

210195
STEPTOE & JOHNSON LLP
ATTORNEYS AT LAW

Samuel M. Sipe Jr.
202.429.6486
ssipe@step toe.com

1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Tel 202.429.3000
Fax 202.429.3902
step toe.com

March 1, 2004



PUBLIC VERSION

Via HAND DELIVERY

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board
1925 K Street, NW
Washington, DC 20423

Re: **STB Docket No. 41191 (Sub-No.1), AEP Texas North Company v. The Burlington Northern and Santa Fe Railway Company**

Dear Secretary Williams:

Enclosed for filing in the above-captioned matter are the original and ten copies of the Public version of the Opening Evidence and Argument of The Burlington Northern and Santa Fe Railway Company. The Public version of this Opening Evidence and Argument consists of a single volume containing the Narrative and Exhibits. Also enclosed are three copies of a CD containing a PDF version of the Public Narrative. BNSF is filing the Highly Confidential version of this Opening Evidence and Argument today under a separate cover letter.

Please date stamp the extra copy of this cover letter and return it to the messenger who delivered this filing.

Sincerely,

Samuel M. Sipe, Jr.

Enclosures
cc: Counsel for Complainant

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PUBLIC VERSION

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Docket No. 41191 (Sub-No. 1)



AEP TEXAS NORTH COMPANY

v.

THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY

**Opening Evidence and Argument of
The Burlington Northern and Santa Fe Railway Company**

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Public Record**

NARRATIVE AND EXHIBITS

Volume I of I

Richard E. Weicher
Michael E. Roper
David M. Pryor
THE BURLINGTON NORTHERN AND
SANTA FE RAILWAY COMPANY
2500 Lou Menk Drive
Fort Worth, TX 76131
(817) 352-2353

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

ATTORNEYS FOR
THE BURLINGTON NORTHERN AND
SANTA FE RAILWAY COMPANY

March 1, 2004

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TABLE OF ABBREVIATIONS

AAR	Association of American Railroads
AEP	American Electric Power
AEP Texas	AEP Texas North Company
BN	Burlington Northern Railroad Company
BNSF	The Burlington Northern and Santa Fe Railway Company
DCF	Discounted Cash Flow
EOTDs	End-of-Train Devices
ICC	Interstate Commerce Commission
ICCTA	ICC Termination Act
PPI	Producer Price Index
PRB	Powder River Basin
R/VC	Revenue-to-Variable Cost
SAC	Stand-Alone Cost
SARR	Stand-Alone Railroad
STB	Surface Transportation Board
UMF	URCS Master Files
URCS	Uniform Railroad Costing System
WP	Workpaper
WTU	West Texas Utilities

CASE NAMES

<i>1996 Decision</i>	<i>West Texas Utilities Co. v. Burlington Northern R.R. Co.</i> , 1 S.T.B. 636 (served May 3, 1996)
<i>CP&L/NS</i>	<i>Carolina Power and Light Company v. Norfolk Southern Ry. Co.</i> , STB Docket No. 42072 (served Dec. 23, 2003)
<i>Coal Rate Guidelines or Guidelines</i>	<i>Coal Rate Guidelines, Nationwide</i> , 1 I.C.C.2d 520 (1985)
<i>FMC</i>	<i>FMC Wyoming Corp. v. Union Pacific R.R.</i> , STB Docket No. 42022 (served May 12, 2000)
<i>General Procedures</i>	<i>General Procedures for Presenting Evidence in Stand-Alone Cost Rate Cases</i> , STB Ex Parte No. 347 (Sub-No.3) (served Mar. 12, 2001)
<i>July 2003 Decision</i>	<i>West Texas Utilities v. The Burlington Northern and Santa Fe Ry. Co.</i> , STB Docket No. 41191 (served July 23, 2003)
<i>March 2001 Decision</i>	<i>West Texas Utilities Co. v. The Burlington Northern and Santa Fe Ry. Co.</i> , STB Docket No. 41191 (filed Mar. 23, 2001)
<i>May 2003 Decision</i>	<i>West Texas Utilities Co. v. The Burlington Northern and Santa Fe Ry. Co.</i> , STB Docket No. 41191 (filed May 29, 2003)
<i>November 2000 Decision</i>	<i>West Texas Utilities Co. v. The Burlington Northern and Santa Fe Ry. Co.</i> , STB Docket No. 41191, (filed Nov. 7, 2000)
<i>PEPCO</i>	<i>Potomac Electric Power Co. v. Consolidated Rail Corp.</i> , STB Docket No. 36114 (Sub-No. 1) (served April 7, 1982)
<i>Southern Pacific</i>	<i>S. Pacific Transp. Co. v. City of San Antonio, Tex.</i> , 748 F.2d 266, 274 (5th Cir. 1984)
<i>TMPA</i>	<i>Texas Municipal Power Agency v. The Burlington Northern and Santa Fe Ry. Co.</i> , STB Docket No. 42056 (served Mar. 24, 2003)
<i>Xcel</i>	<i>Public Service Company of Colorado D/B/A Xcel Energy v. The Burlington Northern and Santa Fe Ry. Co.</i> , STB Docket No. 42057

I. COUNSEL'S ARGUMENT AND SUMMARY OF THE EVIDENCE

This is the opening evidence and argument of defendant The Burlington Northern and Santa Fe Railway Company ("BNSF") in STB Docket No. 41191 (Sub-No.1), *AEP Texas North Company v. The Burlington Northern and Santa Fe Railway Company*. The format of BNSF's submission complies with that prescribed in the Board's March 12, 2001 decision in STB Ex Parte No. 347 (Sub-No. 3), *General Procedures for Presenting Evidence in Stand-Alone Rate Cases* ("*General Procedures*").

This proceeding should not be on the Board's docket. The complainant, AEP Texas North Company ("AEP Texas"), has flouted Board orders and defied the governing statute by refusing ever to pay the rates that it now seeks to challenge. AEP Texas should not be permitted to take advantage of the Board's rate reasonableness procedures when it has resorted to self-help in defiance of the Board's law and procedures. BNSF has sought dismissal of AEP Texas' complaint for this reason and BNSF urges the Board to act promptly on that motion. The defendant and the Board should not be required to waste further time and resources on a case that should not even be before the Board.

AEP Texas's complaint addresses the reasonableness of rates for BNSF's transportation of coal from certain mines in the Powder River Basin ("PRB") of Wyoming to AEP Texas' Oklaunion Station, near Vernon, Texas.¹ The Board has already addressed the reasonableness of rates on movements from the Rawhide mine in the PRB to Oklaunion. In a 1996 decision, the Board conducted a SAC analysis to determine the maximum reasonable rate that can be charged

¹ AEP Texas Verified Complaint, STB Docket No. 41191 (Sub-No.1) (filed Aug. 11, 2003) ("*2003 Verified Complaint*"); as supplemented in Supplement to the Verified Complaint of AEP Texas, STB Docket No. 41191 (Sub-No.1) (filed Dec. 22, 2003).

for transportation from the Rawhide mine to AEP Texas' Oklaunion Station.² The Rawhide mine is only a short distance from the other PRB mines at issue here, and the transportation characteristics of the Rawhide movement do not differ materially from the transportation characteristics of coal movements from the other PRB mines to the Oklaunion Station. Given the similarity in transportation characteristics, the results of a SAC analysis in this case should not differ materially from the SAC determination made by the Board in the *1996 Decision*. As explained below, BNSF has never charged rates for the issue traffic movements that exceed the maximum reasonable SAC rate that the Board already calculated for the Rawhide mine. As a result, there is no reason to believe that the challenged rates in this proceeding exceed a maximum reasonable level.

This Argument reviews several legal issues that will affect the Board's consideration of AEP Texas' evidence, including AEP Texas' defiance of the Board's law and precedent in refusing to pay the lawfully established common carrier rates that it seeks to challenge in this case. This Argument also summarizes the results of BNSF's variable cost calculations. As BNSF explains in more detail in Section II.A of the Narrative, the rates at issue have never generated revenues that exceed the Board's jurisdictional threshold. Indeed, AEP Texas' refusal to pay the challenged rates has resulted in revenues on the issue traffic that are substantially below the jurisdictional threshold, thus providing additional and independent grounds for the Board to dismiss AEP Texas' complaint without further consideration of evidence. Even if the R/VC ratios are calculated based on the challenged rate as opposed to the amounts AEP Texas has unilaterally chosen to pay, the rates are below the jurisdictional threshold in all costed

² *West Texas Utilities Co. v. Burlington Northern R.R. Co.*, 1 S.T.B. 636 (served May 3, 1996) ("*1996 Decision*").

quarters. The Board therefore lacks jurisdiction and the complaint should be dismissed as to movements in those periods.

A. PROCEDURAL BACKGROUND

BNSF's rates for the transportation of coal from the PRB to AEP Texas' Oklaunion Station have been the subject of ICC and STB proceedings for almost a decade. BNSF summarizes below the long and complicated procedural history of this case as it will be relevant to any consideration by the Board of SAC evidence.

The reasonableness of rates for movements of coal from PRB mines to the Oklaunion Station was first challenged in 1994 by AEP Texas' predecessor, West Texas Utilities ("WTU"). Since the scope of WTU's 1994 complaint was unclear -- it referred to "the movement of Complainant's coal from the Powder River Basin to Oklaunion Station"³ -- the ICC ordered WTU to provide a more specific statement of the scope of the complaint. WTU responded with a list of 11 PRB mine origins for which it sought a rate prescription, including 10 that are the subject of this proceeding.⁴ Both WTU and BN submitted SAC evidence that encompassed several of those mine origins.⁵

On May 3, 1996, the Board issued its decision. The Board evaluated the parties' SAC evidence and made findings on contested SAC issues. The Board's treatment of SAC traffic, revenue and cost issues was extremely favorable to the complainant, and as a result the Board found that the maximum reasonable rate under the SAC test was below the jurisdictional

³ WTU Verified Complaint, STB Docket No. 41191, at 7 (filed Jan. 12, 1994).

⁴ The list, contained in WTU's 2/17/1995 letter to the Board, included Rawhide Jct., Caballo Jct., Belle Ayr, Eagle Jct., Rojo Jct., Cordero, Coal Creek Jct., Reno Jct., Jacobs Jct., Rochelle, and Macco Jct..

⁵ In its decision, the Board included a map with the locations of the PRB mine origins that would be served by the stand-alone railroad. *1996 Decision* at 659.

threshold for the first several years of the discounted cash flow period.⁶ Since the Board cannot prescribe a rate that is below the jurisdictional threshold, the Board concluded that a rate prescription would have to be based on the variable cost evidence. The Board calculated variable costs for movements from the Rawhide mine, which provided the base-load coal for the Oklaunion Station at the time, and issued an order requiring the defendant to establish and maintain a common carrier rate for movements from the Rawhide mine that did not yield revenues in excess of the 180 percent revenue/variable cost limit as calculated by the Board.⁷ The Board noted, however, that it would extend its findings to cover rates from non-Rawhide mines if location-specific supplemental evidence was presented.⁸

Shortly after the decision was issued, WTU asked BN to extend the prescribed rate to other mine origins, noting that the Board's SAC findings were based on annual shipments from multiple PRB mines and that "BN service costs, as determined by the Board, would not be expected to differ meaningfully (and certainly should not be higher) for coal originating at points near or south of Rawhide."⁹ BN agreed to apply the \$13.68 rate prescribed by the Board in the *1996 Decision* to transportation from non-Rawhide mines.¹⁰ In 1997, the Rawhide mine closed, and WTU began to obtain its base-load coal from other mines in the PRB.¹¹

⁶ The Board staff developed a discounted cash flow (DCF) model projecting the SAC maximum rate levels through the year 2014, which the Board included as Table E-1. *Id.* at 711.

⁷ *Id.* at 679.

⁸ *Id.* at 644.

⁹ See Letter from Mr. Nicholas Akins to Mr. Sami Shalah, dated July 16, 1996, attached as Exhibit B to WTU Petition for Reconsideration and Request for Oral Argument, STB Docket No. 41191 (filed Nov. 27, 2000) ("WTU Petition for Reconsideration").

¹⁰ See Letter from Mr. Shalah to Ms. Mills, dated Aug. 30, 1996, attached as Exhibit C to WTU Petition for Reconsideration.

¹¹ The Rawhide mine was later reopened, as discussed below, and AEP Texas resumed shipping coal from that origin in 2002.

BNSF maintained the rate for non-Rawhide movements at the level prescribed by the Board in the *1996 Decision*, which was based on 180 percent of variable costs as calculated in 1996 on Rawhide movements, until mid-2000. By this time, the SAC maximum rate had risen to a level that exceeded the prescribed rate based on the jurisdictional threshold. On June 16, 2000, BNSF notified the Board of its intention to increase its common carrier rate for non-Rawhide movements and specifically asked the Board to confirm that the rate prescription in the *1996 Decision* applied only to the Rawhide movements, or, alternatively, to modify that prescription to allow BNSF to charge for non-Rawhide movements the higher of either 180 percent of the variable costs or the SAC maximum.¹² In a November 7, 2000 decision, the Board held that BNSF was lawfully entitled to raise its common carrier rates for non-Rawhide movements without modification of the *1996 Decision* prescription because that rate prescription technically applied only to movements originating at Rawhide.¹³ The Board did make clear, however, that it would extend the *1996 Decision* rate reasonableness determination to cover the non-Rawhide mines on the basis of the already developed record after receiving limited supplemental evidence pertaining to movements from those other origins.¹⁴

WTU sought reconsideration of that decision, and on March 23, 2001, the Board confirmed that the rate prescription in the *1996 Decision* applied only to the Rawhide mine, a conclusion obvious from the face of the decision, but also reiterated that it would extend that rate prescription to non-Rawhide mine origins based on the record already developed in the 1996

¹² BNSF Notice and Justification for Increased Rates on Coal Movements from Non-Rawhide Origins, or, In the Alternative, Petition for Modification of Rate Prescription, STB Docket No. 41191 (filed June 16, 2000).

¹³ *West Texas Utilities Co. v. BNSF*, STB Docket No. 41191, at 4 (filed Nov. 7, 2000) (“*November 2000 Decision*”).

¹⁴ *Id.* at 5.

case. The Board identified three limited categories of supplemental evidence that would enable it to determine the maximum reasonable rate on movements from the non-Rawhide origins based on the record already developed: (1) whether additional resources would be needed to serve the additional mines; (2) whether there were other significant changed circumstances affecting the rate analysis; and (3) whether the rate resulting from the SAC analysis would exceed 180 percent of variable costs.¹⁵

Shortly after the Board's *November 2000 Decision*, AEP Texas and BNSF entered into negotiations regarding a transportation agreement that would cover rail transportation to multiple generating facilities owned by the AEP family of companies, including the Oklaunion Station. Apparently due to the pending negotiations, AEP Texas did not pursue the Board's invitation to submit evidence applicable to non-Rawhide mine origins. However, AEP Texas also unilaterally decided to continue paying the old rate established in the *1996 Decision* rather than the new common carrier rate for non-Rawhide service that the Board had authorized BNSF to establish.¹⁶

BNSF never accepted AEP Texas' short payment of the lawful rate, but BNSF also did not initially demand and pursue its legal remedies for full payment due to the possibility that BNSF would retroactively forgive the owed payments on the Oklaunion movements as a part of a comprehensive commercial arrangement involving multiple AEP generating facilities. BNSF never represented that AEP Texas was free to pay a lower rate than that being charged or that BNSF would forego pursuing its right to those payments in the event that a final transportation

¹⁵ *West Texas Utilities Co. v. BNSF*, STB Docket No. 41191 at 2 (filed Mar. 23, 2001) ("*March 2001 Decision*").

¹⁶ *See Motion of The Burlington Northern and Santa Fe Railway Company to Dismiss the Complaint*, STB Docket No. 41191, at 6-7 (filed Sept. 2, 2003) ("*Motion to Dismiss*"), and attached Verified Statement of Sami M. Shalah.

agreement was not reached between the parties.¹⁷ In fact, during the course of negotiations, BNSF exercised its rate making initiative to increase the common carrier rate on non-Rawhide movements, although keeping the new rates at levels that never exceeded the SAC maximum reasonable rate calculated in the *1996 Decision*. AEP Texas continued to short pay, and the negotiations terminated at the end of 2002 without an agreement between the parties.¹⁸

With the termination of commercial negotiations, BNSF sought to collect the amounts that were due from AEP Texas on movements from non-Rawhide origins by filing a collection action in March 2003 in the United States District Court for the Northern District of Texas. AEP Texas responded that BNSF's claims were preempted by the Board's jurisdiction to review the reasonableness of rates and it sought a stay of the collection action and a referral of the rate reasonableness issue to the Board. The District Court granted AEP Texas' requests, entering a stay of the collection action and referring the issue of the reasonableness of the rates to the Board.¹⁹ BNSF sought a writ of mandamus from the Fifth Circuit, which concluded that "BNSF makes out a plausible argument that the District Court got the law wrong," but nevertheless denied BNSF's petition due to the heavy burden a party must meet to persuade a court to invoke the "extraordinary remedy" of mandamus.²⁰

AEP Texas had also begun moving coal once again from the reopened Rawhide mine in 2002. BNSF therefore sought from the Board a declaration that the *1996 Decision* had improperly limited the prescribed rate for movements from the Rawhide mine to the

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ See the attachment to Letter from Samuel M. Sipe to Honorable Vernon A. Williams, dated Jan. 13, 2004, attaching U.S. District Court for the Northern District of Texas, Fort Worth Division, Aug. 1, 2003 Order.

²⁰ See the attachment to Letter from Samuel M. Sipe to Honorable Vernon A. Williams, dated Jan. 13, 2004, attaching U.S. Court of Appeals for the Fifth Circuit Sept. 19, 2003 Order.

jurisdictional threshold of 180 percent of variable costs regardless of the level of the SAC maximum reasonable rate.²¹ The Board concluded that it had erred in the *1996 Decision* by focusing solely on the jurisdictional threshold and it modified the rate prescription to allow the prescribed rate to increase to the maximum reasonable level determined under the Board's prior SAC calculations.²² However, the Board did not allow BNSF to recover the amounts to which it would have been entitled but for the Board's error in formulating its rate prescription in the *1996 Decision*. The Board's decision recognized that the refusal to allow BNSF to recover the amounts that it would have been entitled to deprived BNSF of more than \$8 million in revenues for 2002 and 2003.²³

Shortly before the Board issued its *May 2003 Decision*, AEP Texas had finally responded, on May 14, 2003, to the Board's 2001 invitation to submit evidence that would allow the Board to extend the *1996 Decision* to non-Rawhide origins, and it sought a procedural schedule for the reopened proceeding.²⁴ On July 23, 2003, the Board responded to AEP Texas' request for a procedural schedule and specified the types of evidence that the parties would be permitted to submit in addressing an extension of the existing rate prescription to cover the non-Rawhide mine origins.²⁵ The Board made it clear that any evidence of "substantially changed

²¹ Petition of the Burlington Northern and Santa Fe Railway Company for a Declaration Regarding the Rate Prescription on Coal Movements from Rawhide, Wyoming to Oklahoma, Texas, STB Docket No. 41191 (filed April 17, 2003).

²² *West Texas Utilities Co. v. BNSF*, STB Docket No. 41191 (filed May 29, 2003) ("*May 2003 Decision*").

²³ *Id.* at 6.

²⁴ AEP Texas Petition to Establish Procedural Schedule, STB Docket No. 41191 (Reopened) (filed May 14, 2003).

²⁵ *West Texas Utilities Co. v. BNSF*, STB Docket No. 41191 (served July 23, 2003) ("*July 2003 Decision*").

circumstances” would not include changes in the fundamental assumptions underlying the SAC determination that the Board reached in the *1996 Decision*.²⁶

AEP Texas was apparently dissatisfied with any limitation on the evidence it could submit regarding the extension of the Rawhide rate prescription to non-Rawhide mines, so it filed instead a new complaint, initiating this proceeding, which sought a de novo rate reasonableness determination for movements from non-Rawhide origins. AEP Texas also filed a petition to vacate the Board’s *1996 Decision* in order to be in a position to challenge a new common carrier rate that BNSF presumably would establish on movements from Rawhide if the existing Rawhide rate prescription were vacated.²⁷ The petition to vacate is still pending.

B. THE BOARD SHOULD PROMPTLY ADDRESS AEP TEXAS’ REFUSAL TO PAY THE CHALLENGED RATE

A threshold question that the Board should address prior to any consideration of evidence in this proceeding involves AEP Texas’ refusal since July 2000 to pay BNSF’s lawfully established common carrier rates for transportation from non-Rawhide mine origins to the Oklaunion Station. In defiance of the statutory scheme governing railroad rate making and Board orders authorizing BNSF to establish a rate of its choosing for non-Rawhide movements, AEP Texas has refused to pay the rate that BNSF established for the issue traffic and instead has paid the rate set by the Board in the *1996 Decision* at the jurisdictional threshold for movements from the Rawhide mine. As BNSF explained in its September 2, 2003 Motion to Dismiss, it is improper for AEP Texas to seek to invoke the protection of the statute’s rate reasonableness provisions when it has refused to fulfill its own obligations to pay BNSF’s lawfully established rates.

²⁶ *Id.* at 2-3.

²⁷ AEP Texas North Company’s Petition to Vacate Rate Prescription, STB Docket No. 41191 (filed Sept. 2, 2003) (“Petition to Vacate”).

The Board should not through inaction allow AEP Texas to flout the Board's prior orders and the statutory scheme. The Board has several alternatives to address AEP Texas' defiance of Board procedures. While the Board has not yet acted on BNSF's Motion, BNSF urges the Board promptly to rule on it and to dismiss the complaint. The Board could also order AEP Texas to pay the amounts in dispute as a condition to being permitted to maintain this complaint proceeding. At a minimum, the Board should issue an order requiring that AEP Texas pay the charges that come due on shipments occurring during the litigation as a condition of maintaining this complaint proceeding.²⁸

There is no legitimate dispute about AEP Texas' obligation to pay the lawfully established common carrier rate. Congress has made it abundantly clear that a rail carrier has the right to set in the first instance a common carrier rate of its choosing. The statute provides that a railroad "may establish any rate for transportation or other service provided by the rail carrier," 49 U.S.C. §10701(c), and that the rail carrier "shall provide transportation . . . in accordance with the rates" it establishes. 49 U.S.C. §11101(3). Indeed, once a common carrier rate is established by the railroad, the statute specifies that the established rate is the only lawful rate that can be charged for the transportation at issue. 49 U.S.C. §11101(e). A shipper that avails itself of the common carrier rate established by the carrier is obligated to pay that rate. 49 U.S.C. §10743.

Moreover, as described above, BNSF specifically sought the Board's authorization in June 2000 to implement a new common carrier rate for non-Rawhide movements to resolve any uncertainty about the scope of the Board's rate prescription in the *1996 Decision*. In response,

²⁸ The Board has ample authority to protect the integrity of its regulatory procedures by granting the relief requested by BNSF. See *R.R. Ventures, Inc. -- Abandonment Exemption*, STB Fin. Docket No. 33385 (decided Oct. 3, 2000), *aff'd R.R. Ventures, Inc. v. Surface Transportation Board*, 299 F.3d 523 (6th Cir. 2002); *SF&L Ry., Inc. -- Abandonment Exemption*, STB Docket No. AB-448 (decided Jan. 31, 2003).

the Board expressly recognized that “BNSF has the freedom to increase these rates [on non-Rawhide movements] without precondition except for the 20-day notice. . . .”²⁹ AEP Texas itself has acknowledged that “over WTU’s protest, the Board allowed the higher non-Rawhide rates to go into effect, subject to WTU’s right to challenge the reasonableness of the rate.”³⁰ BNSF subsequently raised the non-Rawhide rates, complying with the 20-day notice provision, to levels that have never exceeded the maximum reasonable SAC rate established in the *1996 Decision* for the nearly identical Rawhide movement.³¹

Nothing has occurred that would free AEP Texas of its statutory obligation to pay BNSF’s lawfully established rates for transportation of non-Rawhide coal. The fact that the parties engaged in commercial negotiations from 2000 to 2002 did not absolve AEP Texas of its obligation to pay the lawful common carrier rates. While AEP Texas paid less than the established rates while the negotiations were pending, BNSF did not demand full payment of the lawful rate because of the possibility that BNSF might retroactively forgive AEP Texas’ short payments as part of a comprehensive commercial arrangement with AEP Texas and its affiliated companies. But BNSF never represented that AEP Texas was free to pay a lower rate than the lawfully established rate or that BNSF would forego its right to the payment of the lawful rate if negotiations were unsuccessful.³² In any event, BNSF has made it abundantly clear since those negotiations terminated that it expects AEP Texas to pay the rates that were lawfully established.

²⁹ *November 2000 Decision* at 5.

³⁰ 2003 Verified Complaint at 5-6.

³¹ The rates established by BNSF are set out in Narrative Section II.A.1.a.(14) below. The maximum SAC rates established by the Board are set out in Table 1 of the *May 2003 Decision*.

³² *See* Motion to Dismiss at 6-7, and attached Verified Statement of Sami M. Shalah.

Nor does the pendency of this rate reasonableness litigation affect AEP Texas' obligation to pay the challenged rates. The governing statute gives shippers the right to challenge the reasonableness of a common carrier rate but it also requires that the shipper pay the challenged rate while the litigation is pending. As explained by the U.S. Court of Appeals for the Fifth Circuit, this statutory scheme

entails a balanced and coherent system for the payment and review of rates. The shipper is required to pay the filed rate at the time of shipment but may later seek review and reparations in the ICC. The carrier, on the other hand, receives assurance that payment will not be delayed pending review; but the carrier must be prepared to reimburse amounts later found to be unreasonable.³³

The post-ICCTA statutory regime in place today differs from that at issue in *Southern Pacific* only to the extent that the common carrier rate is not "filed" but rather "established" by the carrier. But the shipper's obligation to pay the established rate remains unchanged.

The shipper's obligation to pay the challenged rate while any challenge to it is pending was reiterated by the U.S. Court of Appeals for the D.C. Circuit in the litigation leading to the Board's 1996 Decision. In *Burlington Northern Railroad Company v. Surface Transportation Board*, 75 F.3d 685 (D.C. Cir. 1996), the D.C. Circuit struck down an ICC order requiring that BNSF's predecessor establish a common carrier rate before that rate could be used. The ICC sought to justify its order on grounds that the publication of a common carrier rate would permit the shipper to begin a rate reasonableness challenge and therefore minimize the need for the shipper to pay a potentially unreasonable rate while the rate litigation was pending. The D.C. Circuit squarely rejected the ICC's rationale, explaining that "the Commission had extremely limited authority to compel rail carriers to serve at rates other than those of their own choosing

³³ *S. Pacific Transp. Co. v. City of San Antonio, Tex.*, 748 F.2d 266, 274 (5th Cir. 1984) ("*Southern Pacific*").

before completion of a Commission proceeding assessing the rates.” *Id.* at 693-94. The court also rejected the ICC’s argument that the payment of unreasonable rates during the pendency of a rate proceeding might work a hardship on the shipper, noting that “the short answer to the Commission’s argument is that any hardship visited upon WTU would have followed directly from the balance of interests struck by the statute itself.” *Id.*

AEP Texas does not seriously contest these legal principles. Indeed, in connection with its petition to vacate the Board’s rate prescription on movements from the Rawhide mine, AEP Texas acknowledged that a shipper is obligated to pay the lawfully established rate even if it is also challenging the reasonableness of that rate: “removal of the prescription means that the carrier is free to set -- *and the shipper must pay* -- any new rate it chooses, subject to the Board’s jurisdiction to review it on reasonableness grounds.”³⁴ This position, which is a correct statement of the law, is squarely at odds with the position AEP Texas took before the U.S. District Court for the Northern District of Texas in BNSF’s collection action for the payment of AEP Texas’ past short payments. Now, having successfully mischaracterized the law before the district court, AEP Texas asserts that it does not have to pay BNSF’s lawfully established rate because the court entered a stay in BNSF’s collection action.

The district court’s decision, whatever its validity, has no bearing on AEP Texas’ obligation under the Board’s governing statute and precedent to pay the challenged rate before invoking the Board’s rate reasonableness provisions. The court did nothing more than decline to exercise its own jurisdiction over the collection action until the Board had addressed AEP Texas’ rate reasonableness claims. The court did not, and could not, attempt to limit the Board’s own exercise of jurisdiction over AEP Texas in the litigation of those rate reasonableness claims.

³⁴ Petition to Vacate at 11 (emphasis added).

Moreover, even if the court's stay could be read as implying a restriction on the collection of past charges, which BNSF believes would be an improper reading of the decision, there is no basis whatsoever for concluding that the court limited the Board's ability to require AEP Texas to pay the challenged rates on shipments made during the pendency of the litigation as a condition to maintaining a rate reasonableness challenge.

BNSF therefore urges the Board to act promptly on the pending motion to dismiss. If the Board concludes that it would create administrative burdens to dismiss AEP Texas' claim now that the evidentiary phase of the proceeding has begun, it should require that AEP Texas pay the amounts in dispute, or at a minimum, pay the charges that come due on shipments occurring during the litigation as a condition to further consideration of AEP Texas' claims.

C. ANY MAXIMUM REASONABLE RATE DETERMINATION IN THIS CASE THAT DIFFERED MATERIALLY FROM THE BOARD'S 1996 DECISION WOULD BE ARBITRARY AND UNSUPPORTABLE

AEP Texas has made it clear that it intends to have the Board assess the challenged rates under the SAC test set out in the *Coal Rate Guidelines*. But the Board has already evaluated SAC evidence on the maximum reasonable rates for the transportation of PRB coal to AEP Texas' Oklaunion Station. The *1996 Decision*, as corrected by the *May 2003 Decision*, prescribes maximum reasonable SAC rates for one PRB mine origin for the period 1995-2014, and thus encompasses all time periods at issue here. Board decisions should have vitality for the entire 20-year DCF period in a SAC analysis, unless a party seeking a different result meets its burden of showing changed circumstances that warrant a change in the Board's SAC analysis.

In the *1996 Decision*, the Board addressed a rate reasonableness challenge by AEP Texas' predecessor in interest to rates for coal shipments from Wyoming PRB mine origins to the Oklaunion Station that is virtually identical to the challenge at issue here. Although the Board's *1996 Decision* prescribed a rate only for coal movements originating at the Rawhide

mine, AEP's predecessor WTU submitted SAC evidence relating to a SARR that served several PRB origins, all of which are included in AEP Texas' present rate reasonableness case.³⁵ The Board's SAC calculations thus covered many of the specific mine origins that are at issue here. All of the origin mines in the SAC calculations contained in the 1996 Decision, including the Rawhide mine, share the same mainline facilities and are within close proximity to one another.

AEP's predecessor, WTU, acknowledged that the SAC analysis in the *1996 Decision* was directly applicable to the movements at issue here even if the rate prescription in that case extended only to the Rawhide mine. In its reply to BNSF's June 2000 petition seeking authorization to increase rates on non-Rawhide origins, WTU argued that the rate prescribed in the *1996 Decision* should be extended to the adjacent Buckskin mine, one of the mines at issue here, as "there is no suggestion of differing circumstances between the two that would justify different rates."³⁶ It also urged the extension of the *1996 Decision* to all PRB origins, characterizing them as "nearby mines with essentially the same transportation characteristics and costs."³⁷ When WTU sought reconsideration of the Board's *November 2000 Decision*, WTU argued that because of the nearly identical characteristics of the PRB mines, "all the evidence that could have any bearing whatsoever on the extension issue is before the STB."³⁸

³⁵ *1996 Decision* at 643, note 4.

³⁶ Reply of West Texas Utilities Company to Notice and Justification for Increased Rates On Coal Movements From Non-Rawhide Origins, Or, In the Alternative, Petition For Modification of Rate Prescription, STB. Docket No. 41191, at 8 (filed June 29, 2000).

³⁷ *Id.* at 9, note 9.

³⁸ WTU Petition for Reconsideration and Request For Oral Argument, STB Docket No. 41191, at 5 (filed Nov. 27, 2000). In the Petition, WTU makes reference to the geographic proximity of the mines along the same BNSF line (particularly the Rawhide and Buckskin mines which are located on the same BNSF spur), the similarity of all track configurations and loading capacities, and BNSF's treatment of the Wyoming mines as a group for the purpose of setting long-haul rates.

The rates being challenged in this case are at levels that have never exceeded a maximum reasonable level for coal shipments from the PRB to Oklahoma as previously determined by the Board. Thus, to find the challenged rates unreasonable, the Board would have to conclude that rates that were reasonable as determined in its *1996 Decision* have now become unreasonable.

Such a conclusion would be arbitrary and unsupported. There has been no change in circumstances that would warrant such a conclusion. There have been no substantive changes to the governing statute. There have been no changes to the *Coal Rate Guidelines* that govern SAC cases. There have been no major changes in the economy or in the transportation marketplace.³⁹ Some changes have occurred in traffic patterns and in the costs that would be incurred to construct and operate a new railroad entrant into the market, but those changes are not so great that they could be expected to produce materially different SAC results.

What has changed since 1996 is the degree to which complainants attempt to game the SAC analysis through reliance on cross-over traffic, rerouting of traffic, and manipulation of the traffic grouping principles set out in the *Guidelines*. Indeed, the *1996 Decision* is one of the last SAC cases decided by the Board in which the SARR at issue was assumed to serve the selected traffic group for the entire movement provided by the defendant railroad in the real world. In recent SAC cases, complainants have come to rely heavily on cross-over traffic as a mechanism to distort SAC results in their favor. It is certainly possible that AEP Texas will pursue such a strategy in this case. However, if it does so and if its purported results differ materially from the Board's 1996 SAC findings where cross-over traffic was not used, the contrast with the Board's

³⁹ One aspect of the transportation marketplace that differs somewhat from what was projected in the *1996 Decision* is that the rates BNSF has charged to shippers in WTU's shipper group have not increased to the extent that WTU claimed they would. Compared to actual experience between 1995 and the present, the revenues attributed to the SARR were overstated and the SAC maximum rates were accordingly lower than they would have been if more accurate rate projections had been used.

1996 findings would confirm the extent to which cross-over traffic is being used to distort SAC results as opposed to simplifying the SAC test.

Any decision by the Board in this case that differs materially from the result in the *1996 Decision* would call into serious question the validity of the SAC test as a means of assessing rate reasonableness. The SAC analysis is supposed to establish a reasonableness cap on rates based on the evaluation of a least-cost, efficient SARR. If the SAC analysis produces significantly divergent results for virtually identical movements involving the same parties from case to case, despite the absence of statutory or economic changes that would cause such a difference, there is a fundamental flaw with the analysis. The same test applied to the same circumstances logically should produce the same result, particularly where the initial decision addressed SAC issues over the very same time periods at issue in a second case. Complainants, who have the incentive to structure an optimally efficient SARR in the first place, should not be able to obtain increasingly favorable results from case to case. If the results do diverge, it would surely be because of the manipulation of cross-over traffic and revenue divisions. The Board must not countenance such use of the SAC analysis.

D. AEP TEXAS IS BARRED FROM SEEKING DAMAGES ON SHIPMENTS MADE BEFORE AUGUST 11, 2001

Under 49 U.S.C. §11705(c), a shipper must file a complaint with the Board to recover damages within two years after the claim accrues. The statute is absolutely clear on its face and contains no provision for discretion to modify the limitation period. Moreover, for the shipment of property, the statute makes it clear that a claim accrues upon delivery, or tender of delivery, by the rail carrier. 49 U.S.C. §11705(g). Accordingly, AEP Texas is barred by statute from seeking reparations on coal deliveries that occurred before August 11, 2001, two years prior to the filing of the complaint in this case.

E. VARIABLE COST EVIDENCE

As noted above, the rates that AEP Texas challenges have never exceeded the SAC maximum levels previously determined for virtually identical movements. Those rates are also below the Board's jurisdictional threshold. BNSF's variable cost calculations for the traffic at issue in this proceeding are described in detail in Section II.A. of this Narrative. BNSF used URCS system-average costs and made certain movement-specific adjustments to locomotive ownership costs and fuel consumption. The specific assumptions used by BNSF are described in the Narrative and are not repeated here.

BNSF then compared its variable costs to the revenues generated by the issue traffic during the limitations period. It is appropriate to carry out the jurisdictional test based on the rates actually paid by the complainant. As the ICC has stated, when Congress set a jurisdictional threshold, it "adopted the principle that shippers *paying rates* below the threshold level should obtain no relief."⁴⁰ The Board similarly explained in the *1996 Decision* that "[t]he statute precludes a finding of market dominance where the carrier shows that the *revenue produced by the movement* is less than 180 percent of the variable costs to the carrier of providing the service."⁴¹ Table I-1 below shows that the issue traffic has generated revenues significantly below the jurisdictional threshold.

⁴⁰ *Coal Trading Corp. v. Baltimore & Ohio R.R. Co.*, 6 I.C.C. 2d 361, 371 (served Jan. 17, 1990) (emphasis in original).

⁴¹ *1996 Decision* at 645.

**Table I-1
Revenue to Variable Cost Ratio Based on Rate Paid by AEP Texas**

Period	Mine	Rate/Ton	Variable Cost/Ton	R/VC Ratio
3 rd Qtr 2001	Buckskin	\$13.68	\$9.30	147%
4 th Qtr 2001	Buckskin	\$13.68	\$9.10	150%
4 th Qtr 2001	Jacobs Ranch	\$13.68	\$9.03	151%
1 st Qtr 2002	Jacobs Ranch	\$13.68	\$8.98	152%
2 nd Qtr 2002	Black Thunder	\$13.68	\$9.71	141%
3 rd Qtr 2002	Black Thunder	\$13.68	\$9.77	140%
3 rd Qtr 2002	Jacobs Ranch	\$13.68	\$9.75	140%
4 th Qtr 2002	Black Thunder	\$13.68	\$10.45	131%
4 th Qtr 2002	Jacobs Ranch	\$13.68	\$10.37	132%
1 st Qtr 2003	Eagle Butte	\$13.68	\$10.45	131%
2 nd Qtr 2003	Eagle Butte	\$13.68	\$9.92	138%

BNSF also calculated the R/VC ratios on the issue traffic assuming that AEP Texas had paid the lawfully established rates. Those calculations also show that the challenged rates are below the jurisdictional threshold for each of the costed quarters.

**Table I-2
Revenue to Variable Cost Ratio Based on Rates Charged by BNSF**

Period	Mine	Rate/Ton	Variable Cost/Ton	R/VC Ratio
3rd Qtr 2001	Buckskin	\$15.78	\$9.30	170%
4th Qtr 2001	Buckskin	\$15.78	\$9.10	173%
4th Qtr 2001	Jacobs Ranch	\$15.78	\$9.03	175%
1st Qtr 2002	Jacobs Ranch	\$15.78	\$8.98	176%
2nd Qtr 2002	Black Thunder	\$15.78	\$9.71	162%
3rd Qtr 2002	Black Thunder	\$16.36*	\$9.77	168%
3rd Qtr 2002	Jacobs Ranch	\$16.46*	\$9.75	169%
4th Qtr 2002	Black Thunder	\$17.25	\$10.45	165%
4th Qtr 2002	Jacobs Ranch	\$17.25	\$10.37	166%
1st Qtr 2003	Eagle Butte	\$17.25	\$10.45	165%
2nd Qtr 2003	Eagle Butte	\$17.64*	\$9.92	178%

*Weighted-average rate on shipments during the quarter.

F. CONCLUSION

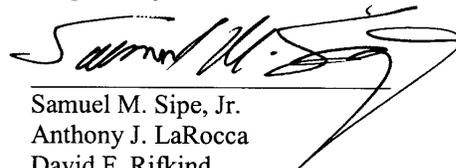
The Board should dismiss AEP Texas' complaint. AEP Texas should not be permitted to maintain a rate reasonableness challenge while abusing Board processes by refusing to pay BNSF's lawfully established rates. Moreover, BNSF's cost calculations show that the revenues generated by the issue traffic are below the Board's jurisdictional threshold.

OF COUNSEL

Richard E. Weicher
Michael E. Roper
THE BURLINGTON NORTHERN
AND SANTA FE RAILWAY COMPANY
2500 Lou Menk Drive
P. O. Box 961039
Ft. Worth, TX 76131-0039
Phone (817) 352-2368
Facsimile (817) 352-2397

March 1, 2004

Respectfully submitted,

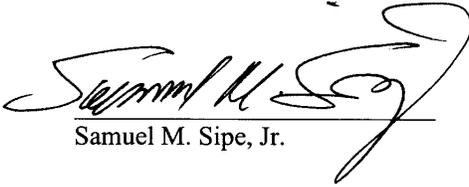


Samuel M. Sipe, Jr.
Anthony J. LaRocca
David F. Rifkind
1330 Connecticut Ave., N.W.
Washington, D.C. 20036
Phone (202) 429-6486
Facsimile (202) 429-3902

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by messenger on
this 1st day of March, 2004 on the following;

Kelvin Dowd, Esq.
Slover & Loftus
1224 Seventeenth Street, N.W.
Washington, DC 20036



Samuel M. Sipe, Jr.

II. MARKET DOMINANCE

A. QUANTITATIVE EVIDENCE

1. Variable Costs

This section of the Narrative explains the bases for BNSF's calculation of the variable costs to transport coal to AEP Texas' Oklaunion plant. The variable cost evidence presented in this Narrative is supported by Benton V. Fisher, Deborah G. Newland, and Warren H. Wasserburger. The qualifications and verifications of each witness, which are set out in Section IV to this Narrative, describe the portions of this Narrative that are sponsored by each witness. Briefly, Mr. Fisher is a Managing Director and Ms. Newland is a Senior Consultant at FTI Consulting, Inc. They specialize in the economic and financial analysis of network industries, including rail transportation. They are BNSF's principal variable cost witnesses in this proceeding. Mr. Wasserburger is a former BNSF General Road-Foreman, with over 25 years of experience in operations at BNSF and its predecessor, including management responsibility for monitoring locomotive performance for BNSF's fleet. He has sponsored fuel consumption evidence in *TMPA* and *Xcel*. Mr. Wasserburger sponsors evidence that supports a movement-specific adjustment to reflect actual fuel consumption by locomotives on certain AEP Texas trains.

Mr. Fisher and Ms. Newland developed variable cost evidence by mine and by quarter for each mine origin that accounted for ten percent or more of the coal originated in that quarter. BNSF applied a ten-percent threshold to ensure that there were sufficient data from which to develop reliable variable cost evidence for movements from a specific mine origin. Consistent with Board precedent, Mr. Fisher and Ms. Newland did not attempt to develop variable cost

evidence for mines from which AEP Texas originated no coal during the costed period.¹ BNSF calculated costs for AEP Texas movements in each quarter from the Third Quarter 2001 through the Second Quarter 2003, the last quarter for which variable cost data were provided in discovery. Movements occurring prior to the Third Quarter 2001 are not included as those movements are outside the statutory limitations period, as explained in Section I above.

To develop BNSF's variable costs for transportation provided under the challenged rates, Mr. Fisher and Ms. Newland relied on Uniform Rail Costing System ("URCS") costs based on the URCS Master Files ("UMF") for 2001 and 2002, and developed using procedures previously accepted by the Board.² They made a movement-specific adjustment to locomotive-ownership costs to reflect the fact that AEP Texas trains utilized significantly more locomotives than the system-average train and that those locomotives are predominantly SD70MACs, which are more expensive than the system-average locomotive. In addition, they made a movement-specific adjustment for fuel consumption on certain trains that moved in the Second Quarter 2003 to reflect the results of a fuel consumption study that BNSF carried out on several recent AEP Texas trains. They incorporated the results of these movement-specific adjustments in lieu of BNSF system-average costs in their calculation of variable costs. Finally, they did not apply the URCS linking factor, which has become obsolete.³

¹ *TMPA* at 38.

² To develop costs, Mr. Fisher adjusted the Board's UMF to include Account 90 and exclude Account 76. *See TMPA* at 40, *CP&L/NS* at 114.

³ Use of the linking factor is not required. *See Ex Parte No. 431 (Sub-No. 1), Adoption of the Uniform Railroad Costing System for All Regulatory Costing Purposes*, 5 I.C.C. 2d 894, 899 n.15 (Decided Sept. 8, 1989). The linking factor is based on outdated data from the early and mid-1980s.

Mr. Fisher and Ms. Newland calculated variable costs for the Oklaunion movement that ranged from \$8.98 per ton to \$10.45 per ton. As explained above in Section I of this Narrative, AEP Texas has disregarded the lawful common carrier rate established by BNSF for movements of the issue traffic and unilaterally decided to pay rates of \$13.68 for the movements covered by the complaint. Based on that rate, the R/VC ratios for the issue traffic range from 1.31 to 1.52, far below the jurisdictional threshold for the Board to entertain AEP Texas' rate reasonableness challenge. Even based on the rates BNSF lawfully established but AEP Texas has refused to pay, the R/VC ratios for the issue traffic range from 1.62 to 1.78. The bases for these calculations are explained in detail below.

The variable cost evidence is presented in the following sequence. Section II.A.1.a. identifies the specific traffic and operating characteristics that underlie Mr. Fisher's and Ms. Newland's variable cost calculations. Section II.A.1.b. explains the methodologies used to calculate the various components of variable costs and describes the movement-specific adjustments employed (in lieu of system-average data) to reflect more accurately the variable costs of the issue traffic service. The detailed variable cost calculations are presented in Exhibit II.A-1.

a. Traffic and Operating Characteristics of the Oklaunion Movement

As discussed above, Mr. Fisher and Ms. Newland primarily used URCS system-average costs to estimate variable costs for AEP Texas shipments moving under the challenged rate. Mr. Fisher and Ms. Newland made a movement-specific adjustment to locomotive-ownership costs. In addition, for three trains in the Second Quarter 2003, they made a movement-specific adjustment to fuel costs based on the results of a recent fuel consumption study of AEP Texas trains. Developing URCS system-average costs for the AEP Texas movement requires

identification of the following movement-specific inputs: lading and tare weights, cars per train, route miles, car owner, and car type. The locomotive ownership and fuel consumption movement-specific adjustments further required identification of the specific locomotives utilized by the AEP Texas trains, the amount of time each locomotive was used in AEP Texas service, the locomotive consist sizes, and the locomotive cycle times. The fuel consumption adjustment also required the collection of data from the locomotives actually used in the several trains, as discussed in Exhibit II.A-3. Exhibit II.A-2 presents the characteristics used to develop BNSF's variable costs consistent with *Potomac Electric Power Co. v. Consolidated Rail Corp. "PEPCO"*.⁴ The sources of the data are identified below.

(1) Name of Mines and Power Plant

AEP Texas trains have originated during the quarters that have been costed here from the following nine mines in the PRB: {
}. Coal movements from Rawhide are subject to a rate prescription in a separate STB proceeding (STB Docket No. 41191), and are not at issue here. In some quarters, AEP Texas originated shipments from more than one mine. In those quarters, one mine typically originated the majority of coal, while the other mine(s) accounted for, in most cases, a handful of shipments. As identified above, Mr. Fisher and Ms. Newland developed variable costs by quarter for each mine origin that accounted for more than ten percent of the coal originated in that quarter.

The destination is the Oklaunion Generating Station near Vernon, Texas.

⁴ Docket No. 36114 (Sub-No. 1), served April 7, 1982.

(2) Milepost at Origins; Milepost at Destination

Exhibit II.A-2 presents the mileposts for the origin mines and the turnout at Oklaunion, as identified from track charts BNSF produced in discovery. The Oklaunion plant is located on a spur track approximately four miles from the BNSF mainline.⁵

(3) Annual Tons

In the Third and Fourth Quarters 2001, BNSF transported a total of 1.3 million tons to Oklaunion. In 2002, BNSF transported 3.1 million tons to Oklaunion. In the First and Second Quarters 2003, BNSF transported a total of 1.3 million tons to Oklaunion.⁶

(4) Date of First Shipment

As explained in Section I, AEP Texas is barred from seeking reparations on movements that occurred more than two years before the date it filed the complaint. *See* 49 U.S.C.A. § 11705(c). The first shipment to move under the challenged rate for which AEP Texas' challenge is not time-barred was waybilled on August 6, 2001, and delivered on August 11, 2001.⁷

(5) Alpha-Numeric Car Type

Information from traffic tapes provided in discovery indicates that BNSF predominantly uses plain gondolas (AAR car type "J") to move AEP Texas' coal.⁸ Mr. Fisher and Ms. Newland relied on BNSF system-average costs for plain gondolas to develop variable costs for the AEP Texas movement.

⁵ Electronic workpaper "oklaunion map.ppt."

⁶ Electronic workpaper "opstats.xls."

⁷ Electronic workpaper "opstats.xls."

⁸ Electronic workpaper "car type.xls."

(6) Lading Weight per Car

Mr. Fisher and Ms. Newland developed the average lading per car for the shipments to Oklaunion from the BNSF traffic tapes provided in discovery. Exhibit II.A-2 presents the average lading weights by origin mine and quarter.⁹

(7) Tare Weight of Car

Like lading weights, Mr. Fisher and Ms. Newland developed the average tare weight from the BNSF traffic tapes provided in discovery.¹⁰ Exhibit II.A-2 presents the average tare weights by origin mine and quarter.

(8) Identity of Car Owner

BNSF provides the rail cars used to transport coal to Oklaunion.

(9) Identity of Locomotive Owner

BNSF provides the locomotives used to move the AEP Texas trains. *See* Item 21.

(10) Car Lease Rental

Mr. Fisher and Ms. Newland relied on BNSF URCS system-average costs for plain gondolas to develop variable costs for the AEP Texas movement.

(11) Locomotive Lease Rental

BNSF acquired the locomotives used to power AEP Texas trains through purchases and operating leases. Mr. Fisher and Ms. Newland used detailed accounting data produced by BNSF

⁹ BNSF.OP.WP.II.A-0005 and electronic workpaper “opstats.xls.”

¹⁰ *Id.*

in discovery to calculate locomotive ownership costs.¹¹ The calculation of these costs is described below in Section II.A.1.b.(1)(b).

(12) Present Rate

The present rate is \$18.83 per net ton. AEP Texas, however, has paid and continues to pay BNSF \$13.68 per net ton for all shipments moving under the challenged rate.

(13) Proposed Rate

See Item (12) above.

(14) Initial Rate and Effective Date

BNSF charged a rate of \$15.78 per net ton for all movements of the issue traffic from August 11, 2001 until August 2002. In August 2002, the rate increased to \$17.25 per net ton. In May 2003, the rate increased to \$18.04 per net ton and was applied to all shipments until the end of 2003. Notwithstanding BNSF's establishment of the above rates, AEP Texas has paid and continues to pay \$13.68 per net ton.

(15) Amounts (or Percent) of Rate Escalation

As described in Section I of this Narrative, BNSF has escalated the rates at issue here so that they do not exceed the levels set out in the Board's maximum SAC rate calculations in the *1996 Decision*.

(16) Cars per Train

Mr. Fisher and Ms. Newland developed the average number of cars per train for shipments to Oklaunion from the BNSF traffic tapes.¹² Exhibit II.A-2 presents the average

¹¹ BNSF.OP.WP.II.A-0011 and electronic workpaper "AEP Loco Ownership.xls."

number of cars per train by origin mine and quarter. Prior to June 2003, the average tender was approximately 117 cars. In June 2003, BNSF increased the tender to approximately 128 cars.

(17) Loaded Miles

Mr. Fisher and Ms. Newland developed the loaded miles between origin mine and destination using BNSF's track charts.¹³ Using the BNSF train movement records provided in discovery, they also determined the actual routings in each quarter (*i.e.*, via Alliance, Nebraska or Guernsey, Wyoming) used by the AEP Texas trains.¹⁴ The loaded miles used to calculate the variable costs are weighted to reflect the actual routings traversed by the AEP Texas trains, and are set forth in Exhibit II.A-2.

(18) Empty Miles

Mr. Fisher and Ms. Newland followed the procedures described in Item 17 to identify the empty miles.¹⁵ The empty miles are set forth in Exhibit II.A-2.

(19) Length of Origin Loop Track

Mr. Fisher and Ms. Newland used BNSF URCS system-average origination costs, adjusted to reflect unit coal train service,¹⁶ to estimate variable costs for the issue movement.

¹² Electronic workpaper "opstats.xls."

¹³ Electronic workpapers "Oklaunion Miles.123" and "AEP Cycle Summary.xls."

¹⁴ BNSF.OP.WP.II.A-0006 to 0007 and electronic workpaper "AEP Cycle Summary.xls," sheet "Cycle Routing."

¹⁵ *Id.*

¹⁶ Ex Parte No. 270 (Sub-No. 4), *Investigation of Railroad Freight Rate Structure – Coal*, 345 I.C.C. 71, 227 (Decided Dec. 3, 1974).

(20) Length of Destination Track

Mr. Fisher and Ms. Newland used BNSF URCS system-average destination costs, adjusted to reflect unit coal train service,¹⁷ to estimate variable costs of the issue movement.

(21) Number of Locomotives

Mr. Fisher and Ms. Newland developed the average locomotive consist sizes for AEP Texas trains by mine origin and quarter from the BNSF train movement files produced for Third Quarter 2001 through Second Quarter 2003. These records show that from Third Quarter 2001 through First Quarter 2002, the issue traffic was powered by an average of slightly more than three locomotives. In Second Quarter 2002, BNSF added a fourth locomotive to the AEP Texas train consist for a longer portion of the move. Among other things, the additional unit eliminated the need for the AEP Texas train to be helped at Denver. As a result, the average consist size increased by approximately 0.4 locomotives. The AEP Texas trains are powered predominantly by 4000HP SD70MAC units for the entire round trip.¹⁸ Exhibit II.A-2 presents the average consist sizes by quarter and origin mine that Mr. Fisher and Ms. Newland used to calculate the variable costs of the AEP Texas trains.

(22) Loading Hours

Included in Item (24).

(23) Unloading Hours

Included in Item (24).

¹⁷ *Id.*

¹⁸ BNSF.OP.WP.II.A-0008 and electronic workpapers "AEP Cycle Summary.xls," sheet "Locos Per Train" and "AEP Loco Ownership.xls," sheet "Loco Usage."

(24) Cycle Time

Mr. Fisher and Ms. Newland developed an average locomotive cycle time for AEP Texas trains by mine origin and quarter from the BNSF train movement files that were produced in discovery.¹⁹ Exhibit II.A-2 presents the cycle time by quarter and origin mine.

(25) Number of Train Sets Required

Not applicable.

(26) Trips per Year per Train Set

Not applicable.

(27) Crew Districts, Loaded Direction

Mr. Fisher and Ms. Newland used BNSF URCS system-average crew costs to estimate variable costs for the AEP Texas movement.

(28) Crew Districts, Empty Direction

See Item (27) above.

(29) Turnaround Crews

See Item (27) above.

(30) Locomotive Units

Mr. Fisher and Ms. Newland identified the specific locomotive units used on the AEP Texas trains from the BNSF train movement data produced by BNSF. In each of the quarters costed, 94% of the locomotive hours on AEP Texas trains were provided by 4000HP

¹⁹ BNSF.OP.WP.II.A-0009 electronic workpaper “AEP Cycle Summary.xls,” sheet “OD Cycle Times.”

SD70MACs.²⁰ The BNSF variable costs reflect locomotive-ownership costs for the actual units that powered the AEP Texas trains in each of the quarters costed, based on purchase and lease information that BNSF provided in discovery.²¹

(31) Cars Required

BNSF provides the cars used in AEP Texas service.

(32) Cabooses Required

AEP Texas trains use end-of-train devices (“EOTDs”). By using system-average costs, Mr. Fisher and Ms. Newland incorporate system-average EOTD expenses in developing variable costs for the issue movement.

(33) Locomotive Spare Margin

Mr. Fisher and Ms. Newland include a locomotive spare margin of { } percent in 2001, { } percent in 2002, and { } percent based on a special study of BNSF data provided in discovery and described below in Section II.A.1.b.(1)(b).²²

(34) Car Spare Margin

The URCS system-average car-ownership costs used by Mr. Fisher and Ms. Newland incorporates spare margin.

²⁰ Electronic workpaper “AEP Loco Ownership.xls,” tab “Loco Usage.”

²¹ BNSF.OP.WP.II.A-0011 and electronic workpaper “AEP Loco Ownership.xls.”

²² BNSF.OP.WP.II.A-0012 to 0013 and electronic workpaper “Spare Margin.xls.”

(35) Switching by Road-Haul Locomotives

Mr. Fisher and Ms. Newland use BNSF URCS system-average switching costs adjusted to reflect unit coal train service.²³ They allocated the system-average switch engine minutes based on BNSF's system-wide mix of road and yard switching.²⁴

(36) Switching by Yard Locomotives.

See Item (35) above.

(37) Helper Service

By using BNSF URCS system-average train mile and locomotive unit mile variable costs, Mr. Fisher and Ms. Newland incorporate system-average helper service costs in developing variable costs for the issue movement.

(38) Helper Crews

See Item (27) above.

(39) Location of Interchanges

There are no interchanges for the AEP Texas movement.

(40) Location of Inter and Intra-Train Switching

See Item (35) above.

²³ Ex Parte No. 270 (Sub-No. 4), *Investigation of Railroad Freight Rate Structure – Coal*, 345 I.C.C. 71, 227 (Decided Dec. 3, 1974).

²⁴ BNSF.OP.WP.II.A-0014 to 0022 and electronic workpapers “BNSF-01-SWITCH SPLIT.123” and BNSF-02-SWITCH SPLIT.123.”

(41) Joint Facility Payments

By using URCS system-average maintenance-of-way costs, Mr. Fisher and Ms. Newland incorporate system-average joint facility expenses in developing the variable costs for the issue movement.

b. Variable Costs of the AEP Texas Movements

Variable costs are costs that change in direct proportion to changes in output. The Board requires that URCS be used to calculate variable costs in railroad rate proceedings.²⁵ Variable costs for the AEP Texas traffic were calculated using the Board's 2001 and 2002 UMF. In order to calculate the variable costs of service for the Oklaunion traffic, Mr. Fisher and Ms. Newland used BNSF 2001 and 2002 URCS system-average costs, indexed as appropriate. For locomotive ownership costs, they used actual BNSF costs to make movement-specific adjustments that reflect the actual traffic and operating characteristics of the AEP Texas trains. They also applied the results of a fuel consumption study to certain trains operating in the Second Quarter 2003. The methodologies used in making the movement-specific adjustments are explained in the following sections of this Narrative.

(1) Gross Ton-Mile Costs

URCS develops gross ton-mile unit costs for road property maintenance and ownership. Gross ton-mile costs also include a portion of the expenses associated with train fuel, locomotive ownership, locomotive maintenance, and locomotive and train administration activities. With

²⁵ URCS is the cost accounting tool that the Board uses to estimate variable costs. Each year, using cost and operating statistics from each Class I carrier's Annual R-1 Report, the Waybill Sample, Annual Report of Cars Loaded and Terminated (Form CS-54), and the Report of Freight Commodity Statistics (Form QCS), the Board develops the URCS unit costs for each carrier.

the exception of fuel consumption and fuel expense overheads in the Second Quarter 2003, and locomotive ownership throughout the periods costed, Mr. Fisher and Ms. Newland use URCS system-average gross ton-mile costs for the AEP Texas traffic. As to train fuel, they incorporated the results of a study of actual fuel consumption on a number of recent AEP Texas coal trains, as described below. As to locomotive ownership, they incorporated the results of a study of the actual units that powered the AEP Texas trains in each quarter costed.

(a) Fuel

BNSF carried out a fuel study that examined the actual consumption of fuel on certain trains operating in the Fourth Quarter 2003, and compared these fuel consumption calculations to BNSF's system-average fuel consumption as determined by URCS. BNSF used the same fuel-study methodology that was accepted by the Board in the *TMPA* case.²⁶ BNSF found that the AEP Texas fuel study trains consumed approximately five percent more fuel than the system-based on URCS. The fuel study trains, which all moved in the Fourth Quarters 2003, were longer and heavier than all but three trains that moved at the end of the Second Quarter 2003. Therefore, Mr. Fisher and Ms. Newland applied the fuel consumption study results only to the three AEP Texas trains that operated in second quarter 2003 that had characteristics similar to the fuel study trains. The fuel consumption study methodology and results are described in BNSF Opening Exhibit II.A-3. The calculations and supporting data are included in BNSF's workpapers.²⁷

²⁶ *TMPA* at 58.

²⁷ BNSF.OP.WP.II.A-0027 to 0452 and electronic workpapers "Fuel_trains_movement.xls" and "Tx_North_Fuel_Stdy__15_Trains.123."

(b) Locomotive Ownership Costs

As indicated above, Mr. Fisher and Ms. Newland calculated the locomotive-ownership costs based on the actual units that powered the AEP Texas trains from Third Quarter 2001 through Second Quarter 2003. For each BNSF locomotive that appeared in an AEP Texas train consist, Mr. Fisher and Ms. Newland identified the gross investment and age -- if the locomotive was purchased or acquired through a capital lease -- or the annual payment normalized over the life of the lease -- if the locomotive was acquired under an operating lease -- from accounting information provided to AEP Texas in discovery.²⁸ With this information, Mr. Fisher and Ms. Newland then calculated a composite annual ownership cost weighting each locomotive's costs by its proportion of the total locomotive unit-hours used to power AEP Texas traffic traveling under the challenged rate in that quarter. Mr. Fisher and Ms. Newland converted the annual cost to a cost per locomotive unit-hour, and multiplied the cost by the round-trip locomotive cycle hours. They then substituted the resulting figure for the URCS system-average locomotive-ownership costs.

Mr. Fisher and Ms. Newland also calculated a locomotive spare margin based on a special study of the SD70MAC locomotives in BNSF's Alliance pool²⁹ using data maintained by BNSF in the ordinary course of business and produced to AEP Texas in discovery.³⁰ Their study examined the *availability* (the total time that a locomotive is capable of being used to power a train) and *utilization* (the time that the locomotives are available, but not being "utilized" on a

²⁸ Electronic workpaper "AEP Loco Ownership.xls."

²⁹ The detailed train movement records produced to AEP indicate that SD70MAC's comprised 94% of the locomotive hours for the AEP trains. Further, BNSF uses its SD70MACs almost exclusively for coal transportation.

³⁰ Electronic workpaper "Spare Margin.xls."

train) of the locomotives in the Alliance pool, which is the pool from which locomotives in AEP Texas service are drawn. From these data, Mr. Fisher and Ms. Newland developed an annual composite spare margin that accounts for both unavailable and non-utilized time, neither of which is included in the locomotive cycle times they developed for the AEP Texas trains. They applied this additive to the locomotive cycle times. By applying the composite factor to the locomotive cycle times for the AEP Texas trains, Mr. Fisher and Ms. Newland account for BNSF's full locomotive-ownership requirements for powering the issue traffic.

(2) Locomotive Unit-Mile Costs

URCS develops costs per locomotive unit-mile that include a portion of the expenses associated with train fuel, locomotive ownership, locomotive maintenance, locomotive repair and servicing, and locomotive and train administration. Treatment of locomotive fuel and ownership expenses is discussed in Section II.A.1.b.(1) above. All other locomotive unit-mile costs are included at system-average levels.

(3) Indexing

Mr. Fisher and Ms. Newland indexed 2001 base-year costs to Third and Fourth Quarters 2001, and 2002 base-year costs to each quarter of 2002 as well as to First and Second Quarters 2003 using the method adopted in ICC Statement 1E3-80 (April 1980), as supplemented in Complaints Filed Under Section 229 of the Staggers Rail Act of 1980, 365 I.C.C. 507 (1980). To index from base-year levels to each quarter, Mr. Fisher and Ms. Newland segregated BNSF expenses into six categories: (1) wages; (2) wage supplements; (3) materials and supplies without fuel; (4) fuel; (5) other indexable expenses, including purchased services, taxes and general expenses; and (6) non-indexable expenses not subject to price changes, which include depreciation, equipment rents and leases, and unemployment insurance taxes. Mr. Fisher and

Ms. Newland used AAR indices and the Bureau of Labor Statistics' Producer Price Index³¹ (to index other indexable expenses) to develop a composite index for all groups except fuel and non-indexable expenses.

Mr. Fisher and Ms. Newland used the actual BNSF fuel cost per gallon by quarter for each of the eight quarters costed in developing variable costs for the issue movement.³²

2. Rate and Resulting R/VC Calculation

Based on the procedures described above in Section II.A.1 of this Narrative, Mr. Fisher and Ms. Newland calculated variable costs and revenue-to-variable cost ratios by origin mine and quarter for the Third Quarter 2001 through the Second Quarter 2003. Table II.A-1 summarizes the results for transportation from each of the issue mines to Oklaunion under the rates as paid by AEP Texas. Table II.A-2 presents the R/VC ratios calculated using the challenged rates that AEP Texas has refused to pay. Exhibit II.A-1 provides totals by individual URCS cost component; the detailed calculations are provided in the workpapers.³³

³¹ The use of the PPI conforms to the method suggested by the Board in the FMC decision. *See FMC* at 91.

³² BNSF.OP.WP.II.A-0024 to 0026 and electronic workpapers "BNSF-01TO01-IE3-INDEX.123," "BNSF-02TO02-IE3-INDEX.123," "BNSF-02TO03-IE3-INDEX.123."

³³ Electronic workpaper "BNSF AEP OPEN PRG.123."

Table II.A-1
Revenue to Variable Cost Ratio Based on Rate Paid by AEP Texas

Period	Mine	Rate/Ton	Variable Cost/Ton	R/VC Ratio
3rd Qtr 2001	Buckskin	\$13.68	\$9.30	147%
4th Qtr 2001	Buckskin	\$13.68	\$9.10	150%
4th Qtr 2001	Jacobs Ranch	\$13.68	\$9.03	151%
1st Qtr 2002	Jacobs Ranch	\$13.68	\$8.98	152%
2nd Qtr 2002	Black Thunder	\$13.68	\$9.71	141%
3rd Qtr 2002	Black Thunder	\$13.68	\$9.77	140%
3rd Qtr 2002	Jacobs Ranch	\$13.68	\$9.75	140%
4th Qtr 2002	Black Thunder	\$13.68	\$10.45	131%
4th Qtr 2002	Jacobs Ranch	\$13.68	\$10.37	132%
1st Qtr 2003	Eagle Butte	\$13.68	\$10.45	131%
2nd Qtr 2003	Eagle Butte	\$13.68	\$9.92	138%

Source: Exhibit II.A-1

Table II.A-2
Revenue to Variable Cost Ratio Based on Rates Charged by BNSF

Period	Mine	Rate/Ton	Variable Cost/Ton	R/VC Ratio
3 rd Qtr 2001	Buckskin	\$15.78	\$9.30	170%
4 th Qtr 2001	Buckskin	\$15.78	\$9.10	173%
4 th Qtr 2001	Jacobs Ranch	\$15.78	\$9.03	175%
1st Qtr 2002	Jacobs Ranch	\$15.78	\$8.98	176%
2nd Qtr 2002	Black Thunder	\$15.78	\$9.71	162%
3rd Qtr 2002	Black Thunder	\$16.36*	\$9.77	168%
3rd Qtr 2002	Jacobs Ranch	\$16.46*	\$9.75	169%
4th Qtr 2002	Black Thunder	\$17.25	\$10.45	165%
4th Qtr 2002	Jacobs Ranch	\$17.25	\$10.37	166%
1st Qtr 2003	Eagle Butte	\$17.25	\$10.45	165%
2nd Qtr 2003	Eagle Butte	\$17.64*	\$9.92	178%

Source: Exhibit II.A-1

*Weighted-average rate on shipments during the quarter.

Witness Qualifications and Verification

1. Benton V. Fisher

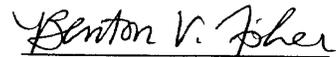
Benton V. Fisher is a Managing Director at FTI Consulting, Inc., an economic and financial consulting firm with offices located at 1201 Eye Street, N.W., Suite 400, Washington, DC, 20005. Since 1991, Mr. Fisher has been involved in various aspects of transportation consulting including economic studies involving costs and revenues, traffic and operating analyses, and work with performance measurement and financial reporting systems.

Mr. Fisher holds a Bachelor of Science in Engineering degree from Princeton University. In 1990, he served as the Deputy Controller for the Bill Bradley for U.S. Senate Campaign. In 1991, he joined Klick, Kent & Allen, Inc., which was acquired by FTI in 1998. While with the firm Mr. Fisher has performed numerous analyses for and assisted in the preparation of expert testimony related to merger applications, rate reasonableness proceedings, contract disputes, and other regulatory costing issues before the Interstate Commerce Commission, Surface Transportation Board, Federal Energy Regulatory Commission, Postal Rate Commission, Federal Court, and State Utility Commissions.

Mr. Fisher is sponsoring evidence relating to BNSF's variable costs for the issue movement. His evidence is contained in Section II.A of the Narrative. Mr. Fisher has signed a verification of the truth of the statements contained therein. A copy of that verification is attached hereto.

I declare under penalty of perjury that I have read the Opening Evidence that I have sponsored, as described in the foregoing Statement of Qualifications, and that the contents thereof are true and correct. Further, I certify that I am qualified and authorized to sponsor this testimony.

Executed on February 27, 2004



Benton V. Fisher

2. Deborah G. Newland

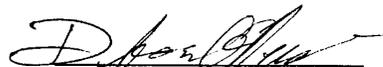
Deborah G. Newland is a Senior Consultant with FTI Consulting, Inc., an economic and financial consulting firm with offices located at 1201 Eye Street, N.W., Suite 400, Washington, DC, 20005. Since 2001, Ms. Newland has been involved in various aspects of transportation consulting, including detailed cost analyses for several of the country's largest railroads, studies of historic rail rates and long term coal traffic and revenue forecasts, and extensive statistical analysis, such as modeling fuel consumption variation with cycle times and evaluating historical changes in rail transportation rates.

Ms. Newland holds a Bachelor of Arts degree in Economics from Furman University, graduating *cum laude*. She has also received a Masters of Science degree in Economics from the University of North Carolina at Chapel Hill, and has also completed extensive econometric coursework at the doctoral level, covering such topics as measure-theoretic probability, statistical theory, and applied econometrics. Since joining FTI in 2001, Ms Newland has performed economic and financial consulting services to regulated and newly deregulated industries, including the transportation and postal sectors. Her focus is on costing and statistical analyses in support of expert testimony within regulatory proceedings, and she has assisted in the preparation of expert testimony in proceedings before the Surface Transportation Board and the Postal Rate Commission.

Ms. Newland is sponsoring evidence relating to BNSF's variable costs for the issue movement. Her evidence is contained in Section II.A of the Narrative. Ms. Newland has signed a verification of the truth of the statements contained therein. A copy of that verification is attached hereto.

I declare under penalty of perjury that I have read the Opening Evidence that I have sponsored, as described in the foregoing Statement of Qualifications, and that the contents thereof are true and correct. Further, I certify that I am qualified and authorized to sponsor this testimony.

Executed on February 26, 2004


Deborah G. Newland

3. Warren H. Wasserburger

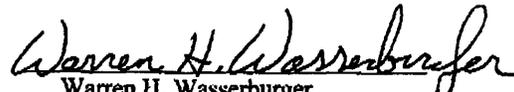
Mr. Wasserburger is a railroad transportation consultant. His business address is 8117 Wayland Drive, Weatherby Lake, Missouri 64152.

Mr. Wasserburger was employed by BNSF and its predecessors for 28 years. His management positions with the Burlington Northern Railroad ("BN") began in 1981 as Roadforeman of Engineers in Alliance, Nebraska. He held a number of positions with the railroad. From 1990 to 1995, Mr. Wasserburger was Manager Train Handling Analysis, responsible for analyzing event recorder data and monitoring the train handling skills of all engineers on the BN. Mr. Wasserburger had the same responsibilities from 1995 to 1996 as the Senior Manager Operating Practices for the BNSF. From 1996 to October 2001, Mr. Wasserburger was the General Roadforeman, Northern Service Region, in North Kansas City, Missouri, responsible for coordinating the activities of 22 division roadforemen and supervising additional train, yard and engine employees.

Mr. Wasserburger is sponsoring evidence relating to actual fuel consumption of the locomotives used on AEP Texas trains. His evidence is incorporated in Exhibit II.A-3 of BNSF's opening evidence. A copy of Mr. Wasserburger's verification is attached hereto.

I declare under penalty of perjury that I have read the Opening Evidence that I have sponsored, as described in the foregoing Statement of Qualifications, and that the contents thereof are true and correct. Further, I certify that I am qualified and authorized to sponsor this testimony.

Executed on February 27, 2004


Warren H. Wasserburger

EXHIBITS

**BNSF Opening Exhibit II.A-1
Has Been Redacted**

**BNSF Opening Exhibit II.A-2
Has Been Redacted**

BNSF Fuel Study Methodology

BNSF has based its variable cost calculation for certain trains moving in the Second Quarter of 2003 on a movement-specific study of fuel consumption on AEP Texas trains. The fuel consumption study used data collected from locomotive event recorders on the locomotives that powered AEP Texas trains during the Fourth Quarter of 2003. BNSF's witness Mr. Wasserburger analyzed the event recorder data and provided his analysis to Mr. Fisher and Ms. Newland, who used the analysis to make a movement-specific adjustment to BNSF's system-average fuel consumption calculation to trains operating in the Second Quarter of 2003 that had similar characteristics to the fuel study trains. BNSF's fuel study is discussed further below.

Background

Locomotives used in AEP Texas service are equipped with event recorders that keep track of a variety of operating characteristics, such as speed and distance traveled.¹ Event recorders also keep track of a locomotive's throttle position by time. The amount of fuel consumed by modern diesel locomotive engines is a function of the locomotive's throttle positions. Because the locomotive diesel engine simply creates electricity for traction motors, the amount of fuel consumed by the diesel engine at each throttle position is constant and does not vary with other operating conditions. The manufacturers of the locomotives used by BNSF perform extensive tests to develop highly precise fuel consumption figures for each throttle position on each locomotive model. It is therefore possible to calculate fuel consumption with a high degree of accuracy using the manufacturer fuel consumption specifications and data from

¹ Because of the accuracy of the data generated by event recorders, they are used, among other things, in reconstructing events leading up to accidents or other types of incidents investigated by the railroad.

locomotive event recorders on the amount of time a locomotive spends in various throttle positions.

Fuel Study Procedure

BNSF conducted an AEP Texas-specific fuel study using the data collected from locomotive event recorders. The basic approach involved the collection of event recorder data from locomotives on 30 AEP Texas trains operating between October and December 2003.² These study trains averaged 128 cars per train, which are representative of the longer, heavier trains that BNSF began operating for AEP Texas at the end of the Second Quarter 2003. The event recorder data were collected by BNSF personnel each time an empty AEP Texas train passed through Guernsey, WY, or in some cases Alliance, NE. In a few cases, downloads of event recorder data could not be made in Guernsey or Alliance. BNSF attempted to collect the event recorder data from those locomotives when they arrived in other stations.³

The raw data collected by BNSF personnel were transmitted electronically to BNSF's witness, Mr. Wasserburger. Using software capable of reading event recorder data, Mr. Wasserburger analyzed the data collected during the study and calculated the fuel consumed by locomotives in AEP Texas service.⁴

² During this period of time, { } trains loaded at the { } mine and { } trains loaded at the { } mine.

³ When BNSF personnel were unable to collect event recorder data from a sufficient number of locomotives on a train, or when the data collected were corrupt or unusable, BNSF's witness, Mr. Wasserburger, could not calculate the consist's total fuel consumption. As a result of these problems, 15 trains were eliminated from the study.

⁴ Mr. Wasserburger obtained a license from the software manufacturer, Quantum Engineering Inc., to use its proprietary software.

Using the event recorder data that were collected by BNSF employees in the manner described above, Mr. Wasserburger developed the following methodology for calculating fuel consumption. First, he separated each round-trip cycle into six segments:

- Guernsey (or Alliance)-to-Mine empty
- Mine-to-Guernsey (or Alliance) loaded
- Guernsey (or Alliance)-to-Amarillo loaded
- Amarillo-to-Oklaunion loaded
- Dwell time at Oklaunion
- Oklaunion-to-Guernsey (or Alliance) empty.

Mr. Wasserburger's basic methodology was to identify the proper beginning and ending points on the event recorder data for each segment of the movement. Once appropriate beginning and ending points are identified, the Quantum computer program can measure the throttle/dynamic brake position by time over the specified interval. When the time in each throttle position is multiplied by the manufacturer's fuel consumption rates for that throttle position, the total fuel consumption for a particular movement segment can be established by summing the results for each throttle position. This process is explained in more detail below.

To identify the appropriate beginning and ending points for each segment, Mr. Wasserburger looked at several locomotive "events" that are reflected in the event recorder data. These events can be used to determine where a locomotive is at different points in time and what it is doing. For example, the event recorder indicates when a distributed power locomotive has been attached to a train. For the typical AEP Texas train, this occurs in Guernsey (or Alliance) when the train is preparing to depart to the mines for loading. This event can therefore be used to establish an appropriate beginning point for the movement from Guernsey-to-mine. Other

locomotive events can be used to establish appropriate beginning or ending points for other segments. To ensure that he had chosen appropriate beginning and ending points for each locomotive, Mr. Wasserburger used the event recorder data in conjunction with the train movement files that record the movement of particular trains across BNSF's network.⁵

After identifying the appropriate beginning and ending times for each locomotive on each of the six segments identified above, Mr. Wasserburger instructed the Quantum program to measure the throttle/dynamic brake position by time between the beginning and ending point on each segment. The Quantum program⁶ generates a report showing the fuel consumed in each throttle position and the total fuel consumed by each locomotive between the beginning and ending points determined by Mr. Wasserburger.⁷ The total fuel consumption for each study train was calculated by summing the fuel consumed by each locomotive over each of the six movement segments.⁸ In a few cases where event recorder data from a particular locomotive

⁵ Mr. Wasserburger tracked the AEP Texas study trains using BNSF's train movement data. BNSF's train movement records for the AEP Texas study trains are located in the electronic workpaper "Fuel_trains_movement.xls."

⁶ Mr. Wasserburger used the manufacturer's fuel consumption rates per throttle position for the SD70MAC and C44-9 locomotives used on the AEP Texas trains. The fuel consumption rates for these locomotives are provided at BNSF.OP.WP.II.A-0028.

⁷ Mr. Wasserburger printed these reports and included them in his workpapers. BNSF.OP.WP.II.A-0039, for example, shows that the lead locomotive on AEP Texas train { } consumed 544.70 gallons of fuel while traveling between Alliance and the { } mine.

⁸ A summary report showing each locomotive's fuel consumption, as well as the total fuel consumption per train is provided at BNSF.OP.WP.II.A-0030 to 0037 and electronic workpaper "Tx_North_Fuel_Stdy_15_Trains.123" at tab "4." This report shows that the DP units on the trains consume more fuel than the other locomotives during the loaded movement. This is because the DP units can be operated separately from the two lead locomotives and controlled by the engineer at the front of the train through radio signals. Because the DP locomotives are pushing heavy, loaded coal cars, the locomotives often work harder (*i.e.*, at a

were unavailable for the entire round-trip movement, Mr. Wasserburger determined the fuel consumption for the locomotive using data from one of the other locomotives powering the train.

Mr. Wasserburger also took into account the fact that the locomotive operator may turn off, or “isolate,” one of the locomotives for portions of the return movement of empty cars. When this is done, the locomotive is allowed to idle instead of generating electricity to provide tractive power to the train, and therefore conserves fuel on the return trip. While an isolated locomotive consumes fuel at an idle rate, the event recorder records actual throttle commands from the controlling locomotive. As a result, the isolated locomotive’s event recorder data are likely to show a throttle position other than “idle.” Nevertheless, the event recorder tractive-effort data make it possible to determine when the locomotive is not generating electricity. During those periods, which could be identified on the event recorder data, Mr. Wasserburger included only an amount of fuel to reflect the fact that the locomotive was idling for that portion of the movement.⁹ Therefore, Mr. Wasserburger’s analysis reflects engineers’ efforts to conserve fuel.

Mr. Wasserburger’s methodology is identical to the methodology used by BNSF’s witnesses in the *TMPA* and *Xcel* cases. The Board accepted this methodology in its *TMPA* decision. *TMPA* at 58. The Board has not yet issued a decision in *Xcel*.

higher throttle setting) than the lead locomotives, which results in a somewhat higher level of fuel consumption over certain segments.

⁹ For example, Mr. Wasserburger determined that locomotive 9438 on train { } was isolated for the Oklaunion-Alliance segment, and therefore calculated idle fuel consumption during this portion of the trip by multiplying the total time by the idle fuel consumption rate. BNSF.OP.WP.II.A-0062. For other locomotives, such as 9528 from train { }, Mr. Wasserburger determined that the locomotive was isolated for only part of the segment, and therefore relied on both the Quantum report and a calculation of idle fuel consumption. BNSF.OP.WP.II.A-0101.

Mr. Wasserburger's results are contained in work papers that are being filed along with this Narrative.¹⁰ Mr. Wasserburger also provided his results to Mr. Fisher and Ms. Newland who used them to calculate movement-specific fuel consumption for certain AEP Texas trains.

Calculation of the Movement-Specific Adjustment

Mr. Fisher and Ms. Newland first calculated the movement-specific fuel consumption for each train in the study and divided the trains into two groups based on mine origin.¹¹ They then developed the average movement-specific fuel consumption for a train originating at each mine. These results are set forth in the table below.

**Average Fuel Consumption
of AEP Texas Study Trains**

Origin Mine	Number of Trains	Average Fuel Consumption
{ }	{ }	24,341
{ }	{ }	25,598
Combined	15	24,592

The average fuel consumption for the { } trains and the average fuel consumption for the { } trains were compared to BNSF's system-average fuel consumption for AEP Texas trains based on URCS.¹² This comparison shows that the actual fuel consumption of the { } trains is 5.4 percent above URCS system-average levels. It

¹⁰ BNSF.OP.WP.II.A-0038-0343 and electronic workpaper "Tx_North_Fuel_Stdy_15_Trains.123" at tab "Stdy Trns Sumy."

¹¹ As explained above, the fuel study trains originated at one of two mines: { }.

¹² To develop the fuel consumption calculated by URCS for the AEP Texas trains, Mr. Fisher and Ms. Newland determined the URCS variable fuel costs using the specific operating inputs (e.g., tons per car) for the AEP Texas coal trains, and then converted these variable fuel costs to gallons by dividing by the cost per gallon. BNSF.OP.WP.II.A-0344 to 0347 and electronic workpaper "Tx_North_Fuel_Stdy_15_Trains.123" at tab "ADJMT FACTORS."

also shows that the actual fuel consumption of the { } trains is 4.5 percent above the system-average.¹³

¹³ *Id.*