 <td< td=""><td>STB Multi-Stage Discounted Cash Flow Cost of Equity and Standard & Poor's Railroad Cost of Equity CSX NSC UN STB S&P STB S&P UN MS-DCF COE^{1//} MS-DCF COE^{1//} MS-DCF COE^{1//} MS-DCF (2) (3) 1/ 16.5% 1/ 15.5% 13.6% 10.9% 14.8% 11.2% 13.0% 14.0% 10.9% 15.1% 10.8% 15.0% 18.3% 10.9% 17.7% 10.8% 15.5%</td></td<> | STB Multi-Stage Discounted Cash Flow Cost of Equity and Standard & Poor's Railroad Cost of Equity CSX NSC UN STB S&P STB S&P UN MS-DCF COE ^{1//} MS-DCF COE ^{1//} MS-DCF COE ^{1//} MS-DCF (2) (3) 1/ 16.5% 1/ 15.5% 13.6% 10.9% 14.8% 11.2% 13.0% 14.0% 10.9% 15.1% 10.8% 15.0% 18.3% 10.9% 17.7% 10.8% 15.5% | |

MarketGrader, an independent equity research firm, also estimated the railroad companies' cost of equity. Table 2 below provides MarketGrader's current estimates of the railroads' cost of equity.

⁴ While in some cases the research and valuation reports I reviewed included the railroad company's estimated cost of capital (these firms included Credit Suisse, Goldman Sachs, EVA Dimensions, MarketGrader, S&P, New Construction and Ativo Research), in most instances the reports were silent on their cost of capital and cost of equity assumptions. Firms that do not public disclose their cost of equity estimates for railroads may still develop or use estimates in their financial analysis.

| Table 2 MarketGrader Railroad Costs of Equity - July 2013 | | | | | | | |
|---|--|--------|--------|--------|--|--|--|
| Item | | CSX | NSC | UNP | | | |
| | (1) | (2) | (3) | (4) | | | |
| 1. | MarketGrader Unweighted Cost of Equity | 9.80% | 10.34% | 9.27% | | | |
| 2. | STB 2012 MS-DCF Cost of Equity | 18.32% | 17.65% | 15.53% | | | |
| 3. | % STB exceeds MarketGrader ^{1/} | 87% | 71% | 68% | | | |
| Sou 1/ (| rrce: Exhibit No. 3 Line 2 ÷ Line 1) – 1.0. | | | | | | |

Equity research and investment banking firms can be presumed to be using accurate information in their analyses. Based on the examples above, it appears that the equity research and investment banking firms believe that the railroad companies' costs of equity range between roughly 9.2 and 11.2 percent, depending upon the railroad and the time period. The STB's CAPM cost of equity estimates are generally in-line with these independent cost of equity estimates, although the Board's CAPM figures tend to be a slightly higher when compared on an annual basis.⁵ However, the cost of equity figures produced by the independent firms are substantially lower than the STB's MS-DCF determinations. I believe the STB's MS-DCF costs of equity to be significantly overstated.

⁵ Between 2008 and 2012, the STB's CAPM costs equity ranged from 10.4 to 11.8 percent

VERIFICATION

I, Daniel L. Fapp, declare under penalty of perjury, that the foregoing Statement is true and correct, and that I am qualified and authorized to file this Statement.

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Daniel L. Fapp

Executed on August 26, 2013

STATEMENT OF QUALIFICATIONS

My name is Daniel L. Fapp. I am Vice President of the economic consulting firm of L. E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Suite 200, Alexandria, VA 22314; 760 E. Pusch View Lane, Suite 150, Tucson, Arizona 85737; and 21 Founders Way, Queensbury, New York 85737.

I received a Bachelor of Science degree in Business Administration with an option in Marketing (cum laude) from the California State University, Northridge in 1987, and a Master of Business Administration degree from the University of Arizona's Eller College of Management in 1993, specializing in finance and operations management. I am also a member of Beta Gamma Sigma, the national honor society for collegiate schools of business.

I have been employed by L. E. Peabody & Associates, Inc. since December 1997. Prior to joining L. E. Peabody & Associates, Inc., I was employed by BHP Copper Inc. in the role of Transportation Manager - Finance and Administration, and where I also served as an officer and treasurer of the three BHP Copper Inc. subsidiary railroads, The San Manual Arizona Railroad, the Magma Arizona Railroad (also known as the BHP Arizona Railroad) and the BHP Nevada Railroad. I have also held operations management positions with Arizona Lithographers in Tucson, AZ and MCA-Universal Studios in Universal City, CA.

While at BHP Copper Inc., I was responsible for all financial and administrative functions of the company's transportation group. I also directed the BHP Copper Inc. subsidiary railroads' cost and revenue accounting staff, and managed the San Manuel Arizona Railroad's and BHP Arizona Railroad's dispatchers and the railroad dispatching functions. I served on the company's Commercial and Transportation Management Team and the company's Railroad Acquisition Team where I was responsible for evaluating the acquisition of new railroads,

STATEMENT OF QUALIFICATIONS

including developing financial and economic assessment models. While with MCA-Universal Studios, I held several operations management positions, including Tour Operations Manager, where my duties included vehicle routing and scheduling, personnel scheduling, forecasting facilities utilization, and designing and performing queuing analyses.

As part of my work for L. E. Peabody & Associates, Inc., I have performed and directed numerous projects and analyses undertaken on behalf of utility companies, short line railroads, bulk shippers, and industry and trade associations. Examples of studies which I have participated in organizing and directing include, traffic, operational and cost analyses in connection with the rail movement of coal, metallic ores, pulp and paper products, and other commodities. I have also analyzed multiple car movements, unit train operations, divisions of through rail rates and switching operations throughout the United States. The nature of these studies enabled me to become familiar with the operating procedures utilized by railroads in the normal course of business.

Since 1997, I have participated in the development of cost of service analyses for the movement of coal over the major eastern and western coal-hauling railroads. I have conducted on-site studies of switching, detention and line-haul activities relating to the handling of coal. I have also participated in and managed several projects assisting short-line railroads. In these engagements, I assisted short-line railroads in their negotiations with connecting Class I carriers, performed railroad property and business evaluations, and worked on rail line abandonment projects.

I have been frequently called upon to perform financial analyses and assessments of Class I, Class II and Class III railroad companies. I have determined the Going Concern Value of privately held freight and passenger railroads, including developing company specific costs of

STATEMENT OF QUALIFICATIONS

debt and equity for use in discounting future company cash flows. My consulting assignments regularly involve working with and determining various facets of railroad financial issues, including cost of capital determinations. In these assignments, I have calculated railroad capital structures, market values, cost of railroad debt, cost of preferred railroad equity and common railroad equity. I am also well acquainted with and have used financial industry accepted models for determining a firm's cost of equity, including Discounted Cash Flow Model ("DCF") models, Capital Asset Pricing Model ("CAPM"), Farma-French Three Factor Model and Arbitrage Pricing Models. I have also lectured in graduate level finance and economics classes discussing corporate capital theory and costs of equity determination, and am a member of the Professional Advisory Council for the Eller School of Management Finance Department at the University of Arizona.

In my tenure with L. E. Peabody & Associates, Inc., I have presented stand-alone cost evidence, including discounted cash-flow models and cost of capital determinations, in numerous proceedings before the STB, and presented evidence on railroad fuel surcharges in STB in Ex Parte No. 661, *Rail Fuel Surcharges*. I have submitted evidence on cost of capital determinations and related issues in Ex Parte No. 558 (Sub-No. 10), *Railroad Cost of Capital – 2006*, Ex Parte No. 558 (Sub-No. 11), *Railroad Cost of Capital – 2007*, Ex Parte No. 558 (Sub-No. 11), *Railroad Cost of Capital – 2007*, Ex Parte No. 558 (Sub-No. 12), *Railroad Cost of Capital – 2008*, Ex Parte No. 558 (Sub-No. 13), *Railroad Cost of Capital – 2009*, Ex Parte No. 558 (Sub-No. 14), *Railroad Cost of Capital – 2010*, Ex Parte No. 664, *Methodology To Be Employed In Determining The Railroad Industry Cost Of Capital*, and Ex Parte No. 664 (Sub-No.1), *Use Of A Multi-Stage Discounted Cash Flow Model In Determining The Railroad Industry's Cost Of Capital*. In addition, my reports on railroad valuations have been used as evidence before the Nevada State Tax Commission.

| | | CSX | | NSC | | UNP | |
|----|-------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
| | <u>Year</u> | STB <u>MSDCF</u> | S&P <u>COE 1/</u> | STB <u>MSDCF</u> | S&P <u>COE 1/</u> | STB <u>MSDCF</u> | S&P <u>COE 1/</u> |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1. | 2008 | 17.0% | <u>2</u> / | 16.5% | <u>2</u> / | 15.5% | <u>2</u> / |
| 2. | 2009 | 13.6% | 10.9% | 14.8% | 11.2% | 13.0% | 10.5% |
| 3. | 2010 | 14.0% | 10.9% | 15.1% | 10.8% | 13.8% | 10.5% |
| 4. | 2011 | 16.7% | 10.9% | 16.8% | 10.8% | 15.0% | 10.5% |
| 5. | 2012 | 18.3% | 10.9% | 17.7% | 10.8% | 15.5% | 10.5% |

STB Multi-Stage Discounted Cash Flow Cost of Equity and Standard & Poor's Railroad Cost of Equity

<u>1</u>/ Standard & Poor's reported cost of equity in their equity research reports for the year after the STB MSDCF cost of equity, e.g., the CSX 2012 value of 10.9% was taken from a 2013 S&P Report. The lag is necessary to account for Standard & Poor's accounting for year-end railroad information.

2/ Standard and Poor's did not report a cost of equity for these periods in its Stock Report.

Note: Standard and Poor's did not report its cost of equity for the BNSF for the years 2008 and 2009, the last full years the BNSF's stock was publicly traded.

MarketGrader Railroad Costs of Equity - July 2013

| | | | MarketGrader Costs of Equity | | | |
|----|--------------------------------|----------------------------|------------------------------|------------|--------|--|
| | Item | Source | <u>CSX</u> | <u>NSC</u> | UNP | |
| | (1) | (2) | (3) | (4) | (5) | |
| 1. | Weighted Cost of Equity | MarketGrader Report | 4.97% | 5.62% | 6.34% | |
| 2. | Debt Weight | MarketGrader Report | 49.30% | 45.63% | 31.61% | |
| 3. | Equity Weight | 100% - Line 2 | 50.70% | 54.37% | 68.39% | |
| 4. | Unweighted Cost of Equity | Line 1 ÷ Line 3 | 9.80% | 10.34% | 9.27% | |
| 5. | STB 2012 MS-DCF Cost of Equity | EP 558 (Sub-No. 16) | 18.32% | 17.65% | 15.53% | |
| 6. | % STB exceeds MarketGrader | (Line 5 ÷ Line 4) -1 x 100 | 87% | 71% | 68% | |

Sources: MarketGrader.com StockGrader Reports