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July 27, 2004

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BY HAND DELIVERY

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board - Case Control Unit
1925 K Street, N.W.
Washington, D. C. 20423

JUL 27 2004

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Public Record



Re: 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 **UNDER SEAL** in the above-referenced proceeding please find an original and sixteen copies of Complainant AEP Texas North Company's ("AEP Texas") Rebuttal Evidence (Highly Confidential version). This filing consists of two volumes containing AEP Texas' Rebuttal Narrative, three volumes of Exhibits, five volumes of hardcopy Workpapers, and two CDs containing AEP Texas' Rebuttal Narrative, Exhibits and electronic workpapers.

In addition, AEP Texas is submitting herewith a notebook computer containing the RTC Model used to simulate the operations of the stand-alone railroad in this case, as well as the three model runs submitted by the parties (AEP Texas' Opening model run, BNSF's Reply model run, and AEP Texas' Rebuttal model run).

Also enclosed are an original and ten copies of the Public Version of AEP Texas' Rebuttal Evidence Narrative and Exhibits. All of the accompanying workpapers, both hardcopy and electronic, are designated as Highly Confidential and are not included in the public version of this filing.

Please note that these filings contains a number of pages in color. Their locations are marked with tape flags on the unbound originals.

Hon. Vernon A. Williams
July 27, 2004
Page 2

We have enclosed an additional hard copy of this filing to be date-stamped and returned to the bearer of this letter.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'KJ Dowd', with a stylized flourish at the end.

Kelvin J. Dowd
An Attorney for AEP Texas North Company

KJD:dmb
Enclosures

cc: David M. Konschnik
Counsel for Defendants

211669

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

AEP TEXAS NORTH COMPANY)

Complainant,)

v.)

Docket No. 41191 (Sub-No. 1)

THE BURLINGTON NORTHERN AND)
SANTA FE RAILWAY COMPANY)

Defendant.)

**REBUTTAL EVIDENCE OF
COMPLAINANT AEP TEXAS NORTH COMPANY**

**NARRATIVE
VOLUME 1 OF 2**

PUBLIC VERSION
CONFIDENTIAL MATERIAL REDACTED

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**I Counsel's Argument and
Summary of Evidence**

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

AEP TEXAS NORTH COMPANY	)	
	)	
Complainant,	)	
	)	
v.	)	Docket No. 41191 (Sub-No. 1)
	)	
THE BURLINGTON NORTHERN AND	)	
SANTA FE RAILWAY COMPANY	)	
	)	
Defendant.	)	

PART I

COUNSEL’S ARGUMENT AND SUMMARY OF EVIDENCE

Complainant AEP Texas¹ herein presents its Rebuttal Evidence in support of its challenge to the reasonableness of common carrier rates established by Defendant BNSF for the transportation of coal in unit trains from mine origins in the PRB² to AEP

¹ Unless otherwise specified, abbreviations of parties, case names and other subjects used in this Rebuttal shall have the same meaning as ascribed in AEP Texas’ Opening Evidence.

² At the time that AEP Texas submitted its Opening Evidence, the BNSF rate on shipments from the Rawhide mine was governed by the Board’s modified *West Texas Utilities* rate prescription. In anticipation of a ruling on AEP Texas’ September 2, 2003 petition to vacate that prescription and bring the Rawhide movements within the ambit of this proceeding, AEP Texas included evidence with respect to the variable and stand-alone costs of service from Rawhide as part of its Opening submission. In a decision served March 19, 2004, the Board granted the petition and vacated the Rawhide

(continued...)

Texas' Oklahoma Generating Station near Vernon, Texas. AEP Texas' Opening Evidence in this proceeding was filed on March 1, 2004, and modified by errata submitted on March 19, 2004 and April 12, 2004.

This Rebuttal responds to the Reply Evidence submitted by BNSF on May 24, 2004, and to the arguments and claims included therein. In consideration of that evidence, AEP Texas has made certain modifications to its Opening cost and maximum rate calculations that accept, in whole or in part, some of the adjustments proposed by BNSF. For the most part, however, AEP Texas herein demonstrates why BNSF's criticisms of AEP Texas' Opening Evidence are without merit, and the carrier's counter-statements of costs and associated maximum reasonable rates should be rejected. Significantly, no evidence is offered by AEP Texas herein which is not directly responsive to evidence submitted and/or claims made by BNSF in its Reply. The format of AEP Texas' Rebuttal follows the Board's March 12, 2001 decision in *Ex Parte No. 347 (Sub-No. 3)*.

Taken together with its Opening submission, AEP Texas' Rebuttal Evidence conclusively demonstrates that it is entitled to the following relief: (1) a Board

²(...continued)

prescription effective April 18, 2004. While BNSF subsequently filed a petition for review of that decision in the U.S. Court of Appeals for the District of Columbia Circuit, the carrier did not object to AEP Texas' April 19, 2004 Second Supplement to its Complaint, formally clarifying that the reasonableness of BNSF's common carrier rate from Rawhide (which was set at the same level as the vacated prescription) was at issue in this case.

ruling that BNSF possesses market dominance over the transportation of coal from the PRB to Oklaunion, within the meaning of 49 U.S.C. § 10707; (2) a Board determination that for all relevant time periods, the challenged rates have exceeded and presently exceed a reasonable level, in violation of 49 U.S.C. § 10701 (d)(1); (3) the prescription of lawful maximum rates for coal transportation from the PRB mines to Oklaunion pursuant to 49 U.S.C. §§ 10704 (a)(1) and 11701 (a); and (4) an award of reparations payable by BNSF to AEP Texas for all charges collected under the challenged rates from and after June 16, 2000 in excess of the rates prescribed by the Board, together with appropriate interest and the reimbursement of the Board's filing fee.

Table I-1, *infra*, offers a representative example of the maximum rates which should be held to apply, based upon the evidence adduced herein. For the reasons noted above, these rates differ only modestly from those presented in Table I-1 of AEP Texas' Opening Evidence.

A. INTRODUCTION

A detailed recital of the relevant background facts concerning AEP Texas' dispute with BNSF over the reasonableness of the latter's rates on coal shipments to Oklaunion is set forth in AEP Texas' Opening Narrative, and need not be repeated here. Before moving to a summary of the evidentiary record with respect to variable and stand-alone costs, however, AEP Texas responds to BNSF's meritless argument that the Board's resolution of this proceeding should be bound by its 1996 ruling in *West Texas*

Utilities. By the Board's own action earlier this year, the cost determinations and resulting rate prescription in that case were vacated and rendered without precedential effect, and BNSF's implicit claim that AEP Texas' Complaint in this proceeding somehow should be treated as a petition to reopen that proceeding is without basis in law or National Transportation Policy. AEP Texas' rate challenge properly is before the Board.

When judged on the evidence presented in *this* proceeding, which itself was sanctioned by order of the Board, it is clear that the rates at issue substantially exceed the jurisdictional threshold³ and properly calculated stand-alone costs, for all relevant time periods. As set out in full in this Rebuttal, AEP Texas is entitled to an order prescribing reasonable maximum rates for the future, and an award of reparations, plus interest, on all shipments made since June 16, 2000 at rates in excess of the reasonable maximum.

**B. AEP TEXAS' RATE CHALLENGE
PROPERLY IS BEFORE THE BOARD**

Reprising an argument that it introduced on Opening, BNSF claims that AEP Texas and the Board are legally bound by the rate prescription order entered in 1996 in *West Texas Utilities*, and that the rates at issue in this proceeding must be deemed reasonable because they are not in excess of the rates that the Board prescribed eight

³ 49 U.S.C. § 10707(d)(1)(A). BNSF has conceded the absence of effective transportation competition of coal service to Oklahoma. See BNSF Reply at II.B-1.

years ago for application to shipments from the Rawhide mine. *See* BNSF Reply at I-3-13. BNSF's position is absolutely meritless.

At the Board's invitation, AEP Texas petitioned for vacation of the *West Texas Utilities* prescription on September 2, 2003. In its petition, AEP Texas explained how the governing statutory scheme clearly established that the sole purpose of a rate prescription is to remedy a rail carrier's proven violation of the law, and that the sole intended beneficiary of a prescription is the shipper who requested it. *See* 49 U.S.C. §§ 10704 (a)(1), 11701 (b), 11704 (c)(1). While a rail carrier is entitled to charge rates in conformance with the prescription while it remains in effect, nowhere in the governing statute or the decisions of the Board, its predecessor, or the courts is there any support for the notion that a railroad has a right to seek a prescription, or to retain one in the face of a request for vacation made by the shipper for whose benefit it was entered.

The Board agreed with AEP Texas, and in its Decision served March 19, 2004 decreed that the Rawhide prescription, "which was imposed to protect [AEP Texas] from unreasonably high rates, should not become the source of a rate that would now be considered unreasonable. . . ." *Id.* at 3. In its ordering paragraph, the Board directed that "[t]he rate prescription imposed in *West Texas I*, as modified in *West Texas II*, is vacated and shall have no further force or effect." *Id.* at 4.

It is hornbook law that when an order is "vacated," it not only ceases to have prospective effect, but it is deprived of any precedential impact. *County of Los*

Angeles v. Davis, 440 U.S. 625, 634 (1979); *O'Connor v. Donaldson*, 422 U.S. 563, 577 (1975); *United States v. Munsingwear, Inc.*, 340 U.S. 36, 39-40 (1950). As succinctly summarized in a venerable legal treatise:

When an order is set aside or vacated, the result is the destruction of the order in its entirety. Its effectiveness is ended, the previously existing status is restored, *and the effect is the same as though the order had never existed.*

60 C.J.S. Motions and Orders § 71 (2003) (emphasis added).

BNSF opposed AEP Texas' request for vacation of the Rawhide prescription, and obviously is unhappy with the Board's March 19, 2004 Decision.⁴ However, there can be no dispute as to the implications of that ruling. Whatever precedential effect the prior SAC analysis and resulting prescription may have had is gone, and it is as though the findings "had never existed." BNSF's position that this vacated, eight year-old ruling is binding on the determination of maximum reasonable rates in this proceeding⁵ is untenable, and should be summarily rejected.

⁴ BNSF has sought review of that Decision in the U.S. Court of Appeals for the District of Columbia Circuit. *See* BNSF Reply at I-7. AEP Texas has been granted leave to intervene in support of the Board. Should the Court determine that review of the Board's Decision is appropriate at this time, AEP Texas will demonstrate that the Decision is legally sound, and proper as a matter of regulatory policy.

⁵ Again, it is significant as well that the *West Texas Utilities* prescription applied only to shipments from the Rawhide mine, a proposition that BNSF fought vigorously--and successfully--to protect in 2000. There *never* has been a determination of the maximum reasonable rates for coal shipments from other PRB mines to Oklahoma.

The Board's March 19, 2004 Decision authorized AEP Texas to present "a new SAC analysis" to evaluate the reasonableness of BNSF's rates from the PRB to Oklahoma. *Id.* at 3. Contrary to BNSF's one-sided view, in the nine years since the *West Texas Utilities* record was assembled SAC presentations under the *Guidelines* have grown exponentially in size, complexity, level of detail, and composition. Among other things, SARR systems have become more extensive, and taken greater advantage of available economies of scale, scope and density, *inter alia*, through the inclusion of cross-over traffic, which was a rarity in cases developed in the 1990s but now is "a standard feature of SAC cases." *PSCo/Xcel*⁶ at 17. It is neither surprising nor suspect that the SAC presentation offered here by AEP Texas, and its results, differ substantially from the *West Texas Utilities* record.

While BNSF would hold up the Board's 1996 SAC calculations as the benchmark against which to judge the 2004 rates at issue here (BNSF Reply at I-10 to 12), the fact is that that analysis and its outcome have been vacated, and by law are of no further force or effect. AEP Texas' Complaint, as supplemented, is properly before the Board, and AEP Texas is entitled to a full and objective evaluation of the reasonableness of the challenged rates based on current regulatory standards and precedents and the

⁶ Docket No. 42057, *Public Service Company of Colorado D/B/A Xcel Energy v. The Burlington Northern and Santa Fe Railway Company*, Decision issued June 8, 2004 ("PSCo/Xcel").

extensive evidentiary record assembled in this proceeding. That record, to which we now turn, strongly supports the rate relief herein sought by AEP Texas.

**C. BNSF POSSESSES MARKET DOMINANCE
OVER COAL SHIPMENTS TO OKLAHOMA**

AEP Texas' Reply Evidence catalogued the many areas where AEP Texas' movement-specific calculations of variable costs were superior to BNSF's reliance on system-average data. AEP Texas also addressed the illegitimacy of BNSF's self-serving practice of denying AEP Texas and the Board access to information that would permit a more precise computation of variable costs tailored to the efficiencies of high-volume unit train coal traffic, and then citing the absence of such information as a reason to default to system averages. *See, e.g.*, AEP Texas Reply at II-A-33 to 36.

In Part II-A of this Rebuttal filing, AEP Texas again demonstrates that BNSF's approach to the calculation of variable costs represents a regression from the Board's traditional preference for movement-specific costing of unit train traffic, and runs counter to the Board's repeated acknowledgment "that adjustments to a defendant carrier's system-average costs are appropriate to reflect the economies and efficiencies that are associated with high-volume, repetitive movements such as the unit-train service at issue here." *See TMPA* (Decision served February 9, 2001) at 3. *See also* pp. I-A-13 to 23, *infra*. The principal flaws remaining in BNSF's computations following the Board-

sponsored technical conferences between the parties are summarized at pp. II-A-5 to 6, and addressed in detail in subsequent sections of Part II-A.

AEP Texas' Rebuttal also treats in detail several variable cost-related matters which arose from the Board's recent *PSCo/Xcel* decision, including issues concerning road property return and depreciation; car costs; fuel costs; maintenance-of-way costs; crew costs; and locomotive-related costs. With respect to the last of these in particular, AEP Texas demonstrates that the evidentiary conditions which contributed to the Board's departure in *PSCo/Xcel* from established precedent on the issue of the proper calculation of locomotive spare margin are not present in this case. *See* pp. II-A-58 to 70, *infra*. Similarly, AEP Texas respectfully submits that there is no rational basis for re-interpreting the definition of "spare margin" as anything other than "the number of diesel units a railroad keeps in reserve to cover diesel units that have power failures or require maintenance." *See Georgia Power* at 41, n.11.

AEP Texas' Rebuttal evidence shows that at 2Q03 wage and price levels, the *average* revenue/variable cost ratio for the rates at issue is 248%, well in excess of the jurisdictional threshold. *See* Table II-A-30, *infra*.

**D. THE CHALLENGED RATES ARE UNREASONABLE
UNDER THE *COAL RATE GUIDELINES***

AEP Texas' evidence conclusively demonstrates that for all relevant time periods, the rates at issue have exceeded the maximum lawful levels under the SAC

constraint of the *Coal Rate Guidelines*. The measure of the surplus SARR revenues over SAC throughout the DCF period is displayed on Table III-H-5, *infra*.

In this Part, AEP Texas summarizes the reasons why its calculations of historic and future traffic and revenues for the Texas & Northern Railroad (TNR)⁷ should be accepted as the best evidence of record, and BNSF's challenges to that evidence -- particularly its objection to the now-standard inclusion of cross-over traffic and its exclusions of coal traffic that meet the Board's governing criteria -- should be rejected. AEP Texas also shows that its operating plan and operating and construction cost calculations for the TNR are superior to BNSF's counterparts in every respect, and in full compliance with current Board standards and methodologies.

Finally, AEP Texas demonstrates that its innovations in the methodologies for indexing stand-alone operating expenses and allocating rate relief among the members of a SARR traffic group are theoretically and empirically sound, and necessary, effective remedies for the flaws inherent in the Board's current approaches.

**1. AEP Texas' Statements Of Traffic
And Revenues For The TNR Are
Reasonable And Well-Supported**

In addition to its repetitive rhetoric against the well-settled rights⁸ of parties such as AEP Texas to include cross-over traffic in the SAC analysis, BNSF challenges

⁷ The TNR is AEP Texas' hypothetical SARR.

⁸ *PSCo/Xcel* at 13; *Duke/CSXT* at 20-22; *TMPA* at 17.

several elements of AEP Texas' determination of the coal volumes⁹ that would be handled by the TNR. As explained in detail in Part III-A-2, *infra*, AEP Texas has adjusted the base year TNR coal volumes and future volume forecasts presented on Opening in certain respects, in response to points raised or data provided for the first time by BNSF in its Reply. Otherwise, however, the justifications offered by BNSF for its significant reductions in the volume of coal moving over the TNR are without merit, and should be rejected.

The largest single exclusion proposed by BNSF is 28 million tons starting in 2001, and another 5 million tons starting in 2005, that originate at the three southernmost PRB mines. While BNSF presently moves this coal via Guernsey, WY, the TNR would route it via Edgemont, SD for interchange to the residual BNSF at Alliance, NE. Significantly, the TNR would operate over the entire rerouted portion of the movement, and BNSF would receive the traffic along its current, existing route. *See Duke/NS* at 26. BNSF argues that the traffic should be excluded because the TNR routing is longer than the current BNSF routing (BNSF Reply at III.A-25), and because the traffic "shares minimal facilities" with AEP Texas' Oklaunion traffic. *Id.* at 29.

⁹ BNSF does not object to AEP Texas' calculation of volumes (or revenues) for non-coal traffic that would move in overhead service over part of the TNR.

While the TNR routing is somewhat longer than the BNSF routing for this traffic, AEP Texas has met the applicable test for inclusion¹⁰ by demonstrating that transit times for this traffic over the more efficient TNR will be shorter than those experienced today over the BNSF route. *See, e.g.*, Table III-A-10 and pp. III-C- 4 to 7, *infra*. Additionally, the higher priority that would be accorded coal traffic by the TNR¹¹ and the excess capacity that is built into the TNR system¹² help assure that none of the shippers in question would experience a deterioration of service quality as a result of the rerouting.

BNSF's claim that it would violate SAC principles to allow AEP Texas to include traffic that shares facilities with the issue traffic "only to a limited extent" (BNSF Reply at I-18) deliberately distorts Board precedent. The rerouting at issue in *Duke/CSXT*, the authority BNSF relies on, would have had the subject traffic shift to a route that used *none* of the facilities used by the SARR,¹³ a circumstance far different from the instant case. BNSF's argument is the same one that the carrier raised and the Board rejected just last month. *See PSCo/Xcel* at 21-22. The same verdict is called for here.

¹⁰ *See Duke/NS* at 26-29; *CP&L* at 22; *Duke/CSXT* at 16.

¹¹ Coal would be the TNR's highest priority traffic. On BNSF, coal ranks near the bottom of system priorities. *See AEP Texas Op.* at III-A-12-13.

¹² From the start of operations, the TNR would have the capacity to handle its peak traffic year (2020) volume, which is over 18% higher than the 2001 volume level.

¹³ *Duke/CSXT* at 16. Indeed, the "customary routing" was more than 250 miles away from the nearest line being replicated by the SARR. *Id.* at 19.

For the same reasons, BNSF's objections to the inclusion of Georgia Power's Scherer coal traffic should be overruled. As shown by AEP Texas (pp. III-A-27 to 30, *infra*), the TNR's performance in serving this customer will meet or exceed the quality of service that can be expected from BNSF.

At pp. III-A-31 through 55, *infra*, AEP Texas addresses in detail BNSF's other challenges to the TNR coal traffic volumes, which likewise are shown to be either wholly without merit or grossly overstated. A complete restatement of traffic volumes for the TNR (both coal and general freight) is summarized in Table III-A-13.

The principal differences between the parties with respect to TNR revenues are focused on the division of revenues from cross-over coal traffic between the TNR and the "residual" BNSF, and the proper methodology for forecasting changes in coal revenues following the expiration of existing transportation contracts.¹⁴ In each area, however, BNSF advances approaches to the calculation of revenues that are contrary to prior Board rulings and/or indisputable facts. AEP Texas' evidence concerning TNR coal revenues is the best evidence of record, and should be accepted by the Board.

AEP Texas determines the division of revenues from cross-over traffic using the Modified Straight-Mileage Prorate (MSP) methodology that has been employed

¹⁴ There are no disputes with respect to historical single-line revenues, the division of revenues on coal movements that the TNR would interchange with carriers other than BNSF, or historical and projected revenues from non-coal traffic. See pp. III-A-58 to 59, *infra*.

by the Board in each of the last four decided coal rate proceedings. *See PSCo/Xcel* at 17; *Duke/CSXT* at 20-22; *CP&L* at 20-21; *Duke/NS* at 22-25. AEP Texas demonstrates that the MSP method provides a fair measure of the relative costs of cross-over service in this case, and leaves the residual BNSF with revenue divisions substantially in excess of the attributable off-SARR costs of handling traffic interchanged from the TNR. *See pp. III-A-60 to 61, infra*; Exhibit III-A-22. *See also* Declaration of Douglas W. Caves, Ph.D., attached as Exhibit III-G-18.

For its part, BNSF advocates the use of its discredited “density adjusted revenue allocation” (DARA) procedure. DARA has been rejected by the Board in each of the prior proceedings in which MSP was used, principally because it relies on unsupported assumptions regarding the relationship between fixed line segment investment and density which lead to a dramatic over-allocation of cross-over revenue to the residual BNSF. *See. e.g., PSCo/Xcel* at 18.

At pages III-A-61 to 69, *infra*, AEP Texas explains in detail how the version of DARA advanced here suffers from the same fundamental flaws as the iterations rejected in *PSCo/Xcel*, *Duke/CSXT*, *CP&L* and *Duke/NS*. These include a computation of “attributable costs” that produces absurd results; a tendency to distribute profit along with unattributable costs; and an allocation formula that actually provides a *disincentive* to investment which, if applied in the real world, would reduce the efficiency of the entire rail system. DARA also over-estimates the road property component of

variable cost that should be attributed to light density lines, thereby allocating too much revenue to these lines, and relies on a false assumption that each mile of track has identical cost characteristics. *See PSCo/Xcel* at 18.

As an alternative to its doomed DARA procedure, BNSF advocates modifications to the MSP methodology which, like DARA, have the effect of diverting revenue away from the TNR and in favor of the residual BNSF. *See BNSF Reply* at III.A-76-77. As AEP Texas demonstrates in Exhibit III-A-21, however, BNSF's case for manipulating MSP likewise cannot be sustained.

AEP Texas and BNSF each rely on the rate adjustment terms of individual transportation contracts to project the revenues to be earned by the TNR from each member of its customer group through the expiration date of each member's existing BNSF contract. Consistent with established precedent, AEP Texas then projects revenues over the balance of the DCF period using the coal transportation rate forecast included in EIA's 2004 Annual Energy Outlook. *See PSCo/Xcel* at 55; *Duke/CSXT* at 48. BNSF, however, argues that the results of a "contract rates study" that it commissioned for this litigation support ratcheting the TNR customer rates *downward* at contract expiration, then adjusting them by varying percentages of the RCAF for a fixed period and holding the end results constant for the rest of the DCF period.

In *West Texas Utilities*, the Board rejected made-for-litigation partisan "studies" of the type advanced by BNSF here. *See* 1 S.T.B. at 661-62. More recently, the

Board has eschewed analyses of past rate changes generally, pronouncing them unreliable indicators of future pricing. *See, e.g., TMPA* at 28-29. In this case, the Board's concerns are well-founded, as recent statements by BNSF senior executives and market analysts confirm the carrier's intent to seek to increase coal rates and reduce the duration of contract terms to the maximum extent possible. *See* pp. III-A-77 to 79, *infra*. Moreover, the BNSF "study" offered here is so fraught with errors, inherent biases and methodological flaws that it properly could not be used for its stated purpose, even if it was not otherwise inconsistent with Board precedent. *Id.* at 80-84.

The Board should accept AEP Texas' restatement of TNR revenues, as summarized in Table III-A-14, as the best evidence of record.

2. The TNR's Design And Operating Plan Are Reasonable And Consistent With The Coal Rate Guidelines

As shown in Part III-B, *infra*, the parties are in substantial agreement with respect to the design and configuration of the TNR system. Their proposed route-miles are virtually identical, and their track-miles are also very similar. Both parties used the same computerized rail planning and capacity simulation model, the RTC Model, to simulate the TNR's system and train operations for purposes of determining the feasibility of the design and operating plan to accommodate the TNR's volume during the peak traffic week of the peak traffic year (2020). Thus, a major area of potential difference and dispute between the AEP Texas' and BNSF's feasibility evidence has been removed in this case. Moreover, the parties are in substantial agreement with respect to the

configuration and operating inputs that should be used in simulating the TNR's system configuration and operations. *See* Exhibit III-B-4 and pp. III-C-34 to 35, *infra*.

With respect to the operating plan for the TNR, AEP Texas Witness Paul Reistrup – one of the Nation's leading experts on rail operations – designed a plan that is feasible yet also very efficient, in compliance with the SAC principle that a SARR can and should be a least-cost, most-efficient railroad that is capable of providing the service required by its customers. *See* Part III-C, *infra*. As shown at pp. III-C-34 to 35, BNSF has accepted the vast majority of the elements of Mr. Reistrup's operating plan. However, in several cases, BNSF has altered Mr. Reistrup's operating plan to better comport with what it describes as BNSF's "real-world operations." At II. III-C-36 to 54, Mr. Reistrup demonstrates that BNSF's proposed alterations are unnecessary in terms of the TNR's feasibility.

BNSF's thesis is that because its own present operational methods work (at least most of the time), they must be reflected in the TNR's operating plan for the Board to accept it as feasible. However, the integrity of the incumbent's existing system operations plan is not the issue under guiding SAC principles. Rather, the key issue is whether the TNR operating plan posited by AEP Texas is feasible for its specific, limited traffic group given the constructs of the stand-alone world, including the presumed ability to design a least-cost, most-efficient replacement for the incumbent. The Board specifically recognized this principle in crafting the present procedures for presenting

evidence in SAC rate cases,¹⁵ and it is faithfully reflected in the evidence submitted herein by AEP Texas. See Parts III-B and III-C, *infra*.

3. AEP's Calculation Of the TNR's Operating Expenses Is The Best Evidence Of Record

AEP's calculation of the TNR's annual operating expenses is set forth in Part III-D of its Opening and this Rebuttal Evidence. These expenses include equipment (locomotive and railcar) requirements, operating and non-operating personnel expenses, general and administrative ("G&A") expenses (including information technology requirements), materials and supplies, maintenance-of-way expenses, ad valorem taxes, and insurance costs. Many of these expenses are based on the well-supported operating plan developed by AEP Texas' Witness Reistrup, as well as the results of AEP Texas' RTC simulation of the TNR's peak-period operations. A few of the major categories of operating expense are addressed briefly here.

a. Equipment

AEP Texas has submitted reasonable and well-supported estimates of the costs associated with the TNR's locomotive and railcar fleets. This evidence includes a calculation of the TNR's peak-week locomotive and car requirements based on the train

¹⁵ See *Ex Parte No. 347 (Sub-No. 3)*, Decision served March 12, 2001, at 6: "...we remind parties that a railroad's SAC evidence should be limited to addressing deficiencies in the complaining shipper's evidence. It is not sufficient for a railroad to show that another way of providing service would be superior, because the purpose of a SAC analysis is to identify the *least* cost at which the current level of service for each member of the traffic group could be provided" [emphasis in original].

cycle times produced by AEP Texas' Rebuttal RTC simulation, converted to base-year requirements using a peaking factor as described in Parts III-C-1 and III-D-1, *infra*. AEP Texas calculated locomotive and railcar lease costs based on lease agreements provided by BNSF in discovery, which is consistent with the procedure approved by the Board in prior decision including *TMPA*. Locomotive fuel costs were calculated based upon BNSF's system average fuel price and fuel consumption rates. In Part III-D-1, AEP Texas demonstrates that in this instance, the use of system averages is the best evidence of record and that BNSF's efforts to impose significant increases above its own system average levels with respect to each of these fuel-related items are riddled with errors.

b. Personnel

Operating and Non-Operating Personnel. AEP Texas' estimates of the number of operating and non-operating employees required by the TNR are well-supported by expert testimony from Mr. Reistrup, and again constitute the best evidence of record. Unlike BNSF's over-sized staffing, AEP Texas' plan declines to impose excess staffing levels upon the TNR during 51 weeks of the year merely to ensure that employees can maintain their usual time off from work during the TNR's annual peak operating week. Moreover, AEP Texas' plan foregoes the large locomotive "hostling" staff that BNSF has proposed. BNSF's staffing proposal is a vestige of old rail union work rules, and like many of BNSF's other staffing proposals, has no place in the development of a least-cost, most efficient SARR.

Finally, AEP Texas' plan also reflects reasonable and well-supported approaches to the determination of compensation levels and fringe benefits. As AEP Texas demonstrates in Part III-D-2, *infra*, AEP Texas' proposals are more realistic than BNSF's for a railroad such as the TNR.

General and Administrative Expenses. With respect to G&A costs, AEP Texas' evidence is strongly supported by expert testimony and reflects the SARR staffing principles that the Board has endorsed repeatedly in its past decisions, including, most recently, *TMPA* and *PSCo/Xcel*. This evidence directly considers the stream-lined nature of the TNR's unit train and trainload operations, and staffs the various G&A functions accordingly. AEP Texas' evidence groups these functions logically, and is unburdened by the duplicative middle-management that often produces inefficiencies in "real world" railroads – especially the major Class I carriers that have grown to their present size through various mergers and consolidations. *See* Part III-D-3, *infra*.

BNSF's Reply evidence, on the other hand, is based largely upon a number of comparisons between the TNR and alleged real-world "peer" railroads. From its review of information regarding the annual revenues, total employees, operating mileage, and annual carloads of real-world railroads, BNSF concludes that the TNR should be measured against six carriers, and that three (*i.e.*, KCS, WCS and IC) have "the most comparable operations." BNSF Reply at III.D-45. However, BNSF presents no explanation of just how these three carriers' operations actually compare to the TNR's.

In fact, the operations of these carriers are not even remotely comparable to the operations of the TNR. The TNR is a carrier that handles only trainload traffic, almost all of which is unit train coal traffic. The TNR serves only five local destinations (*i.e.*, the Pawnee, Arapahoe, Comanche, Harrington, and Oklaunion power plants). Furthermore, since Pawnee, Arapahoe, and Comanche each are Xcel/PSCo generating stations, TNR actually only provides destination service to three corporate entities (*i.e.*, Xcel/PSCo, SPS, and AEP Texas North). Each one of the three carriers cited by BNSF serves a multitude of ultimate destinations and corresponding customer entities.

Likewise, more than 95% of the TNR's traffic is composed of coal moving in unit trains. The TNR originates and forwards most of this traffic to BNSF and two other carriers (UP and NKCR) in interline service for delivery to its ultimate destination. The balance of the TNR's traffic is overhead manifest traffic that moves in intact trains and as to which the TNR performs only a small percentage of the total movement. None of the "most comparable" railroads identified by BNSF has a traffic mix of this nature.

Moreover, it is evident that the characteristics that BNSF has used to perform its "peer" identification are not relevant to the question of G&A expenditures. No more G&A-related work is required to transport a unit train of coal 1,400 miles than to transport that same unit train only 100 miles, yet BNSF's analysis bases many of its comparisons on expenditures per 1,000 GTM's. Similarly, no more G&A-related work is required to transport a unit train of coal 1,400 miles than to provide 100 miles of local

service for a merchandise train carrying a combination of cars from a group of different shippers. In fact, since the coal train is billed as a single unit (in a continuously repeating cycle), *far less* work is needed to administer this type of “high-GTM” service.

Nevertheless, BNSF’s peer analysis treats the carrier providing long-haul unit train service as requiring far greater G&A expenditures than a multi-shipper merchandise train.

Even if the Board were to compare the TNR to a real-world railroad (and as AEP Texas demonstrates, it should not), it would be imperative under SAC theory that the Board limit such comparisons to the most efficient of those real-world railroads. AEP Texas demonstrates in Part III-D-3 that a wide range of efficiency levels exists among the railroads that BNSF has selected for its various comparisons. Contrary to BNSF’s assumption, there is absolutely no justification for comparing the TNR to an inefficient railroad (or even to an average of efficient and inefficient railroads), since SAC theory requires the SARR to be optimally efficient.

The absence of a comparable real-world peer, which is entirely plausible under SAC principles, mandates that G&A expenses for the TNR should be developed through a specific analysis of the nature of the TNR’s operations and the functions to be served by each G&A staff member. AEP Texas’ evidence employs this approach, and is based upon the testimony of experts with senior-level experience in the railroad industry. On the basis of its precedent and SAC theory, the Board should accept AEP Texas’ G&A evidence.

c. Maintenance-of-Way Expenses

The parties also have presented widely divergent views on the treatment of the annual maintenance-of-way (“MOW”) costs that will be experienced by the TNR. AEP Texas has developed a MOW plan that embraces SAC principles, particularly the concept that a SARR is a least-cost, most efficient railroad. This plan also recognizes that, unlike existing Class I railroads, the TNR will be maintaining a new roadbed and newly constructed state-of-the-art facilities, and it has a workforce that is unencumbered by either union work rules or merger protective conditions. In addition, because of the homogenous nature of its traffic mix (*i.e.*, more than 95% of the traffic moves in unit coal trains) and the defined level of traffic volumes, the TNR does not experience some of the maintenance difficulties (whether by nature, by frequency or by magnitude) that may be experienced by “real-world” railroads that have to deal with widely divergent train types and unpredictable traffic flows.

Not surprisingly, the MOW plan developed by AEP Texas’ MOW experts differs significantly from BNSF’s own experience, and that of other Class I railroads. This plan assumes that the TNR will employ many of the practices that have been successfully deployed by some Class I railroads (including the Canadian Pacific), as well as by regional railroads, to reduce MOW expenses. These practices include cross-training and outsourcing of many functions, most notably program maintenance.

BNSF has countered AEP Texas' MOW plan with a grossly inflated, bloated MOW staff that essentially mirrors its own existing practice. BNSF repeatedly espouses a feasibility standard that requires the complainant to show that any efficiency its SARR seeks to introduce is actually in practice today by existing Class I railroads. Thus, BNSF reasons that the MOW plan (or any of its subparts) must be based on its own or another Class I's existing practices to be feasible, no matter how inefficient that plan or practice may be. This new standard thus decrees that the SARR can be no more efficient than the most-efficient *existing* Class I railroad – regardless of whether that railroad is itself burdened with antiquated facilities and equipment, and a highly specialized, crafted, unionized workforce – without regard for the clear efficiencies that are available to the SARR by virtue of its homogenous, predictable traffic flow and non-unionized forces.

This approach, on its face, is inconsistent with the SAC principles adopted in the *Coal Rate Guidelines*. The appropriate standard is not whether the incumbent's real-world approach to MOW is feasible, but rather whether an efficient SARR can achieve a feasible MOW plan at significantly less expense. AEP Texas' MOW experts demonstrated on Opening and again in Part III-D-4, *infra*, that it can. AEP Texas' plan is not only feasible, but it is the *only* plan before the Board that recognizes the significant differences between the SARR and a "real-world" railroad. BNSF's inflated plan fails to recognize these differences, and therefore must be rejected.

**4. The Road Property Investment Costs Proposed
By AEP Texas Are Sound And Well-Supported**

BNSF engages in an extended effort to push the TNR's road property investment costs far beyond what a least-cost, most-efficient carrier with no barriers to entry would reasonably expect to incur. The reality is that AEP Texas' Opening construction cost estimate, with slight revisions made on Rebuttal, is not only feasible, but represents the best evidence of record in this case.

BNSF's efforts to inflate the TNR's construction costs are embedded in virtually every cost item, and are addressed in Part III-F, *infra*. However, four items in particular should be noted here: the costs for contingencies, engineering, earthwork, and land acquisition.

Despite a long line of ICC and Board decisions adopting a 10 percent additive to SARR construction costs for contingencies, BNSF now argues that the Board should apply a 20 percent contingency additive because the planning of the TNR project allegedly is only preliminary, and such projects typically incur delays and cost overruns. AEP Texas' engineering experts demonstrate in great detail in Part III-F-11, *infra*, that the planning for the TNR project has progressed far enough that, even under BNSF's proposed standards, a 10 percent contingency additive safely can be used. Indeed, for several large construction cost categories, such as earthwork, a five percent contingency would be justified. Moreover, AEP Texas thoroughly refutes BNSF's flawed assumptions about delays and costs overruns – particularly those involving the most

relevant, comparative project, the construction of the WRPI (now Union Pacific) lines in the Powder River Basin in the early 1980's.

AEP Texas further demonstrates that BNSF's 20 percent additive is inconsistent with stand-alone cost theory because BNSF's arguments clearly contemplate shortages of materials or people necessary to perform the construction. Such limitations are barriers to entry that do not exist in the stand-alone world. As such, BNSF has presented no plausible reason for the Board to depart from its past precedents.

For the engineering additive, on Rebuttal AEP Texas has adopted the 10 percent figure that the Board definitively established in *PSCo/Xcel*. *Id.* at 118. By comparison, BNSF's additive is an unprecedented 14.6 percent. As AEP Texas demonstrates at length in Part III-F-10, *infra*, BNSF's additive is overstated because it double counts certain activities, such as surveys, and includes over \$75 million in costs that are typically covered by contract specifications (*i.e.*, construction stakeout and materials testing). Moreover, BNSF has assumed that railroad projects are of a "higher" complexity than other projects, a point which the Board recently rejected, in favor of a finding that railroad projects are of "average" complexity. *PSCo/Xcel* at 118. When BNSF's unnecessary additives and overstated complexity costs are adjusted, BNSF's total engineering additive drops under 10 percent. Thus, the Board's 10 percent additive is more than adequate in this instance.

BNSF also argues that AEP Texas has understated the earthwork costs associated with the construction of the TNR. Most of BNSF's arguments surely will be familiar to the Board. Indeed, BNSF raises many of the same equipment-based criticisms it has raised in *AEPCO*, *Otter Tail*, *PSCo/Xcel*, and *TMPA*. AEP Texas thoroughly refutes BNSF criticisms in Part III-F-2, *infra*. Moreover, AEP Texas has demonstrated on Opening, and again on Rebuttal, that major public projects (and BNSF projects as well) actually pay considerably less per cubic yard for excavation work than what AEP Texas has proposed – and far less than what BNSF proposes. Interestingly, BNSF never took issue with AEP Texas' Opening Evidence on this point; all but conceding that its own costs are greatly inflated.

Finally, BNSF's land acquisition cost analysis is baseless and overstated. Unlike AEP Texas' expert, BNSF's sponsoring witness made no physical inspection of the line and, in fact, appears not to have done any research at all. Even with all of AEP Texas' land data available to him, BNSF's witness chose to apply an oversimplified approach leading to a vastly overstated cost. By comparison, AEP Texas establishes the reasonableness of its land acquisition costs by properly applying additional mathematical approaches and demonstrating that regardless of the method used, the costs come out at or near AEP Texas' Opening costs. *See* Part III-F-1, *infra*.

5. AEP Texas' Execution Of The DCF Methodology Is Supported By the Best Evidence of Record

Part III-G of this Rebuttal addresses the parties' differences with respect to the Board's discounted cash-flow methodology. AEP Texas' alternative to the percentage reduction methodology for allocating rate relief is the subject of Part III-G-6, *infra*.

Herein, AEP Texas addresses BNSF's opposition to AEP Texas' methodology for indexing TNR operating expenses and its criticism of AEP Texas' calculation of capital costs, the two other major areas of difference with respect to DCF issues. In both cases, BNSF's claims are without merit and AEP Texas has offered the best evidence of record.

a. Operating Expense Index

BNSF ignores entirely the fundamental inconsistency in forecasting future changes in TNR coal revenues using an index that assumes a pass-through of TNR productivity gains (the EIA coal rate forecast), while at the same time projecting future changes in TNR operating expenses using an index (the RCAFU) that *ignores* productivity gains. In a sense, this is understandable, as the illogic has no real defense. Because the inconsistency inherently biases virtually every SAC analysis in the defendant's favor, however, fundamental fairness and the integrity of the regulatory process make it imperative that the Board act to cure it. In its Opening Evidence, AEP Texas developed and presented a practical and well-supported index adjustment that does just that. *See* AEP Texas Op. at III-G-5-20. In this Rebuttal, AEP Texas shows that each of BNSF's criticisms of AEP Texas' EIA-based productivity adjustment is without merit.

Contrary to BNSF's claim, the EIA factor is a *bona fide* measure of total factor productivity. The EIA measurement of productivity growth, which compares changes in input prices to changes in the output prices (*i.e.*, rail rates), fits squarely within the recognized definition of a total factor productivity gauge under standard economic theory. See pp. III-G-9 to 10, *infra*. BNSF argues that UP's entry into the PRB and utility "bundling" of captive and competitive movements – rather than productivity improvements – have caused the rate moderation measured by EIA. As AEP Texas shows, however, both of those "innovations" occurred long ago, and neither would have a meaningful effect on future year-to-year changes. *Id.* at 10.

It is noteworthy that the average annual rate of productivity growth implicit in TNR's operating cost index (1.3%) is slower than BNSF's own calculation of the productivity growth rate implicit in the EIA forecast (1.9%). *Id.* at 11. It is also slower than the 1.5% rate that the Board in *WPL* implied would be attributable solely to innovations in information technology.¹⁶ This unchallenged data rebuts BNSF's unsupported rhetoric that AEP Texas was improperly claiming productivity gains equivalent to those forecast for coal-hauling railroads generally.

¹⁶ In *WPL*, the complaining shipper advocated indexing operating expenses at an annual rate of 1.5%, based on the defendant's internal forecast. The defendant argued for use of the RCAFU, which "would increase twice as fast" as the complainant's index. *WPL* at 106. In siding with the shipper, the Board cited information technology as the sole cause of the cost inflation differential. *Id.* The Board likewise accepted the principle that the SARR could be expected to realize the same productivity gains that the defendant railroad projected for itself.

BNSF claims that the TNR would start out { } more efficient than BNSF is today with respect to the same traffic group, which it attributes to up-front productivity that “real world” railroads would take 18 years to replicate. *See* BNSF Reply at III.G-9 to 10. As shown at pp. III-G-12 to 20, *infra*, however, the cost calculations used by BNSF to arrive at this figure are riddled with errors. Properly and consistently determined, the base year operating expense differential between the TNR and BNSF is { } which is entirely predictable given that the TNR presumptively is an optimally efficient railroad. However, even that comparison is irrelevant to the question of *future* productivity gains for the TNR. BNSF alleges – without evidence – that any cost advantage enjoyed by a new entrant such as the TNR inevitably will erode over time, but the real-world experience of retailers such as Wal-Mart proves the contrary.

AEP Texas’ Rebuttal Evidence identifies several specific sources of future productivity gains for the TNR, including density economies (measured by the rail industry standard criterion of gross ton-miles per employee); improvements in locomotive technology as the TNR gradually adds power year-by-year in response to traffic growth; improvements in information technology; and enhanced production flexibilities. The quantifications of these gains offered by AEP Texas – all of which would begin to be realized in the early years of the TNR’s operation – easily support the 1.3% average annual productivity growth factor implicit in AEP Texas’ analysis. *See* pp. III-G-21-25, *infra*.

BNSF's claim that railroad productivity opportunities *only* arise as assets age or become obsolete takes previous Board rulings out of context, and is fallacious as a matter of principle. See pp. III-G-25 to 26, *infra*. Likewise, its argument that mid-stream asset replacements to enhance productivity cannot be accommodated in the DCF model is wrong, as the use of the EIA coal rate forecast (which *includes* productivity gains) in the DCF analysis confirms. See pp. III-G-26 to 27, *infra*.

On Opening, AEP Texas showed that the age of assets profile of the TNR was not so different from that of a typical Class I coal road as would justify ignoring altogether the prospect of future productivity gains. Without directly challenging AEP Texas' methodology, BNSF claims that "distortions" caused by accounting for railroad mergers and removal costs affect AEP Texas' analysis. As shown at pp. III-G-28 to 29, *infra*, however, the purchase accounting rules for railroad mergers really are no different from the rules applicable to the acquisition of any partially depreciated asset, and the new accounting standards for removal costs cited by BNSF post-date AEP Texas' analysis. Neither undermines the validity of AEP Texas' age of assets study.

By using the EIA coal rate forecast to project future revenues for the TNR, the Board implicitly has recognized that there are meaningful future productivity gains to be realized by the TNR and passed through to its customers. AEP Texas' proposed methodology for indexing operating expenses, while conservative, offers a well-supported and empiric basis to properly reflect these productivity gains on the cost side as

well. It represents the best evidence of record, and is necessary in order to neutralize the bias that is inherent in the practice followed in recent coal rate proceedings.

b. The Cost Of Capital

In Part III-G-4 of this Rebuttal, AEP Texas provides further evidentiary support for the proposition that the TNR would have been able to take advantage of the steady, recent trend of lower capital costs to refinance its debt in 2002. *See pp. III-G-1 to 2, infra.* In its Reply, BNSF objected to AEP Texas' reliance on the Board's determination of the 2002 railroad industry cost of capital. On June 28, 2004, the Board published its findings regarding 2003 railroad capital costs, which confirmed the recent trend and showed a further decline (from 9.8% in 2002 to 9.4% for 2003). AEP Texas has incorporated the 2003 capital costs in its Rebuttal restatement, following the multi-year average approach advocated by BNSF. *See Exhibit III-G-13.*

BNSF also claimed that AEP Texas could not show that the markets could absorb a refinancing the size of the TNR's. However, AEP Texas shows that the Class I railroads successfully issued an annual average of \$2.4 billion in debt over the 1998-2003 time period, some 60% more than the \$1.05 billion that the TNR would refinance.¹⁷

¹⁷ AEP Texas also shows that there is no valid basis for BNSF's assumed, 4% floating equity premium (BNSF Reply at III.G-3), which has been rejected by the Board in previous cases. *See TMPA* at 162; *WPL* at 107.

6. The Generalized Percentage Reduction Methodology Is Faithful To Ramsey Principles, And Should Be Adopted In This Case

AEP Texas' evidence shows that properly calculated, the stand-alone revenues attributable to the TNR substantially exceed SAC in every year of the DCF model. Therefore, it is necessary to consider the proper method to allocate rate relief among the members of the TNR traffic group.

In its Opening presentation, AEP Texas explained that the percentage reduction methodology employed by the Board in previous cases is inconsistent with Ramsey pricing principles because it focuses on the maintenance of absolute price level relationships, rather than the mark-up of price over marginal cost which is a Ramsey hallmark and a key indicator of elasticity of demand. *See* AEP Op. at III-G-27 to 29. AEP Texas also noted what the Board already has acknowledged: that the percentage reduction formula is susceptible to manipulation or "gaming." *Id.* at III-G-25 to 26; *CP&L* at 31-32.

Acting on the Board's invitation,¹⁸ AEP Texas developed and presented the Generalized Percentage Reduction Methodology (GPRM) as an alternative to the percentage reduction formula. The GPRM is faithful to Ramsey principles, as its focus is on relative mark-ups of price over marginal cost. *See* AEP Op. at III-G-30 to 31. When

¹⁸ *CP&L* at 32 ("[T]he Board is receptive to another approach for determining the appropriate extent of rate relief in SAC cases.").

stand-alone revenues exceed SAC, the GPRM works to allocate rate reductions in a manner commensurate with the pattern of rate increases followed when revenues were inadequate: that is, the shippers whose demand is most inelastic and therefore experienced the highest mark-ups of price over marginal cost receive the greatest measure of relief when overall revenues are reduced. In addition to its consistency with Ramsey principles, the GPRM solves the “gaming” problem. *Id.* at III-G-31 to 32.

BNSF is wrong in its assertion that alleged railroad “gaming” is the sole justification for the GPRM. BNSF Reply at I-36. As AEP Texas explained previously and reiterates in this Rebuttal (*see* pp. III-G-35 to 36, *infra*), the GPRM is designed principally to address the Board’s current method’s inconsistency with Ramsey principles. Railroad “gaming” is neutralized as one result, but its existence is not a prerequisite to the GPRM’s validity.

BNSF likewise misses the mark with its charge that AEP Texas has attempted to “manipulate” the SAC analysis. BNSF Reply at I-36. The particulars of BNSF’s charge are that AEP Texas has included cross-over traffic in the TNR traffic group, and has used the MSP methodology to allocate revenues for that traffic. *Id.* Both of these, of course, are Board-sanctioned elements of a modern SAC analysis. *PSCo/Xcel* at 16-18; *CP&L* at 20-21. As AEP Texas explains (pp. III-G-37 to 39, *infra*), BNSF’s claim of shipper “gaming” is simply another collateral attack against cross-over traffic,

and its proposed adjustment to the percentage reduction methodology a thinly-veiled maneuver to neutralize the impact of such traffic on the SAC analysis.

BNSF's objection to the GPRM itself rests on a mischaracterization: the false claim that AEP Texas is seeking a "shortcut" to the calculation of Ramsey prices. BNSF Reply at I-37. In fact, the GPRM does not purport to *calculate* Ramsey prices. What the GPRM does is allocate rate reductions in response to excess SARR revenues over SAC in accordance with Ramsey *principles*; that is, in relation to elasticities of demand. *See* pp. III-G-43 to 48, *infra*.

BNSF and its witnesses Higgins and McChesney argue that the GPRM cannot measure demand elasticities because the revenue factors used for cross-over traffic are not prices for through service, and the marginal cost calculations used in the GPRM are on a system-average basis.¹⁹ *See* BNSF Reply at I-37 and Exhibit III.G-1. However, the elasticity of a shipper's demand is movement-specific, not segment-specific, so the fair allocation that occurs under MSP *will* assign revenues to the TNR that reflect the demand elasticity of the overall through movement. And while a revenue allocation methodology that relies on system average marginal cost calculations may be less precise than one which uses movement-specific marginal costs, from the standpoint of consistency with Ramsey principles it is still far superior to an approach that ignores the

¹⁹ BNSF never explains why system averages are unacceptable in the marginal cost arena but at the same time should be deemed "best evidence" when it comes to calculating variable costs.

relative price mark-ups altogether and focuses solely on absolute price levels.²⁰ That perfect precision must be tempered with considerations of administrative practicality is a principle embedded in the STB's Uniform Rail Costing System and the promulgations of the Railroad Accounting Principles Board. *See Adoption of the Uniform Rail Costing System as a General Purpose Costing System*, 5 I.C.C. 2d 894, 908 (1989).

For the reasons set out in detail at pp. III-G-43 to 48, *infra*, the GPRM should be adopted by the Board for use in allocating rate relief under the SAC test. Moreover, the Board should act to adopt the GPRM in this case, and not wait for a rulemaking request as alluded to in *PSCo/Xcel*, at 38.²¹ Sound reasons of policy and administrative practicality support such a course.

First, the Board and its predecessor consistently have used individual adjudications to adopt or modify various components of the SAC methodology, including the very consequential matter of an allocation formula for cross-over revenues. *See Duke/NS* at 19-25. Indeed, the percentage reduction methodology itself was adopted in an individual adjudication. *Coal Trading Corp. v. The Baltimore & Ohio Railroad Co.*, 6 I.C.C. 2d 361, 380 (1990). Adoption of the GPRM is a single change in a single component of the overall CMP methodology, and better suited to adjudication than to a

²⁰ The views expressed by Witnesses Higgins and McChesney are addressed in full in the Declaration of Dr. Douglas W. Caves. *See* Exhibit III-G-18.

²¹ That the Board has the authority and discretion to do so is beyond dispute. *See, e.g., SEC v. Chenery Corp.*, 332 U.S. 194, 203 (1947); *American Fed. of Gov't. Employees, AFL-CIO*, 815 F.2d 718, 721 (D.C. Cir. 1987).

general rulemaking. Additionally, at least since *CP&L*, interested parties have had notice of the Board's willingness to consider alternatives to the percentage reduction formula in individual cases.

Second, there must be a serious concern whether a general rulemaking, if initiated, could be restricted to consideration of an alternative to the percentage reduction methodology. More likely, such a proceeding would become a vehicle for carrier, shipper and government parties alike to promote modifications to other aspects of the CMP and/or SAC methodologies with which they may be dissatisfied. Even if such a "town meeting" reaction did not succeed in formally expanding the scope of the rulemaking, most certainly it would extend its tenure and delay resolution of the issue well beyond the date that it would be resolved in this proceeding.

Third, considerations of administrative practicality and economy strongly favor addressing the issue in this proceeding, rather than in a rulemaking. This proceeding is on schedule for a final decision sometime during the Second Quarter of 2005. Resolution of the question of the proper methodology for allocating rate relief under the SAC test in this case would ensure that the parties to every subsequent proceeding would have before-the-fact guidance as to the Board's evidentiary expectations. The rulemaking proceeding referred to in *PSCo/Xcel*, on the other hand, has not even begun, and it would not be realistic to expect that it could be completed even

within a year.²² Throughout its pendency, any coal rate cases brought before the Board would be decided using a methodology with acknowledged material flaws, which in turn would open the door to extended, after-the-fact piecemeal litigation (*e.g.*, petitions for reconsideration, technical corrections, etc.). Efficiency concerns are better served by the Board's resolving the matter in this case.

E. AEP TEXAS IS ENTITLED TO REPARATIONS ON ALL SHIPMENTS MADE SUBSEQUENT TO JUNE 16, 2000

As AEP Texas demonstrated on Opening, and confirms in this Rebuttal, the rates that BNSF has been charging for its PRB movements to Oklaunion have exceeded the statutory maximum throughout the relevant time period. Accordingly, AEP Texas is entitled to reparations on the difference between the amount paid, and the amount ultimately found to be the maximum reasonable level allowed at law. A summary of these reparations is contained at AEP Texas Exhibit III-H-6.

In its Reply, BNSF suggests that 49 U.S.C. § 10705(c) bars AEP Texas from recovering any reparations for movements prior to August 11, 2001, because it did not file its Complaint within the limitations period for claims before that date. BNSF Reply at I-40 to 45. As AEP Texas demonstrated on Opening, and as further explained below, the Board should exercise its discretion under the unique circumstances of this

²² Just the final phase of the *Coal Rate Guidelines* proceeding took 30 months to complete. *Coal Rate Guidelines*, 1 I.C.C. 2d at 521.

case and toll this statute of limitations to allow recovery of reparations for the pre-August 11, 2001 movements.

1. Section 11705(c) Is Not Jurisdictional

In determining whether a statute of limitations is jurisdictional, courts look to the congressional intent underlying the statute, as evidenced by the clear language of the statute itself, legislative history, and statutory purpose. *Miller v. New Jersey State Department of Corrections*, 145 F.3d 616,618 (3d Cir. 1998). A statute will be not be considered “jurisdictional” if the statutory provisions specifying the time for filing are clearly separate from the jurisdictional grant. *See e.g., Zipes v. Trans World Airlines, Inc.*, 455 U.S. 385, 394 (1982); *Mondy v. Secretary of the Army*, 845 F.2d 1051, 1055 (D.C. Cir. 1988). When considered under these standards, it is clear that § 11705(c) is not a jurisdictional statute.

Section 11075(c) provides: “A person must file a complaint to recover damages under section 11704(b) of this title within 2 years after the claim accrues.”²³ As BNSF correctly notes, under § 11705(g) such claims are deemed to accrue “on delivery or tender of delivery by the rail carrier.” BNSF Reply at I-39. BNSF fails to note, however, that the Board’s underlying jurisdiction to determine such claims is not bestowed by

²³ Section 11704(b) states: “A rail carrier providing transportation subject to the jurisdiction of the Board under this part is liable for damages sustained by a person as a result of an act or omission of that carrier in violation of this part. A rail carrier providing transportation subject to jurisdiction of the Board under this part is liable to a person for amounts charged that exceed the applicable rate for the transportation.”

either of these sections. Rather, the Board's jurisdiction to assess damages in rate disputes is separately granted in 49 U.S.C. § 10501(b)(1), which provides: "The jurisdiction of the Board over transportation by rail carriers, and the *remedies* provided in this part with respect to rates, classifications, rules (including car service, interchange, and other operating rules), practices, routes, services and facilities of such carriers is exclusive." (Emphasis added).

In claiming that §11705(c) is jurisdictional, BNSF relies upon pre-Staggers Act precedent involving the review of statutes of limitations that are decidedly more narrow than §11705(c). BNSF Reply at I-41. BNSF then boldly jumps to the conclusion, without citing any authority in either the statutory language or legislative history, that "[t]he strong deregulation policy and congressional desire to restrict the scope of ICC and Board regulation expressed in the Staggers Act and the ICCTA reinforce the Supreme Court's pre-Staggers Act findings that the statute is [sic] jurisdictional limit on the Board's regulatory authority." BNSF Reply at I-41.

Indeed, there is a significant difference between the pre-Staggers Act statutes of limitations relied upon by BNSF and the post-Staggers Act statute of limitations at issue in this proceeding. All of the pre-Staggers Act rail transportation cases relied upon by BNSF involved statutes of limitations that were considered jurisdictional because they included language that evidenced a legislative intent to prevent suits on delayed claims. The pre-Staggers Act version of § 11705(c) specified that "[a]ll

complaints for the recovery of damages shall be filed with the Commission within two years from the time the cause of action accrues, and not after.” Interstate Commerce Act § 16, as amended by Act June 29, 1906, c. 3591, § 5, 49 U.S.C.A. § 16. The critical distinction in these cases can be found in key language that was included in §16, but no longer exists in § 11705(c). As the Supreme Court explained in *A.J. Phillips Company v. Grand Trunk R.R. Co.*, § 16 indicated its purpose to prevent suits on delayed claims, “by the provision that all complaints for damages should be filed within two years, *and not after*. Under such a statute the lapse of time not only bars the remedy, but destroys the liability.” 236 U.S. 662, 667 (1915) (emphasis in original). The Supreme Court further explained this rationale in another ICC case involving a rate dispute under §16:

It is thus made very clear that the holding of the Commission was, not that, having jurisdiction over the claim upon consideration thereof, is was found to be barred by the statute of limitation, but that the language of the two-year provision of the act was jurisdictional, and placed it so beyond its power that it could not be considered at all . . .

We agree with this conclusion of the Commission, that the two-year provision of the act is not a mere statute of limitation, but is jurisdictional – is a limit set to the power of the Commission as distinguished from a rule of law for the guidance of it in reaching its conclusion. *Interstate Commerce Commission v. Northern Pacific Ry. Co.*, 216 U.S. 538, 544, 30 Sup. Ct. 417, 54 L.Ed. 608. That such was the opinion of this court was clearly intimated in *Phillips v. Grand Trunk Western R.R. Co.* (citation omitted).

Such a statute is distinguishable from a more generalized statute of limitations that states a specified limitations period, but does not include restrictive

language indicating that the limitations period is inflexible. Section 11705(c) represents the latter type of statute. Unlike former § 16, current § 11705(c) simply refers to filing requirements and is silent as to whether the Board may consider extending the limitations period. In similar contexts, courts have confirmed that such statutes should be considered non-jurisdictional and subject to equitable tolling:

. . . absent ‘exceptionally emphatic’ text to the contrary, [*Mondy v. Secretary of the Army*, 845 F.2d 1051, 1055 (D.C. Cir. 1988)], structural separation between the jurisdictional grant and the filing requirements within a statutory regime indicates that Congress never intended a court’s jurisdiction to turn on timely filing. *Id.*; see also, *Zipes*, 455 U.S. at 394, 102 S.Ct. at 1133; *Hardin v. City Title & Escrow Co.*, 797 F.2d 1037, 1040 (D.C. Cir. 1986).

United States v. BCCI Holdings, 916 F.Supp. 1276, 1283 (D.C. 1996). Section §11705(c) does not contain any “exceptionally emphatic” language like the words “and not after” that would indicate a clear intention to remove the discretion to apply equitable tolling. Accordingly, it is evident from the face of §11705(c) and separate statutory provisions vesting the Board with jurisdiction over rate disputes that § 11705(c) is not jurisdictional.

2. Equitable Tolling Applies

BNSF asserts that even if the Board concludes that § 11705(c) is non-jurisdictional, equitable tolling is not appropriate absent a showing of “affirmative conduct of the court or agency which actively misleads the litigant.” BNSF Reply at I-42. BNSF’s attempt to limit the equitable circumstances under which tolling has been applied is not supported by the case law, or the facts of this proceeding.

As AEP Texas explained on Opening, it is not necessary to show that there was an active effort to mislead the litigant by the court or agency to justify tolling . Rather, tolling is appropriate where, as here, the litigant has been led by a tribunal's actions reasonably to believe that it has done everything necessary to perfect its claim. AEP Texas Op. at I-37, citing *Baldwin County Welcome Center v. Brown*, 466 U.S. 147, 151 (1984); *Carlile v. South Routt School District RE 3-J*, 652 F.2d 981, 986 (10th Cir. 1981); see also, *N.E. Alliance for Transp. Reform, Inc. et al. v. U.S. Dep't. of Transp. et al.*, 104 F.Supp.2d 599, 605-606 (D.C. N.C. 2000). As noted in *Carlile*, tolling is appropriate when a party has been “lulled into inaction by [the] past employer, state or federal agencies, or the courts.” 652 F.2d at 986.

In this case, AEP Texas reasonably relied on the Board's actions in assuming that its challenge to the non-Rawhide rates was already before the Board, as the Board had indicated in its earlier decision in *West Texas Utilities*. In both *West Texas Utilities* and *West Texas II*, the Board used language indicating that rates for the non-Rawhide origins would be addressed within the underlying action. But for the Board first requesting AEP Texas to include the additional origins and subsequently issuing instructions on filing supplemental evidence, AEP Texas would have known that a separate complaint needed to be filed to protect its claim. Its actions were influenced by the Board's clear direction in *West Texas II* that a challenge to the non-Rawhide rates was linked to the original complaint in *West Texas Utilities*, and could be effectuated through

the reopened proceeding in the same docket. Further evidence of this inherent link of the two matters is provided by the fact that when the new Complaint was filed in 2003, per the guidance of the Office of Proceedings AEP Texas filed it under a sub-docket to the original case.

Additional support for equitable tolling in this matter also can be found in BNSF's own conduct. BNSF, like AEP Texas, operated under the assumption that the non-Rawhide rates would be resolved in the original docket. As AEP Texas has noted, BNSF agreed to defer application of these rates pending negotiations on a commercial settlement that could have resolved the dispute over the non-Rawhide rates. There are strong policy considerations that warrant consideration of this fact when considering whether equitable tolling should apply. As the First Circuit has noted, "[t]he equities involved in the tolling of the period of limitations are entwined with the policy considerations of the Interstate Commerce Act." *Bangor and Aroostook RR v. I.C.C.*, 578 F.2d 444, 447 (1st Cir. 1978). These policy considerations, including the fact that parties in rail disputes are "interdependent institutions for whom to incur the antagonism of shippers and sister carriers by bringing suit before all the facts are known is a risk-laden venture," lend themselves to appropriate applications of equitable tolling. *Id.*

The policy considerations of the Board are no different than its predecessor. Captive coal shippers are interdependent with the railroads with whom they must deal – the Board, like the ICC before it, recognizes the importance of these parties attempting to

work through their disputes commercially before resorting to litigation.²⁴ AEP Texas reasonably relied on the Board's ruling that the non-Rawhide rates could be challenged in the existing docket during the period in which it adhered to the Board's clearly stated desires for parties to attempt to work out their disputes. It should not be penalized now for following that course.

3. In the Alternative, An Exemption Is Warranted

On Opening AEP Texas suggested that alternatively, the Board could exercise its authority pursuant to 49 U.S.C. § 10502 and exempt this matter from the application of § 11705(c) to the extent necessary to provide complete relief to AEP Texas. AEP Texas Op. at I-36. BNSF alleges in reply that the Board cannot use this exemption authority because it is available "only in situations where the Board is pursuing deregulation." BNSF Reply at I-44, *citing*, *Brae Corp. v. U.S.*, 740 F.2d 1023, 1055 (D.C. Cir. 1984).

As noted in *Bangor and Aroostook*, "considerable deference is owed to the agency's perception of the equities" in considering whether tolling is appropriate. 578

²⁴ See, Chairman Roger Nober, Speech to the Transportation Table, National Press Club (Feb. 14, 2003) (transcript available at <http://www.stb.gov/NewItems.htm>); Ex Parte No. 638, *Procedures to Expedite Resolution of Rail Rate Challenges to be Considered Under the Stand-Alone Cost Methodology*, STB served April 3, 2003, Comments of Chairman Morgan at 12; Ex Parte No. 586, *Arbitration – Various Matters Relating to Its Use as An Effective Means of Resolving Disputes that are Subject to the Board's Jurisdiction*, STB served Sept. 20, 2001, at 1; and Ex Parte No. 638, *Procedures to Expedite Resolution of Rail Rate Challenges to be Considered Under the Stand-Alone Cost Methodology*, STB served Sept. 4, 2002, at 4.

F.2d at 447. Likewise, § 10502 grants the Board considerable discretion to determine whether, and to what extent, to exempt a particular transaction from one or more provisions of the Act. While AEP Texas does not dispute that the Board's discretion in this regard is not unfettered, this discretion is not as limited as BNSF suggests. Rather, where the requested exemption is consistent with precedent *and* policy considerations under the Act, the Board may look to its exemption authority as another basis to warrant the equitable tolling of the statute of limitations.

F. CONCLUSION AND PRAYER FOR RELIEF

Based upon the evidence submitted by AEP Texas in this proceeding, the Board should find that BNSF possesses market dominance over coal transportation from the PRB to Oklahoma, and that the common carrier rates at issue exceed a reasonable level under the *Coal Rate Guidelines*, and therefore are unlawful under 49 U.S.C. § 10701 (d).

In accordance with 49 U.S.C. § 10704 (a), the Board should prescribe the maximum rates that BNSF lawfully may charge to transport coal to Oklahoma, at the higher of the applicable SAC rates or 180% of BNSF's variable cost of service. *See* 49 U.S.C. § 10707 (d)(1)(A). Those maximum rates are set forth in Exhibit III-H-4 for all relevant time periods. At wage and price levels for the most recent quarter in which jurisdictional Oklahoma traffic moved, the maximum rates are as follows:

TABLE I-1 Restated Maximum Rate Calculations for Oklaunion Coal Traffic		
Origin	Quarter	Rate per Ton
Buckskin	4Q03	\$13.01
Eagle Butte	1Q04	\$12.89
Jacobs Ranch	4Q02	\$13.10
Black Thunder	1Q04	\$13.03
Caballo Rojo	4Q01	\$12.60
North Antelope	3Q03	\$12.62
Caballo	2Q03	\$13.10
Cordero	2Q03	\$12.37
North Rochelle	4Q03	\$12.10
Antelope	1Q04	\$12.71
Rawhide ²⁵	2Q03	\$13.82

Because AEP Texas has paid charges in excess of the lawful maximum, pursuant to 49 U.S.C. § 11704 BNSF should be ordered to pay reparations to AEP Texas based on the difference between all charges paid by AEP Texas from June 16, 2000 and

²⁵ Exhibit II-A-151, indexed to 2Q04, the time period as of which the prior rate prescription was vacated.

the charges that AEP Texas would have paid had the maximum levels been in effect, plus interest calculated in accordance with 49 C.F.R. Part 1141.

Respectfully submitted,

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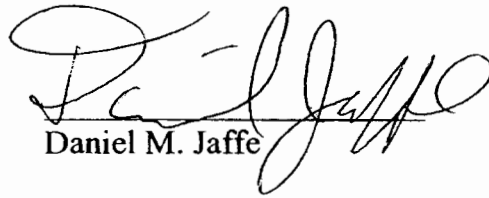


Attorneys and Practitioners

CERTIFICATE OF SERVICE

I hereby certify that on this 27th day of July, 2004, I served five copies of the Rebuttal Evidence of Complainant AEP Texas North Company by hand upon counsel for Defendant, as follows:

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II-A Quantitative Market Dominance

II. A. QUANTITATIVE MARKET DOMINANCE

AEP Texas' Reply Evidence developed BNSF's variable costs of handling AEP Texas' coal traffic from mines in the PRB to the Oklahoma Union Station using the traffic and operating ("T&O") characteristics stipulated by the parties, the cost components and indices¹ pursuant to the *Ex Parte No. 638* Technical Conference, and methodologies consistent with the procedures and findings of the Board and its predecessor in numerous prior coal and other maximum rail rate proceedings.² Variable costs as restated in AEP Texas' Reply were based on BNSF's 2000, 2001, 2002, and 2003 URCS costs, with adjustments derived from data provided by AEP Texas, data reported by BNSF to the Board, information in the public record, information produced by BNSF in discovery, and data revealed for the first time in BNSF's Opening evidence and responses to AEP Texas' workpaper requests.

AEP Texas' cost restatements on Rebuttal continue to use the stipulated T&O characteristics, cost components, indices, and URCS. Each year's URCS costs were indexed to each quarter from the second quarter of 2000 (that is, "2Q00") through the first quarter of 2004 (that is, "1Q04") wage and price levels. In addition to the

¹ In addition to 16 T&O characteristics (*see* AEP Texas Reply at 14), the parties agreed on all indices and 2 cost components: 1) Car Handling - Other and 2) Loss and Damage.

² Case name abbreviations included in this Rebuttal are the same as those used in AEP Texas' Opening and Reply Evidence.

various data sources listed above, AEP Texas' Rebuttal restatement also reflects information provided by BNSF in connection with its May 24, 2004 Reply filing.

BNSF's Reply evidence on variable costs was sponsored by its witnesses (1) Mr. Benton V. Fisher and Ms. Deborah Newland of FTI Consulting ("FTI") on the overall variable costs of the AEP Texas service; (2) Mr. Anthony W. Deichert, BNSF's General Superintendent Coal Operations on Oklahoma train operations; (3) Ms. Cami A. Elliott, a BNSF General Director, on the use of BNSF's Fixed Asset Data Base in the determination of roadway capital costs (included as BNSF Reply Exhibit II-A-4); and (4) FTI's Mr. John C. Klick on the variability of road property investment capital costs (also covered on BNSF Reply Exhibit II-A-4).³

In this Rebuttal evidence, AEP Texas responds to BNSF's Reply evidence on variable costs and identifies the methodological and empirical errors that have led BNSF to continue to overstate the actual costs of providing unit train coal service to AEP Texas. AEP Texas shows that the best evidence of record supports Board jurisdiction to adjudicate the reasonableness of BNSF's common carrier rate to Oklahoma. Specifically,

³ AEP Texas' Rebuttal calculates variable costs for 2Q00 through 1Q04. In its Reply, BNSF calculated variable costs only for 3Q01 through 2Q03. On Opening, BNSF excluded traffic from any mine that did not originate at least 10% of the tonnage in that quarter, and BNSF did not cost any traffic from Rawhide even when its traffic met BNSF's arbitrary 10% cutoff. While stated relative to BNSF's 1Q03 costs, the errors and overstatements outlined by AEP Texas in this Rebuttal apply generally to BNSF's methodology regardless of the time period to which the methodology was applied.

Table II-A-30⁴ shows at 2Q03 wage and price levels, the following Rebuttal variable costs per ton and revenue-to-variable cost ratios for the PRB origin rate in railroad owned cars, established in the Pricing Letters⁵ reflect an R/VC ratio well in excess of 180%:

Table II-A-30		
<u>Average Variable Cost and R/VC Ratio</u>		
<u>PRB Mines to Oklaunion Station - 2Q03</u>		
1.	Rate	\$18.04 per ton ¹
2.	Variable Cost ²	\$7.28 per ton
3.	R/VA Ratio	248%
¹ Rate became effective May 12, 2003.		
² See Tables II-A-31 through II-A-34, <i>infra</i> . Average calculations are included in AEP Texas Reb. electronic workpaper file "VC Summary Rebuttal.123."		

1. **Variable Costs**

a. **Summary and Findings**

In its Reply evidence,⁶ AEP Texas identified eleven (11) reasons why the Oklaunion movement variable cost calculations contained in BNSF's Opening presentation were overstated. BNSF's Reply corrected some of these mistakes. Below,

⁴ Tables II-A-1 through II-A-18 were included with AEP Texas' Opening. Tables II-A-19 through II-A-29 were included with AEP Texas' Reply.

⁵ See AEP Texas Op. at II-A-2 to 4.

⁶ AEP Texas Reply at II-A-11 to 13.

AEP Texas first lists the revisions that BNSF made to its development of variable costs on Reply; second, AEP Texas lists the Rebuttal revisions that AEP Texas has made to its Reply variable costs; third, AEP Texas summarizes the specific reasons why other elements of BNSF's revised Reply calculations must be rejected; and finally, AEP Texas compares its Rebuttal variable cost calculations with BNSF's Reply calculations.

**i. BNSF's Revisions to Its
Opening Variable Cost Calculations**

On Reply, BNSF made the following revisions to its initial development of variable costs:⁷

1. BNSF reflected the parties' stipulated traffic and operating characteristics. *See* BNSF Reply at II-3;
2. BNSF modified its Opening system-average crew wages data. *See* BNSF Reply at II-52;
3. BNSF added payments to a "productivity fund" which are reported in BNSF records as CA Code 32 - Reduced Crew Allowance. *See* BNSF Reply at II-52 to 53;
4. BNSF adopted some of AEP Texas' crew wage record reductions and accepted much of "... AEP Texas' movement-specific crew wage costs" *See* BNSF Reply at II-55 to 56; and
5. BNSF modified its Opening system-average helper service costs. *See* BNSF Reply at II-57 to 60.

See BNSF Reply at II-3, II-51 to 57.

⁷ For a more complete listing of BNSF Reply changes, see BNSF Reply electronic workpaper file "BNSF.RP.WP.II.A-0003."

**ii. AEP Texas' Rebuttal Revisions to
Its Reply Variable Cost Calculations**

In response to points raised, or further information provided by BNSF in its Reply, AEP Texas' Rebuttal restatement reflects the following revisions to the development of variable costs in AEP Texas' Reply:

1. The Road Property Capital Costs were adjusted to correct the ATSF purchase accounting amounts and to reflect BNSF's newly provided data;
2. Car maintenance costs were modified to reflect the Ex Parte No. 270 adjustments and all cars used;
3. AEP Texas modified the Maintenance of Way Cost calculation to remove a trackage rights segment; and
4. AEP Texas made minor adjustments to its crew wage costs.

**iii. BNSF's Reply Variable Costs Are
Overstated and Should be Rejected**

The principal flaws remaining in BNSF's determination of variable costs are as follows:

1. BNSF's road property investment return and depreciation costs (hereinafter "Road Property Capital Costs") are overstated because they are based on system- average costs that make no adjustment for the service-specific, line segment-specific gross investment and depreciation data by valuation section provided by BNSF in discovery;
2. BNSF's Car Maintenance Costs are overstated because they do not reflect the actual days that cars are available for service or in use, nor do they reflect the heavy use of private cars under full service leases;
3. BNSF's Locomotive Maintenance Costs are overstated because they do not reflect the actual maintenance costs that may be derived from BNSF's leases and other related agreements;

4. BNSF's Locomotive Capital Costs are overstated because they are based on average lease payment rates and overstated spare margins;
5. BNSF's Roadway Maintenance Costs are overstated because they are based on URCS system-average maintenance of way costs, not those calculated using line-specific maintenance of way data. Likewise, BNSF's joint facility costs are overstated because they are based on system average joint facility costs, not those calculated using line-specific data;
6. BNSF's Crew Wage Costs are overstated due to a) overcharging for loading crew wages, b) double counting of the "Productivity Fund payments, c) failure to reduce wages to account for the work that AEP Texas train crews perform for non-AEP Texas traffic, d) payroll system errors, e) overcharging for road switch crews, and f) a dramatic overstatement of the markup ratio applied to the wage data developed in a special study;
7. BNSF's fuel costs are overstated because they are based on a flawed and inadequately documented event recorder fuel consumption study;
8. BNSF's Helper Service Costs are overstated because they are based on incorrect frequencies of helper service;
9. BNSF's Switching Costs are inflated because its Switch Engine Minute Unit costs were developed using too few years of normalization and assume that loop track operations are switching;
10. The URCS formula that BNSF used was not developed in accordance with the Board's rules and procedures; and
11. BNSF overstated variable costs because it eliminated the URCS Linking Factor.

**iv. Comparison of AEP Texas' Rebuttal
With BNSF's Reply Variable Costs**

Exhibit II-A-87⁸ compares AEP Texas' Rebuttal calculation of variable costs with those included in BNSF's Reply. Exhibit II-A-88 lists the differences between the two and breaks down those differences by causal factor.⁹ The AEP Texas variable costs included in Exhibits II-A-87 to 88 source to AEP Texas' Rebuttal Exhibits II-A-96 to 150. Tables II-A-31 to 34, below, summarize the comparison of the two parties' variable costs for shipments in railroad owned cars:

⁸ Exhibits II-A-1 to 81 were included with AEP Texas' Opening Evidence. Exhibits II-A82 to 86 were included with AEP Texas' Reply Evidence.

⁹ See AEP Texas electronic workpaper file in variable cost subdirectory II-A\Var Costs\diffrences "Difs VC Rebut [yr+Qtr and mine].123," which documents the calculations of differences by causal factor.

Table II-A-31
Summary of BNSF's Rate, Variable cost and Ratio of
Revenue to Variable Cost - Campbell Branch Mines - 2Q00 through 1Q04

Origin/ Time Period	BNSF Rate/Ton ¹	<u>AEP Texas' Rebuttal</u> Variable Cost/Ton ²	R/VC Ratio ³	<u>BNSF Reply</u> Variable Cost/Ton ⁴	R/VC Ratio ⁵	BNSF Cost Less AEP Texas Cost/Ton ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Buckskin Mine						
1. 2Q00	\$13.68	\$6.53	209%	-	-	-
2. 3Q00 ⁷	15.78	6.55	241%	-	-	-
3. 4Q00	15.78	6.77	233%	-	-	-
4. 1Q01	15.78	6.96	227%	-	-	-
5. 2Q01	15.78	6.98	226%	-	-	-
6. 3Q01	15.78	7.03	224%	\$9.42	168%	\$2.39
7. 4Q01	15.78	6.92	228%	9.32	169%	2.40
8. 2Q03 ^{7,8}	18.04	7.43	243%	-	-	-
9. 4Q03	18.04	7.23	250%	-	-	-
B. Rawhide Mine						
10. 1Q02	\$15.78	\$6.64	238%	-	-	-
11. 2Q02	15.78	6.95	227%	-	-	-
12. 3Q02 ⁷	13.68	7.27	188%	-	-	-
13. 4Q02	13.68	7.24	189%	-	-	-
14. 1Q03	13.68	7.32	187%	-	-	-
15. 2Q03	13.68	7.34	186%	\$10.60	129%	\$3.26
C. Eagle Butte Mine						
16. 1Q03	\$17.25	\$7.31	236%	\$10.42	166%	\$3.11
17. 2Q03 ⁷						
117 cars	18.04	6.94	260%	9.87	178%	2.93
18. 2Q03 ⁷						
128 cars	18.04	6.88	262%	10.17	177%	3.29
19. 3Q03	18.04	7.08	255%	-	-	-
20. 4Q03	18.04	7.08	255%	-	-	-
21. 1Q04	18.83	7.16	263%	-	-	-

¹ Source: The Pricing Letters.

² AEP Texas Reb. Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

³ Column (2) ÷ Column (3).

⁴ See BNSF Reply Exhibit. II-A-1.

⁵ Column (2) ÷ Column (5).

⁶ Column (5) - Column (3).

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklaunion during this time period.

Table II-A-32
Summary of BNSF's Rate, Variable Cost and Ratio of
Revenue to Variable Cost - Orin Line Mines - 2Q00 through 1Q04

Origin/ Time Period	BNSF Rate/Ton ¹	AEP Texas' Rebuttal Variable Cost/Ton ²	R/VC Ratio ³	BNSF Reply Variable Cost/Ton ⁴	R/VC Ratio ⁵	BNSF Cost Less AEP Texas Cost/Ton ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Jacobs Ranch Mine						
1. 2Q00	\$13.68	\$5.97	229%	-	-	-
2. 3Q00	15.78	6.33	249%	-	-	-
3. 1Q01	15.78	6.80	232%	-	-	-
4. 2Q01	15.78	6.80	232%	-	-	-
5. 3Q01	15.78	6.66	237%	\$9.12	173%	\$2.46
6. 4Q01	15.78	6.73	234%	9.03	175%	2.30
7. 1Q02	15.78	6.39	247%	8.99	176%	2.60
8. 3Q02 ⁸	17.25	6.78	254%	9.76	169%	2.98
9. 4Q02	17.25	7.28	237%	10.31	167%	3.03
10. 2Q03 ^{7, 8}	18.04	7.53	240%	-	-	-
B. Black Thunder Mine						
11. 1Q01	\$15.78	\$6.47	244%	-	-	-
12. 3Q01	15.78	7.01	225%	\$9.49	166%	\$2.48
13. 4Q01	15.78	6.54	241%	8.88	178%	2.34
14. 2Q02	15.78	6.77	233%	9.77	161%	3.00
15. 3Q02 ⁸	17.25	6.82	253%	9.85	166%	3.03
16. 4Q02	17.25	7.29	237%	10.53	164%	3.24
17. 2Q03 ^{7, 8}	18.04	7.26	248%	-	-	-
18. 4Q03	18.04	7.12	253%	-	-	-
19. 1Q04	18.83	7.24	260%	-	-	-
C. Caballo Rojo Mine						
20. 2Q00	\$13.68	\$6.44	212%	-	-	-
21. 3Q00 ⁸	15.78	6.43	245%	-	-	-
22. 4Q00	15.78	6.65	237%	-	-	-
23. 1Q01	15.78	6.85	230%	-	-	-
24. 2Q01	15.78	6.69	236%	-	-	-
25. 3Q01	15.78	6.99	226%	\$9.32	169%	\$2.33
26. 4Q01	15.78	7.00	225%	9.46	167%	2.46
27. 2Q03 ^{7, 8}	18.04	7.75	233%	11.57	156%	3.82

¹ Source: The Pricing Letters.

² AEP Texas Reb. Exhibits II-A-87 and II-A-150 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

³ Column (2) ÷ Column (3).

⁴ See BNSF Reply Exhibit. II-A-1.

⁵ Column (2) ÷ Column (5).

⁶ Column (5) - Column (3).

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklahoma during this time period.

Table II-A-33
Summary of BNSF's Rate, Variable Cost and Ratio of
Revenue to Variable Cost - Orin Line Mines - 2Q00 through 1Q04

Origin/ Time Period	BNSF Rate/Ton ¹	AEP Texas' Rebuttal Variable Cost/Ton ²	R/VC Ratio ³	BNSF Reply Variable Cost/Ton ⁴	R/VC Ratio ⁵	BNSF Cost Less AEP Texas Cost/Ton ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. North Antelope Mine						
1. 2Q03 ^{7,8}	\$18.04	\$7.05	256%	-	-	-
2. 3Q03	18.04	7.01	257%			
B. Caballo Mine						
3. 2Q02	\$15.78	\$7.27	217%	\$10.56	149%	\$3.29
4. 3Q02	17.25	6.67	259%	9.55	171%	2.88
5. 4Q02	17.25	7.58	228%	10.79	160%	3.21
6. 2Q03 ⁷	18.04	7.28	248%	10.52	171%	3.24
C. Cordero Mine						
7. 2Q03 ⁷	\$18.04	\$6.87	263%	\$9.76	185%	\$2.89
D. North Rochelle Mine						
8. 3Q02	\$17.25	\$7.33	235%	\$10.77	152%	\$3.44
9. 2Q03 ^{7,8}	18.04	7.09	254%	-	-	-
10. 4Q03	18.04	6.72	268%			
E. Antelope Mine						
11. 2Q03 ^{7,8}	\$18.04	\$6.89	262%	-	-	-
12. 4Q03	18.04	5.97	302%	-	-	-
13. 1Q04	18.83	7.06	267%	-	-	-

¹ Source: The Pricing Letters.

² AEP Texas Reb. Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

³ Column (2) ÷ Column (3).

⁴ See BNSF Reply Exhibit II-A-1.

⁵ Column (2) ÷ Column (5).

⁶ Column (5) - Column (3).

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklaunion during this time period.

Table II-A-34
Summary of BNSF's Rate, Variable Cost and Ratio of Revenue to
Variable Cost – Other PRB Mines from Which no Traffic Moved During 2Q03

Origin/ Time Period	BNSF Rate/Ton ¹	AEP Texas' Rebuttal Variable Cost/Ton ²	R/VC Ratio ³	BNSF Reply Variable Cost/Ton ⁴	R/VC Ratio ⁵	BNSF Cost Less AEP Texas Cost/Ton ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Belle Ayr Mine						
1. 2Q03 ^{7,8}	\$18.04	\$7.52	240%	-	-	-
B. Dry Fork Mine						
2. 2Q03 ^{7,8}	\$18.04	\$7.41	243%	-	-	-
C. Fort Union Mine						
3. 2Q03 ^{7,8}	\$18.04	\$7.41	243%	-	-	-
D. Clovis Point Mine						
4. 2Q03 ^{7,8}	\$18.04	\$7.41	243%	-	-	-
E. Coal Creek Mine						
5. 2Q03 ^{7,8}	\$18.04	\$7.53	240%	-	-	-
F. Rochelle Mine						
6. 2Q03 ^{7,8}	\$18.04	\$7.50	241%	-	-	-

¹ Source: The Pricing Letters.

² AEP Texas Reb. Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

³ Column (2) ÷ Column (3).

⁴ See BNSF Reply Exhibit II-A-1.

⁵ Column (2) ÷ Column (5).

⁶ Column (5) - Column (3).

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklaunion during this time period.

b. Traffic and Operating Characteristics

At pages II-A-14 to 26 of its Reply Narrative, AEP Texas explained that the parties reached stipulated agreements and now concur on 16 of the 20 T&O characteristics and two cost components (*i.e.*, Carload Handling - Other and Loss and Damage). AEP Texas Rebuttal Exhibit II-A-89 compares both parties' T&O

characteristics. At pages II-A-14 to 26 of its Reply, AEP Texas covers the four remaining T&O characteristics upon which the parties continue to disagree. These are: (1) Locomotive Cycle Hours and (2) - (4) the three Yard and Road Switching Minutes categories. Nothing in BNSF's Reply has altered AEP Texas' position regarding the remaining four T&O Characteristics, so the parties remain in disagreement on these issues. AEP Texas' Reply at pages II-A-14 to 26 explain why the Board should accept AEP Texas' evidence on these issues as the best evidence of record.

Details supporting the variable cost findings are discussed in Part II-A-1-c., *infra*.

c. Variable Cost of Service

BNSF's May 24, 2004 Reply raises several objections to AEP Texas' March 1, 2004 Opening variable cost calculations. In many respects, AEP Texas' Reply variable cost calculations anticipated BNSF's Reply objections. Because of this, AEP Texas' Rebuttal will not address the BNSF Reply objections that already have been addressed in AEP Texas' Reply. AEP Texas' Rebuttal Table II-A-35, *infra*, compiles the sources where the Board may find the exposition of each party's positions and responds to a few new issues raised by BNSF on Reply that AEP Texas has not previously addressed. AEP Texas' Rebuttal also addresses issues raised by the Board's recent decision in *PSCo/Xcel*. AEP Texas will focus principally upon those cost issues that have been revised in response to BNSF's Reply or require further treatment because of the *PSCo/Xcel* decision. These cost issues are Road Property Capital Costs, Maintenance of

Way, Locomotive Maintenance, Locomotive Capital Costs (including spare margin), Fuel Costs, and Crew Wage Costs.

i. Preliminary Matters

In an effort to justify its reliance on system-average costs, BNSF has:

1. Erred in evaluating movement-specific versus system-average costs; and
2. Refused to provide data needed by AEP Texas to calculate movement-specific costs.

(a) Movement-Specific vs. System-Average Costs

BNSF's variable cost presentation can only be understood in the context of its overall variable cost strategy, which is to push variable costs up to system-average wherever possible. Because unit train coal transportation¹⁰ is dramatically more cost efficient than any other form of rail transportation, system-average variable costs significantly overstate the variable cost of unit train coal movements.¹¹ On the other hand, because of the effect on the jurisdictional threshold (i.e., 180% of variable costs), BNSF has every incentive to drive its variable cost calculations as high as possible. BNSF has attempted to do so by relying upon system-average costs in place of the true, movement-specific costs of unit train coal transportation.

¹⁰ Defined as "Movement of a particular commodity in trainload lots on an arranged schedule." *Transportation Logistics Dictionary* 237 (1982).

¹¹ As stated in the Board's February 9, 2001 decision in *TMPA*, "TMPA correctly notes that adjustments to a defendant carrier's system-average costs are appropriate to reflect the economies and efficiencies that are associated with high-volume, repetitive movements such as the unit-train service at issue here" *Id.* at 3.

BNSF's principal tactic is to denigrate its own data, then argue that a movement-specific cost estimate based on that data is not demonstrably superior¹² to a system-average cost estimate. In BNSF parlance, to be "demonstrably superior," data must be perfect and complete in every respect in order to be usable. Conveniently, BNSF repeatedly cites shortcomings in the data that it provides, and claims that those shortcomings render answers derived from its data inexact and, therefore, inferior to system average costs. In effect, BNSF invokes its own, allegedly inferior recordkeeping as a reason why the Board should default to system-average costs in lieu of AEP Texas' movement-specific cost calculations.

An example which illustrates BNSF's disingenuous approach concerns ballast investment. At page II.A-31 of its Reply, BNSF states:

¹² The Board will accept system average costs as a default if movement-specific costs are not shown to be "demonstrably superior" to system average. *See* AEP Texas Reply, at II-A-7 to 9.

Investments in ballast are a prime example of this third category of investments [that is, investments that BNSF assigns on a broader geographical basis because it is unable to identify the specific line segments on which they were made]. Typically, BNSF does not track its investment in ballast at a level that would allow it to pinpoint the amount of ballast installed on any one specific line segment.¹³ If BNSF knows the particular region in which the ballast was used, it will assign the investment evenly to all lines in that region even though the ballast may have been used on only a handful of line segments in that region.¹⁴ Spreading the ballast investment across all line segments in the region obviously results in FADB data that understates the investment in ballast on the lines in which the ballast was actually used.

Obviously, costs based on data showing the average ballast investment for the region in which a line segment is located are superior to costs based on a systemwide allocation. If the standard one employs is exactitude or “perfection,” however, a regional average ballast investment is not segment-specific and cannot assign every dollar of ballast investment to a particular line segment. Under this scenario, BNSF typically claims that a resort to system-average data is called for.

BNSF’s claim that movement-specific costs based upon its own accounting data are not “demonstrably superior” to system-average costs because BNSF’s data are so poor and unreliable¹⁵ is counter-intuitive and flies in the face of the “best practices” that BNSF otherwise prides itself on following.¹⁶ In the case of road property accounting

¹³ *Id.* at 25.

¹⁴ *Id.* at 26.

¹⁵ *See* BNSF Reply at II-29.

¹⁶ *See* AEP Texas Reply Workpapers Vol. 1, p. 004.

data, for example, BNSF's witness Cami Elliott implies that BNSF's accounting system is designed solely to meet the minimum requirements of regulation.¹⁷ To credit this claim would be to believe that BNSF has spent { } on road property investment ({ } of BNSF's total investment), but neither knows nor is particularly concerned about where the money has been spent.

This case features a concerted effort by BNSF to revert the Board to reliance on system averages for the calculation of variable costs in areas that for years have been the subject of movement or line-specific adjustments. As recently as 1996, in the predecessor *West Texas Utilities* case, BNSF itself presented movement-specific costs for return on and depreciation of road property investment, maintenance-of-way, joint facilities, locomotive maintenance, locomotive capital costs, freight car capital costs, EOTD capital costs, crew wages, switching, fuel, and helper service costs. *Id.*, 1 S.T.B. at 721-29. In spite of that fact, BNSF argues in this case that some of the most important cost categories (that is, return on and depreciation of road property investment, maintenance-of-way, joint facilities, and locomotive maintenance) should be governed by system averages due to the lack of adequate line or movement-specific data. Either BNSF has not been forthcoming in its responses to AEP Texas' discovery requests, or it is asking the Board to believe that it has become *less* cost-conscious and adopted *inferior* record-keeping practices over the past eight years.

¹⁷ See Elliott Verified Statement, pp. 29-31, included as part of BNSF Reply Exhibit II-A-4. Cami Elliott at p. 26 states that system and region and division charges are allocated based on line segment mileages.

(b) BNSF's Refusal to Provide Data

Another tactic employed by BNSF in an effort to force AEP Texas and the Board to use system average costs is its refusal to provide data that AEP Texas needs to calculate accurate, movement-specific costs. A typical example is illustrated by BNSF's handling of AEP Texas' discovery requests. In its Reply at page II-4, BNSF objects to AEP Texas' development of certain T&O characteristics, stating that "...many [T&O characteristics] were estimated or extrapolated based on shipments from other mines or that occurred in other quarters." BNSF does not mention that its refusal to provide the data requested was the reason that AEP Texas had to use approximations for certain time periods.

In response to AEP Texas' requests during discovery for data upon which to base its T&O characteristics, BNSF did not provide any data for movements from Rawhide Mine, even though AEP Texas had requested it and BNSF knew the movement was in issue as a result of AEP Texas' petition (since granted) to vacate the prior rate prescription. In its Reply, BNSF claims that "...discovery in this case did not cover Rawhide movements so there is an inadequate basis in the record to make calculations for Rawhide."¹⁸ In reality, discovery in this proceeding did include movements from the Rawhide Mine;¹⁹ BNSF simply refused to provide any data.

¹⁸ See BNSF Reply at p. II-8, n.10.

¹⁹ At page 4 of AEP Texas' First Discovery Requests, dated and served August 26, 2007, AEP Texas defined the relevant origin mines as meaning "...the BNSF-served mines and coal load-out facilities and associated rail trackage located in the Powder River Basin in Campbell and Converse Counties, Wyoming" which included, Rawhide Mine.

An even more glaring example of BNSF's obstructionist approach was its refusal to provide the road property investment information that AEP Texas requested in order to determine movement-specific Road Property Capital Costs. AEP Texas' Requests for Production Nos. 9 through 12 requested all the information that AEP Texas would need to determine BNSF's 2000-2003 line segment-specific Road Property Capital Costs.²⁰ BNSF responded by producing PISNU and unassigned Investment for 2001 and 2002, but no FADB segment data, total FADB by account nor FADB Accumulated Depreciation. For the year 2000, BNSF provided the FADB segment data but did not provide PISNU data and Unassigned investment accounts. However, virtually all of the data withheld from AEP Texas had been produced for use by the complainant and the Board in *TMPA*, a proceeding involving coal movements over the very same route traversed by the BNSF trains serving Oklaunion.

BNSF's Reply also included as Exhibit II-A-4 a verified statement of Cami Elliott dated April 30, 2002, which was filed in conjunction with a successful Motion to Compel BNSF to provide this same road property investment data for the year 2000 in the *Otter Tail* proceeding. (STB Docket No. 42071). Ms. Elliott's statement included a table reporting Gross Investment, Accumulated Depreciation and Net Investment in the FADB, which confirmed that BNSF possessed the road property data requested by AEP Texas for the year 2000. The fact that BNSF had the FADB Gross Investment and Accumulated Depreciation by account for the year 2000 means that it also has that same information for

²⁰ See AEP Texas' Reb. Workpapers Vol. 1, pp. 00033-36.

the years 2001 and 2002. In view of the fact that in another proceeding, BNSF had been ordered to provide this information, BNSF had no valid grounds for refusing continuing to produce any of this information to AEP Texas in the first place. BNSF's sole *and invalid* reason for failing to produce this information is to attempt to force the Board and AEP Texas to rely upon system-average numbers, which in turn inflate variable costs for a coal unit train movement.

**ii. Restatement of the
Variable Cost of Service**

In this Section, AEP Texas addresses each party's calculation of variable costs. After a careful review of BNSF's Reply submission on this issue,²¹ AEP Texas has

²¹ BNSF's Reply filing made the following adjustments to its opening presentation on variable costs:

- Adopted the *Ex Parte No. 638* agreed T&O characteristics, indices, and the cost components Carload Handling - Other and Loss and Damage;
- Adopted service-specific costs in place of system-average crew wage costs;
- Adopted service-specific costs in place of system-average costs for Helper Service Costs;
- Costed movements with less than 10% of the tonnage shipped to Oklaunion during the quarter (BNSF excluded these movements in Opening); and
- Costed movements from Rawhide Mine (BNSF excluded these movements in Opening).

determined that only the following, incremental changes need be made to AEP Texas'

Reply calculations:

- The ATSF purchase accounting amounts have been changed from (000) to actual dollars for allocation to FADB actual dollars;
- The FADB accumulated depreciation estimate has been modified to reflect the relationship of the R-1 to BNSF Exhibit II-A-4, Table 1;
- The car maintenance calculation has been modified to reflect the *Ex Parte No. 270* adjustments;
- AEP Texas reverted back to the car type ratio used on Opening, reflecting all three car types used. AEP Texas' Reply calculations inadvertently included only the cars for which BNSF provided data;
- The car maintenance calculation has been modified to remove the exclusion of cars with full service leases;
- The calculation of MOW has been modified to remove a trackage rights segment; and,
- Crew wage costs have been modified to a minor extent.

The following describes each AEP Texas Rebuttal Exhibit:

- II-A-87 compares both parties' rates, variable costs and rate to cost ratios;
- II-A-88 particularizes the differences between AEP Texas' and BNSF's costs for each cost component broken down by factors causing the difference in costs;
- II-A-89 specifies the T&O Characteristics including those agreed to under *Ex Parte No. 638*;
- Exhibit II-A-90 presents AEP Texas' revised Maintenance of Way adjustment ratio;
- Exhibit II-A-91 explains AEP Texas' Road Property Capital Costing Procedure and why BNSF's criticisms of that procedure are wrong;

- Exhibit II-A-92 presents AEP Texas' revised adjustment ratios for road property investment return and depreciation;
- II-A-93 presents AEP Texas' revised Car Maintenance Costs;
- II-A-94 lists the Board's treatment of locomotive spare margin since 1976;
- II-A-95 compares the parties' crew wage mark-up methodologies;
- Exhibits II-A-96 to 150 detail AEP Texas' Rebuttal restatements of variable costs;²² and
- Exhibit II-A-151 summarizes AEP Texas' Rebuttal rates, variable costs, and revenue to variable cost ratios for each mine origin for each time period from 2Q00 through 1Q04.

Table II-A-35, below, lists the citations for both parties' positions regarding major cost components of the variable cost calculations. Because BNSF's Reply submission included so few adjustments and AEP Texas' Reply already fully documented the reasons why its variable costs are superior to those offered by BNSF, it is not necessary to repeat that evidence and argument.

²² AEP Texas' Rebuttal restatements of variable costs are grouped by origin and by time period.

Table II-A-35
**Compilation of AEP Texas' Opening and Reply and BNSF's
Reply Variable Cost Component Calculation Citations**

<u>Variable Cost Component</u>	<u>AEP Texas</u>		<u>BNSF Reply Narrative Pages or Ex. II-^{3/}</u>
	<u>Opening Narrative Pages or Ex. II-A-^{1/}</u>	<u>Reply Narrative Pages or Ex. II-A-^{2/}</u>	
(1)	(2)	(3)	(4)
1. Road Property Capital	35-37, Ex 14-18	30-37	27-42, Ex 4
2. Car Operating Expenses	44-46, Ex 22	37-40	65-67
3. Loco Capital	25, 27, 39-40	17-21, 40-61	11-13, 67-70
4. Switching (Excl fuel)	27, 28, 48 Ex 25	21-26, 61-62, Ex 85	16-19
5. MOW	31-34, Ex 4-13	62-63	20-27
6. Loco Maintenance	37-39, Ex 19	63-67, Ex 86	43-51
7. Crew Wages	26-27, 40-42, Ex 20	68-74	12, 51-57, 71
8. Car Capital	27, 46, Ex 23-24	37-40	13, 60-65
9. Fuel	38-39	74-91	42-43
10. Loop Track	48-49	21-26, 61-62	18
11. Fuel Overheads	38-39	74-91	42-43
12. Helpers	28, 46-47	94-97	14, 57-60
13. Joint Facilities	28, 34-35, Ex 3	62-63	14, 71-72
14. Other	43-44, 47, 49, Ex 21	92-94	16

1/ See also AEP Texas Op. Exhibits II-A-1 to 81.

2/ See also AEP Texas Reply Exhibits II-A-82 to 86

3/ See also BNSF Reply Exhibits II-A-1 to 4.

The parties' cost component estimates differ by the largest magnitude for the cost categories listed in Table II-A-36, *infra*. Table II-A-36 also lists the magnitude of the difference for each cost category and its share of the total variable cost difference between AEP Texas' restated Rebuttal variable costs and BNSF's Reply costs for the 1Q03 unit train movement of coal from Eagle Butte to Oklaunion Station.

Table II-A-36
Comparison of Variable Costs-AEP Texas' Reply and Rebuttal with
BNSF Reply Eagle Butte to Oklaunion Station - 1Q03
Cost Component Differences of Largest Magnitude (\$/Carload)¹

<u>Cost Component</u> (1)	<u>AEP Texas</u> <u>Reply²</u> (2)	<u>AEP Texas</u> <u>Rebuttal³</u> (3)	<u>BNSF</u> <u>Reply³</u> (4)	<u>AEP</u> <u>Texas</u> <u>v. BNSF³</u> (5)	<u>%</u> <u>of Total³</u> (6)
1. Road Property Capital	{ }	{ }	{ }	{ }	{ }
2. Car Operating Expenses	{ }	{ }	{ }	{ }	{ }
3. Loco Capital	{ }	{ }	{ }	{ }	{ }
4. Switching (Excl. fuel)	{ }	{ }	{ }	{ }	{ }
5. M of W	{ }	{ }	{ }	{ }	{ }
6. Loco Repair	{ }	{ }	{ }	{ }	{ }
7. Crew	{ }	{ }	{ }	{ }	{ }
8. Car Capital	{ }	{ }	{ }	{ }	{ }
9. Fuel	{ }	{ }	{ }	{ }	{ }
10. Loop Track	{ }	{ }	{ }	{ }	{ }
11. Fuel Overheads	{ }	{ }	{ }	{ }	{ }
12. Helpers	{ }	{ }	{ }	{ }	{ }
13. Joint Facilities	{ }	{ }	{ }	{ }	{ }
14. Other	{ }	{ }	{ }	{ }	{ }
15. Total	\$787.00	\$808.52	\$1,145.34	\$338.62	100.0%

Totals may not match due to rounding.

¹ AEP Texas' Reply and BNSF's Reply costs reflect the agreed T&O characteristics, cost categories, and indices.

² AEP Texas Reply electronic workpaper file "Difs VC Reply 03Q1 Eagle Butte.123."

³ Source: Exhibit II-A-88 Page 19 of 26 and Reb. electronic workpaper file "Difs VC Rebut 03Q1 Eagle Butte.123."

While the parties' prior positions as cited above need not be repeated in this Rebuttal, BNSF's Reply evidence and the Board's decision in *PSCo/Xcel* raise some new issues that are addressed by AEP Texas under the following cost component headings:

1. Return on Road Property and Road Depreciation Costs
2. Car Operating Expenses and Car Capital Costs
3. Locomotive Capital

4. Switching Costs (excluding Fuel)
5. Maintenance-of-way Costs (including Joint Facilities)
6. Locomotive Maintenance Costs
7. Crew wages Costs
8. Fuel Costs (including Overheads)
9. Other Costs (Including Helper Service Costs)

**(a) Return on Road Property
and Depreciation Costs**

BNSF's books and records (not just its published financial reports) are audited and approved only after passing rigorous auditing requirements designed to give the public more confidence in those records.²³ BNSF keeps only one set of books. The same data that produces the URCS costs also can produce the line segment-specific costs. It is the funneling of the data and the retention of the detail that permits the line segment-specific costing.

Any well-managed corporation looks at its capital expenditure program as a critical link in the development of the profits required to stay in business. Incredibly, and in spite of the importance of road property investment to BNSF's profitability, BNSF insists that AEP Texas and the Board cannot rely on the validity of BNSF's line-specific accounting records. On the contrary, AEP Texas, the shipping public, the Board, and the SEC have a right to rely on the accounting records of any STB- and SEC-regulated

²³ See AEP Texas Reply Workpapers, pp. 002-14.

railroad. If that were not true, there would be no purpose for auditing-accreditation, Board and SEC regulations in this regard.

(i) **BNSF's Drive Toward System-Average Road Property Capital Costs**

In this case, BNSF sought to advocate system-average Road Property Capital Costs by refusing to furnish AEP Texas with the line-specific information needed to determine movement-specific Road Property Capital Costs, and by claiming that the road property data it did produce are “unreliable” and “incomplete.”²⁴ The carrier’s agenda is transparent: a forced retrogression to system average costing of its most efficient and profitable service, toward the end of higher variable costs, lower revenue-to-variable cost ratios, and ever higher captive coal rates.

Subsequent to *San Antonio*,²⁵ and before *TMPA*, BNSF consistently presented Road Property Capital Costs on a movement-specific basis. Now, however, BNSF claims that it no longer maintains road property investment return and depreciation data on a line segment-specific basis. These assertions are inconsistent with past treatment of this data by both BNSF and the Board.

In the early and mid-1970’s, the Burlington Northern Railroad (“BN”), BNSF’s largest predecessor and sole developer of the rail network serving the Powder River Basin (“PRB”) at the time, was faced with the conundrum of making billions of dollars in road property investments with only the promise of future coal transportation

²⁴ See BNSF Reply Exhibit II-A-4, p. 3.

²⁵ *San Antonio*, 1 I.C.C. 2d at 584-86.

tonnage sufficient to financially support that investment. BN's solution was to raise the required capital in the financial markets and to charge a pro-rata share of the "coal-related"²⁶ Road Property Capital Costs to each new coal movement out of the PRB.

In the 1970's and 1980's, BN went to great lengths to segregate "coal-related" investments, including the development of revised Rail Form A's in which the "...capital portion [of "coal-related" investments] was removed from the investment base prior to making the Rail Form A applications." BN's Rail Form A's contained no "coal-related" investments.²⁷ Instead, BN determined "...the proper investment over the route to be traveled by the individual movement. . . ."²⁸ BN then allocated "coal-related" investments to individual traffic segments based upon the ratio of the issue traffic tonnage to the total traffic tonnage.²⁹

In the past, when BNSF's predecessor saw an opportunity to increase rates by detailed accounting of line-specific road property investments, it did so. However,

²⁶ BN defined "coal-related" incremental investments as those road property investments "...attributable solely to additional coal traffic." See Verified Statement of Joseph J. Plaistow, then BN Director-Costs and Financial Analysis, *Annual Volume Rates on Coal - Rawhide Junction, Wyoming, to Sergeant Bluff, Iowa*, ICC Docket No. 37021, October 23, 1978, ("*Iowa Public Service*"), page 13 attached as AEP Texas Rebuttal Workpaper Vol. 1, p.00063.

²⁷ *Id.* at 18, 20.

²⁸ *Id.* at 22.

²⁹ *Id.* at 24. To see the parallel between the procedure employed by BN in the 1970's and the procedure employed by AEP Texas today, compare the BN procedure just described to AEP Texas' description of its Road Capital Cost procedure in AEP Texas Opening Exhibit II-A-18.

now that BNSF apparently believes that it can increase rates through the application of higher system-average Road Property Capital Costs, BNSF asserts that its data is unreliable and that it no longer has an independent business justification to collect detailed, line-specific accounting records.³⁰ But, fairness to AEP Texas requires that only Road Property Capital Costs specific to the AEP Texas movement be included in variable costs, because that is the cost that BNSF must incur to provide rail service to AEP Texas.

BNSF's coal transportation costs per unit are among the lowest of any railroad in the nation, and are significantly less than BNSF's system-average costs per unit or BNSF's merchandise traffic average costs per unit.³¹ Therefore, for every cost component that BNSF is able to push up to system average in a coal rate proceeding, a market-dominant BNSF can increase the jurisdictional floor, the lowest point at which a rate may be prescribed. Under sound regulatory practice, however, since service to AEP Texas does not require BNSF to expend higher system-average Road Property Capital Costs, the captive AEP Texas should not be required to pay the higher system-average Road Property Capital Costs.

³⁰ At pp. 31 and 32 of BNSF Reply Exhibit II-A-4, BNSF's Witness Elliott states that this data is used for line sale transactions and state tax calculations.

³¹ The basis for this statement is Mr. Plaistow's experience as a Burlington Northern ("BN") employee. As BN's Director of Costs and Financial Analysis, Mr. Plaistow was instrumental in the development of BN's "Blacktrack," coal-specific, costing model, as well as the development of BN's general merchandise traffic costing model.

(ii) The Significance of Line Segment-Specific Road Property Capital Costs

At pages II-A-35 through 37 and Exhibits II-A-14 through 18 of its Opening evidence and pages II-A-30 through 37 of its Reply, AEP Texas explained why the Board should adopt its calculation of Road Property Capital Costs and reject BNSF's attempt to push these costs up to system-average levels. In Exhibit II-A-88, page 19 of 26, AEP Texas shows that the difference between system-average and AEP Texas service-specific costs for Road Property Capital Costs is { } per carload or { } per ton. At the jurisdictional threshold level, { } per ton equates to a rate differential of { } per ton (that is, { } times 1.8). On an annual basis, { } per ton for the 2,723,213 million tons of coal that AEP Texas consumed in 2003 equates to more than { } million (or more than { } million over a 10-year period) just for this one cost component.

(iii) AEP Texas' "Demonstrably Superior" Line Segment-Specific Road Property Capital Costs

The Board prefers "demonstrably superior" estimating procedures and results of calculations in those situations where the Board traditionally has accepted alternatives to system average costs.³² Both the Board and BNSF traditionally have used alternative Road Property Capital Costs, not system averages. This section shows that

³² See *Adoption of URCS*, 5 I.C.C. 2d 899 n.12 (1989); See also 49 U.S.C. Section 10707(d)(1)(B).

AEP Texas' line segment-specific costs are "demonstrably superior" to BNSF's system-average costs.

BNSF recites the reasonable procedures that BNSF has used to allocate road property investments. *See, e.g.*, BNSF Reply at II-30 to 31. But BNSF then concludes that the resulting investment records cannot be used to determine Adjusted Road Property Capital Costs. "Reasonable allocations" of investments made by the company doing the investing clearly are "demonstrably superior" to system averages. If BNSF were correct and system averages were superior, BNSF would not use those reasonable allocations for any purpose in its internal management systems, in its reports to the Board, or in its reports to state tax institutions.³³ BNSF's actions belie BNSF's claims.

To evaluate whether or not a specific cost estimate is "demonstrably superior" to a system average cost estimate, the Board considers the components of each cost estimate. Line segment-specific Road Property Capital Costs are made up of the return on and the depreciation of the road property investments used to provide service to a specific shipper. Those Road Property Capital Costs are shared across the gross ton-miles of all shippers benefitting from those road property investments.

The two primary independent variables in this cost estimate are (a) the values of the road property investments, and (b) the gross ton-miles of the traffic using those investments. Each of these independent variables is addressed below.

³³ *See* Elliott Verified Statement, BNSF Reply Exhibit II-A-4 at 31.

d. Independent Variable 1: Values of the Road Property Investments

BNSF's criticism of AEP Texas' line-specific road property investment estimate is not justified. While BNSF claims that AEP Texas' estimate is not perfect, BNSF has not made any attempt to evaluate whether AEP Texas' line-specific estimate is "demonstrably superior" to the system average estimate. Therefore, BNSF has not addressed the standard set by the Board.

In Opening Exhibits II-A-14 through 18, AEP Texas showed that the BNSF-provided line-specific information can be used to calculate Adjusted Road Property Capital Costs and that such efforts produce accurate estimates of the values of road property investments. While the allocation procedure on which BNSF relied may not produce "perfect" valuation estimates of each asset, it is "demonstrably superior" to the system average used by BNSF.

BNSF's system-average estimate of the Oklaunion route's valuation includes road property valuations throughout the BNSF system, which is debased by values and investments in numerous geographic regions of the country having nothing to do with BNSF's service to Oklaunion. BNSF's claim that its URCS system-average costs are the only appropriate source of roadway ownership costs is groundless, since it does not even attempt to offer evidence that its system average estimate is somehow "demonstrably superior" to AEP Texas' line segment-specific estimate based on BNSF's reasonable allocations.

e. **Independent Variable 2: Gross Ton-Miles of the Traffic**

The second variable when evaluating the “demonstrable superiority” of line segment-specific Road Property Capital Costs is the traffic density measured in gross ton-miles of traffic moving over the Oklahoma route’s road property investments. BNSF has not even addressed the accuracy of AEP Texas’ traffic density estimate.

Unlike road property investment values, BNSF never claims that the traffic density data used by AEP Texas is inaccurate or unreliable. Of course, there is no basis for BNSF to charge that the traffic density information it furnished AEP Texas is flawed. BNSF supplied the data from its internal records, and AEP Texas used that data with no adjustment.³⁴ BNSF uses that same or similar data in its own SAC analyses. With no regard for consistency, BNSF uses line-specific traffic densities for SAC calculations and system-average traffic densities for variable cost calculations. Clearly, both AEP Texas and BNSF agree that BNSF’s internal line-specific traffic density data is “demonstrably superior” to a system-average estimate of traffic density.

In summary, both AEP Texas’ road property investment values and its gross ton-mile traffic density data are “demonstrably superior” to BNSF’s system-average approximations.

³⁴ See AEP Texas Op. Exhibit II-A-18, p. 5 of 7, for names of density files supplied by BNSF in discovery and a description of the summary process and output files, which were included in AEP Texas’ Opening electronic workpapers.

**(iv) BNSF's Other Reply Attacks Have
Been Rebutted Or Have No Basis In
Fact**

BNSF's main argument against AEP Texas' line segment-specific Road Property Capital Costs is that AEP Texas based its calculations on the accounting data supplied to it by BNSF, and that the BNSF-supplied accounting data are inaccurate. BNSF's position is nonsense. BNSF itself selected and applied the methods it used to make the required reasonable allocations, so it makes no sense for BNSF to criticize AEP Texas or the Board for employing the data BNSF itself developed and supplied to AEP Texas.

BNSF argues that since it did such a poor job of developing its road property accounting data, AEP Texas and the Board should be required to use system-average Road Property Capital Costs that substantially overstate BNSF's actual cost of providing the AEP Texas service. BNSF's main thesis (including its arguments related to PISNU, the ATSF write-up, unassigned investments, unallocated investments, and variability) is rebutted in AEP Texas' Reply, in this Rebuttal, and in Exhibit II-A-91. The Board should not countenance BNSF's criticisms of AEP Texas' use of the data that BNSF developed in the ordinary counsel of business and provided to AEP Texas in discovery. If BNSF truly believed its criticisms of its own development of that data, then BNSF should have re-determined that data using alternate procedures. Failing to make that re-determination leads one to conclude that BNSF's sole purpose in making its criticisms was to facilitate its efforts to force AEP Texas and the Board to adopt system

average Road Property Capital Costs rather than the true, line segment-specific costs that BNSF actually incurs in providing the AEP Texas service.

BNSF's Reply also claims that AEP Texas' Road Property Capital Costs cannot be correct for several additional reasons not previously addressed in AEP Texas' Opening or Reply evidence.³⁵

First, BNSF claims that a witness for AEP Texas "...acknowledged in the *AEPCO* rate case that BNSF's line-segment specific road property data *could not* be used to develop a movement-specific adjustment to BNSF's system-average road ownership costs." *See* BNSF Reply at II-28. BNSF is wrong,³⁶ and as the specific facts of the *AEPCO* proceeding are not present in this proceeding, BNSF's claim also is irrelevant.

Second, BNSF denigrates AEP Texas' reliance on the precedential value of the ruling in *TMPA* on the treatment of Road Property Capital Costs, stating, "[a]lthough the Board accepted complainant's adjustment in that case, the Board did not address fundamental problems with the data and complainant's methodology there." *See* BNSF Reply at II-31. Again, BNSF is wrong. In *TMPA*, BNSF raised the same complaints to the use of its own accounting data that it raised in this proceeding. The Board fully considered both parties' positions (which would have included any claimed "fundamental

³⁵ Each of BNSF's additional reasons cites imperfections in the data supplied by BNSF to AEP Texas, but BNSF never even tries to show that "the" system average provides a better answer.

³⁶ BNSF presented no evidence in the instant proceeding comparing the road property investment data that it provided in the instant proceeding with that provided by BNSF in *AEPCO*.

problems”) and ruled in favor of TMPA’s position, which was basically the same as AEP Texas’ position herein.

Third, BNSF claims that the “. . .FADB gross investment data and the data generated by the FADB depreciation calculator cannot be used to develop a movement-specific adjustment to road property costs.” See BNSF Reply at II-29 and II-34. BNSF is wrong again. The Board in *TMPA* addressed the use of data generated by the depreciation calculator. In *TMPA*, BNSF calculated depreciation using the same depreciation calculator that it uses here, so the Board has already addressed it. In addition, as AEP Texas noted in its description of its procedure on Opening and Reply, AEP Texas did not use the depreciation calculator. BNSF claims that *it* used the depreciation calculator to develop the numbers that BNSF furnished to AEP Texas, but AEP Texas’ request for documentation of BNSF’s depreciation calculator application elicited nothing in response.³⁷

Before its merger with ATSF, Burlington Northern had a procedure to depreciate its line segment-specific road property investments. BNSF’s witnesses in the instant proceeding used BN’s line segment-specific road property investment information to determine Road Property Capital Costs in *West Texas Utilities*, so those witnesses obviously believed that the BN procedure produced reliable results. BNSF points out that the “. . .data relied upon by the former BN in the *1996 Decision* [in *West Texas Utilities*]

³⁷ See BNSF’s response to AEP Texas’ 2nd Request For Workpapers, dated June 9, 2004, pp. 2-4, included in AEP Texas Reb. Workpapers Vol. 1, pp. 00025-29.

were drawn from BN's property accounting records and not ATSF's FADB system. . . ,"³⁸ but in no way does that fact diminish the relevance and validity of the data BNSF provided to AEP Texas in this proceeding. At the time of the merger, BNSF would have selected the better procedure from those available from BN or ATSF. Since BNSF chose the ATSF procedure, it must have believed it to be superior to the BN procedure on which BN and the Board previously relied. That points to progress in more detailed and specific record-keeping, not retrogression.

Furthermore, the Board in *Otter Tail* did not state that BNSF must use the depreciation calculator. See BNSF Reply at II-33, n.70. The Board's Order of November 15, 2002 in *Otter Tail* stated "Accordingly, this portion of the motion to compel [that is, the portion seeking line segment-specific road property investment and depreciation data] will be granted, and BNSF should disclose information on road property investment costs and depreciation *in whatever format it is maintained by BNSF*." (emphasis supplied).³⁹

Fourth, regarding PISNU investments, BNSF objects to the *TMPA*-accepted Road Property Capital Costing procedure because BNSF claims that while PISNU investments are not assigned to line segments, if they were assigned, AEP Texas and the Board would see that the PISNU investments are made disproportionately on the high density corridors. See BNSF Reply at II-30. Three factors mitigate against BNSF's claim because: (1) PISNU investments cannot be allocated to individual line segments because

³⁸ See BNSF Reply at II-32, n.65.

³⁹ The Board's order is included in AEP Texas' Reb. Workpapers, Vol.1, pp. 00073-76.

BNSF refuses to account for them on that basis; (2) if BNSF actually did provide PISNU investments to AEP Texas on a line segment-specific basis, the *TMPA* Road Property Capital Cost procedure would probably show reduced costs per gross ton-mile because the increase in gross ton-miles per mile would more than offset the increase in road property investment return and depreciation; and (3) BNSF provided no evidence whatsoever that these investments are made disproportionately on high density lines.

Fifth, BNSF further denigrates its own data by citing additional shortcomings of the PISNU data, wherein those PISNU investments are “. . . likely to be more expensive than the older assets that they replaced. . .” *See* BNSF Reply at II-30. Whether or not this BNSF claim is correct can only be shown with evidence that only BNSF would possess, but BNSF has not entered that evidence into this record. Also, much of the PISNU investment does not replace older assets. Rather, it is in addition to the older assets or it is a substantial betterment of older assets. In the absence of more precise data (if it exists), AEP Texas’ procedure adequately treats PISNU investments.

A more troublesome feature of BNSF’s claims regarding PISNU is contained in the following statement:

Thus, because they include assets that have already been replaced by assets reflected in PISNU, the FADB data relied on by AEP Texas understate gross investment and the depreciation data overstate the accumulated depreciation of the assets actually in service.

See BNSF Reply at II-30.

Here, BNSF states that the FADB data includes assets that have already been replaced by PISNU assets. Generally, when an asset is replaced, that asset is retired from the books, and the new asset (in this case an asset included in PISNU) is taken into account. Taken literally, BNSF is saying that its FADB data includes the same assets that are also included in the PISNU assets. This could happen if the effective dates of the PISNU accounting and the FADB accounting are different. But the consequence of assets being reflected in both PISNU and FADB is a double count of the asset, not an *understatement* of gross investment.

Sixth, regarding the unassigned category of investments, BNSF claims that the unassigned investments also are made disproportionately on the heavy density line segments, but BNSF

. . . will assign the investment evenly to all lines in that region even though the ballast may have been used on only a handful of line segments in that region. Spreading the ballast investment across all line segments in the region obviously results in FADB data that understates the investment in ballast on the lines in which the ballast was actually used.

See BNSF Reply at II-31.

BNSF objects to spreading the ballast investment across all line segments *in the region* and then it adopts a procedure that spreads these same investments over all line segments *in the system*. Obviously, spreading the investments over the line segments in the region provides an estimate of actual line segment-specific investment that is “demonstrably superior” to a systemwide spread.

Once again, BNSF has used a reasonable procedure for allocating these ballast investments. Any reasonable allocation is “demonstrably superior” to the system average estimate used by BNSF. *See also* the discussion of this topic in Section II-A-1-C (i)(1), *supra*.

Seventh, an additional point that BNSF raises regarding the depreciation calculator is that it “. . . continues to reflect asset history and depreciation rates of the ATSF.” *See* BNSF Reply p. II-32. While BNSF did not provide any response to AEP Texas’ request for documentation regarding BNSF’s use of the depreciation calculator, this statement regarding use of ATSF’s depreciation rates most likely is untrue. BNSF and all other railroads periodically update their depreciation rates through application of the Iowa survivor curves.⁴⁰ The road depreciation rates that BNSF furnished to AEP Texas in discovery were effective January 1, 1997.⁴¹ If the depreciation calculator were actually using ATSF rates, they would have had to have been effective in 1995, not 1997, because ATSF’s last R-1 was from 1995. ATSF depreciation rates in 1995 immediately prior to merger were very close to BN’s. ATSF’s rates were higher than BN’s for just 4 of the 13 road property accounts to which AEP Texas applies its Road Property Capital

⁴⁰ *See* BNSF electronic workpaper file AEPTX 06182-6225 provided by BNSF in discovery. Pages for track accounts included as AEP Texas Reb. Workpapers Vol. 1, pp. 00115-146.

⁴¹ *See discovery* workpaper BNSF/AEPTX 00007 included as AEP Texas Op. Workpaper Vol. 6, p. 02448.

Cost adjustment ratio. Current 2002 BNSF depreciation rates appear to be midway between pre-merger ATSF and former BN depreciation rates.⁴²

At pp. II-37 to 38 of its Reply, BNSF presents a hypothetical example from which it concludes that substituting the depreciation calculator for group-life accounting causes a 16% reduction to system average when no reduction would actually be needed. Of course, BNSF's example is not based on reality. It is based solely on a hypothetical example using numbers designed by BNSF, not actual accounting data from BNSF's books and records comparing the two depreciation procedures.

But even BNSF's hypothetical example is full of errors. BNSF derives the 16% reduction by comparing a route-specific cost of \$0.75 per GTM (i.e., $(\$50 - \$20) / 40 \text{ GTM} = \$0.75 \text{ per GTM}$) with a system-average cost of \$0.89 per GTM (i.e., $(\$1000 - 200) / 900 \text{ GTM} = \0.89 per GTM). Reducing \$0.89 per GTM by 16% produces an adjusted cost per GTM cost of \$0.75. However, BNSF does not make the necessary reduction to net investment to account for PISNU and unassigned expenses, which are not included in the route-specific data. In 2002, PISNU and unassigned investments accounted for {

} of the gross investment. The correct calculation would be {

} the \$0.75 per GTM for route-specific

data.⁴³ The reduction for PISNU and unassigned investment is necessary to adjust the net

⁴² See AEP Texas Reb. electronic workpaper file "Pre-Merger and Current Deprec Rates.123."

⁴³ See AEP Texas Reb. electronic workpaper file "Example Group Life v. Depr Calculator.123."

investment to a level comparable to the route-specific FADB data, that is, to place them on the same level. This corrected example confirms that AEP Texas' adjustment to the FADB level is correct once BNSF has provided the PISNU and unassigned investment.

If BNSF had provided the FADB route-specific data on a group-accounting basis, AEP Texas could have made a reconciliation directly to the R-1 data. However, BNSF did not provide the required data, and it is the only party with the data. AEP Texas cannot be faulted for not using data that BNSF did not provide.

BNSF's other supposed explanation regarding "overstated" depreciation involves "...BNSF's use of group life accounting." *See* BNSF Reply at II-32. This explanation also fails closer scrutiny. *See* AEP Texas Exhibit II-A-91, section c.(2), where AEP Texas explains that the group life accounting methodology is simply another acceptable depreciation accounting methodology. There is nothing inherent in the method that would cause it to produce a different answer than any other depreciation accounting methodology, and any procedure would have to use Board-approved depreciation rates, so that should not give rise to disparate results. The primary factor distinguishing group life accounting from other depreciation accounting methods is its simplicity and cost-effectiveness.

BNSF never supports its claims regarding allegedly "overstated" depreciation, and BNSF has consistently refused to provide the data AEP Texas would need to test those claims. Furthermore, even if it were true that the FADB calculator overstates depreciation and understates net investment and its associated ROI costs, the

corresponding depreciation costs would be overstated and would *offset* the allegedly understated ROI costs.

Eighth, in its reply at II-33, BNSF suggests that the AEP Texas route shows a higher percentage of accumulated depreciation than the system average as a whole, but the comparison is of no relevance. BNSF could compare the percent accumulated depreciation over any line segment and it would only be coincidental if it were the same as system average. The only conclusion that the Board can draw from BNSF's comparison is that the Board should not use system-average investment and depreciation because it will not represent the actual investment and depreciation costs of the line segment actually used to provide the service in question. This conclusion is reinforced when BNSF's Reply electronic file "rail depreciation.123" is critically reviewed.⁴⁴

BNSF's "rail depreciation.123" file illustrates why it is important that BNSF provide current FADB totals by account, which BNSF refused to provide for 2001 and 2002. Because of BNSF's refusal, AEP Texas estimated the FADB gross and accumulated depreciation at the system level based on the respective relationships to the R-1 in 2000. As shown in AEP Texas' Exhibit II-A-92C, page 9 of 11, this methodology results in a "Percent Depreciated" of 29 percent for 2002. This compares favorably with BNSF's 38 percent for 2000 at BNSF Reply at II-33. Accumulated depreciation varies widely, as shown by the range of 6 percent to 92 percent in BNSF's "rail depreciation.123" example. This range is caused by the large difference in dates of

⁴⁴ See BNSF Reply at II-33, n.69.

service for investment on varying line segments. Segments on the route from Brush to Denver and Salt Creek to the Colorado/New Mexico state line include investments back to 1941, and those investments have been 100% depreciated.⁴⁵ The segment from Texline to Fort Worth shows investments between 1951 and 1981, which are fully depreciated. Line segments between Denver and Pueblo on the former ATSF only show investments subsequent to 1996 (with minor exceptions).

The FADB historical data is recorded by detailed investment by service year since 1941, depreciated using rates in effect when the investment was made.⁴⁶ Because BNSF did not provide the required data, it is not possible to adjust this historical accumulated depreciation data base for the AEP Texas route to the R-1 level. Instead, therefore, AEP Texas adjusts the system accumulated depreciation to the FADB level.⁴⁷

A review of the 'URCSInv' level of AEP Texas electronic workpaper file "Rebuttal Rd Inv AEP Texas 2002.123" shows that the R-1 accumulated depreciation for the track accounts ranges from 13% to 25% of system average. This agrees with BNSF's

⁴⁵ See AEP Texas electronic workpaper file "Rebuttal Rd Inv AEP Texas 2002.123", sheet 'Val Sec Detail', lines 144-84, 5635-666, and 6307-352.

⁴⁶ See AEP Texas electronic workpaper file "Road Inv AEP Texas Rebuttal.123", sheet 'Val Sec Detail' (imported from BNSF discovery file "AEP_Texas_YR2002.txt, report # 2 of 2), columns entitled "SERV YEAR" (i.e., year in service) and "DEP CAT," (i.e., depreciation code and category). Calculating the depreciation rates on lines 94-98 reveals that the rates for the same codes were 1.38% for 1970-1974 and 1.25% for 2000 and 2001.

⁴⁷ On Rebuttal, AEP Texas continues to make this adjustment based on 2000 FADB totals by account because BNSF refused to provide the 2002 data that would have enabled AEP Texas to make an even more accurate adjustment.

13% for rail in “Rail Depreciation.xls.” However, the FADB accumulated depreciation used to calculate net investment at the FADB level, ranges from 30 to 49% of system average.⁴⁸ AEP Texas’ Rebuttal Road Property Capital Costs account for the difference in accumulated depreciation (R-1 vs. FADB) by adjusting accumulated depreciation at the system level, the only level possible given the data BNSF provided. AEP Texas’ use of the FADB accumulated depreciation decreases net investment and puts the system average road property net investment per gross ton-mile on the same level as the route specific FADB-level road property investment per gross ton-mile for the AEP Texas route.

In its Reply at II-33, BNSF implies that the gross investment basis is superior to the net investment basis for developing the line segment-specific adjustment to system average Road Property Capital Costs. Actually, the reverse is true, but the data included in AEP Texas’ Rebuttal Exhibit II-A-92 are sufficient to permit calculation of an adjustment on either basis. Either adjustment calculation would still have to consider the ATSF write-up, PISNU and unassigned.

Ninth, In other proceedings, BNSF charged that the shipper erred by not including yard investment as a basis for comparison to BNSF’s system-wide depreciation figures that include both yard and running investments. BNSF’s new charge is that AEP Texas *did* include yard investment in developing the adjustment ratio to system average.

⁴⁸ See AEP Texas electronic workpaper file “Road Inv AEP Texas Rebuttal.123”, sheet ‘URCS Inv’, column (13) divided by Column (7).

AEP Texas used all the investment information supplied to it by BNSF. AEP Texas' first discovery requests to BNSF in this proceeding stated: "For each valuation section on BNSF's system traversed in whole or in part by the AEP Texas trains, please provide the following information for each year 2000 through the present. . ." See Request for Production No. 9, p. 19, reproduced in AEP Texas Reb. Workpapers Vol. 1, pp. 00033-36. AEP Texas asked for every valuation section used by the AEP Texas trains, not simply valuation sections involving running tracks only. In response, BNSF provided yard investment for the AEP Texas route. See, e.g., line segment 8931, val sec 002 covering Guernsey Yard and line segment 7651, val sec 009 covering Amarillo Yard as reported in BNSF *Discovery File* "LSRanges.xls."⁴⁹ A ratio calculated based on investment including both yard and running segments would be assumed to have the same allocation of running to switching as the system allocation and, therefore, the ratio would apply equally to the system level and running level investment.

Finally, BNSF claims that "...AEP Texas' approach ignores the relationship between density and variability." See BNSF Reply at II-40 to 42 and Exhibit II-A-4.

BNSF fails to mention that its own depreciation rates already reflect higher costs for higher traffic densities. Account 9, Rail and OTM, Account 8, Ties, and Account 11, Ballast are the three largest road property accounts, comprising almost half

⁴⁹ Included as sheet "LSRanges" in electronic files "Rebuttal Rd Inv AEP Texas 2000 [through 2003].123."

of all road property investment and more than half of the investment in the 13 accounts that AEP Texas adjusts with its line segment-specific to system-average adjustment ratio. Rail and OTM depreciation rates vary from { } for Density 5 category to { } for Density 1 category. Tie depreciation rates vary from { } for Density 5 category to { } for Density 1-wood category. Ballast depreciation rates vary from { } for Density 5 category to { } for Density 1 category.⁵⁰

AEP Texas addresses other aspects of the relationship between density and variability in Rebuttal Exhibit II-A-91, section d. (“BNSF’s Invalid Objections to Reflecting Economies of Unit Coal Train Transportation”). In *West Texas Utilities*, BNSF’s witness Klick used the 50% variability factor for application to road property investments for the same traffic and route that is the subject of this litigation.⁵¹ Now BNSF’s Mr. Klick claims that 50% variability does not apply to the AEP Texas route. See BNSF Exhibit II-A-4, pp. 35-42. Mr. Klick makes no attempt to rationalize this inconsistency.

⁵⁰ See *Discovery Document* BNSF/AEPTX 00007, included in AEP Texas Reb. Workpapers Vol. 1, p.00084, showing BNSF’s depreciation rates at the various traffic density categories, and AEP Texas Reb. Workpapers Vol. 1, p.00086, explaining that Density 5 category represents yards, density 2 category represents traffic densities of < 20 MGTM, while Density 1 category represents traffic densities of at least 20 MGTM.

⁵¹ See p. 7 of Exhibit II-A-25 of Complainant’s Reply Evidence, Public Version, filed October 8, 2003 in STB Docket No. 42071, *Otter Tail Power Company v. The Burlington Northern and Santa Fe Railway Company* (“*Otter Tail*”), included in AEP Texas Reb. Workpapers Vol. 1, p. 00094. This workpaper shows that BNSF’s own *West Texas Utilities* cost calculations for service-specific return on road property and road depreciation used a 50% variability factor.

At pages II-40 to 42 of its Reply, BNSF claims that the URCS variability for four separate expense accounts has increased with increasing density between 1996 and 2001. Of course, BNSF was not able to make that claim with regard to the variability for application to Road Property Capital Costs, and any variability associated with any expense account other than Road Property Capital Costs is irrelevant for present application to Road Property Capital Costs. AEP Texas discusses this further in Rebuttal Exhibit II-A-91, section d.

f. Summary - Road Property Capital Costs

AEP Texas' special study of BNSF's Adjusted Road Property Capital Costs as described herein is based on BNSF-provided line-specific investment data for those investments needed to provide service to AEP Texas. Most of that cost is based on the actual investments and gross ton-miles over the valuation section milepost ranges traversed by the Oklaunion trains. Appropriate adjustments have been made to reflect the issues of unallocated monies (PISNU and Unassigned FMA) and differences in accumulated depreciation. AEP Texas' Road Depreciation and Return on Road costs are "demonstrably superior" to BNSF's system-average calculation, and should be accepted as the best evidence of record.

2. Car Operating Expenses and Car Capital Costs

In *Nevada Power* the ICC stated:

Car costs have two components, maintenance costs (expenses) and capital costs. Car maintenance costs are divided into two portions, time related and mileage related including a portion for depreciation. Capital costs contain an element of return on investment together with that portion of car depreciation associated with car-days. *Nevada Power*, 6 I.C.C. 2d at 26.

Car Operating expenses make up \$75.78 per carload or 22.5% of the total cost difference between the two parties for the Eagle Butte 1Q03 movement. Car Capital costs make up \$7.17 per carload or 2.1% of the total cost difference between the two parties. These two cost components will be covered below.

The mileage portion of car maintenance costs is a function of the unit cost per car-mile multiplied by the number of miles of the movement. The time related portion is a function of the unit cost per car day multiplied by the cycle time in days. Both parties used the same format for developing these costs.⁵² See, e.g., the Eagle Butte 1Q03 movement covered by AEP Texas in Rebuttal Exhibit II-A-134, p. 14 of 15 and by BNSF in Reply electronic workpaper file "BNSF AEP Reply Prg.123" BNSF Exhibit II-A-1, 11 of 14, *Supporting workpaper* 11 of 26.

The parties differ very little regarding the mileage portion of the car operating expenses with the primary difference resulting from BNSF's exclusion of the miles over the loop track from the cost per car mile - running. See AEP Texas lines 14.e.

⁵² Both parties used the actual cars moved by car type. A minor difference between the parties arises because BNSF determined the percent of each car type weighted on tons while AEP Texas weighted each car type on the number of trips each car ran. As a result, AEP Texas determined that the J cars represented 94.8% of the cars used in Oklaunion service while BNSF used 95%.

and 14.f. and BNSF lines 13.e. and 13.f of the electronic files named in the preceding paragraph. Instead, BNSF includes yard miles at the much higher cost per car mile - yard unit cost,⁵³ and BNSF uses system-average miles in its cost per car day - yard calculations, not movement-specific miles.⁵⁴ BNSF errs by treating the loop track miles as yard switching miles instead of the correct treatment of these miles which is as an extension of the line-haul miles running. *See San Antonio*, 359 I.C.C. at 32.

The parties differ substantially regarding the time related portion of car operating costs. The causes of the difference will be covered under the following topical headings:

- (i) The active to calendar day adjustment;
- (ii) The measurement of freight car cycle time; and
- (iii) The treatment of car maintenance covered by full service leases.

i. The Active to Calendar Day Adjustment

At page II-65 of its Reply, BNSF objects to AEP Texas' use of the active to calendar day adjustment citing the Board's decision in *TMPA* at page 63. AEP Texas' procedure is set forth in its electronic workpaper file "Rebuttal Car Maintenance.123" and Exhibit II-A-93.

⁵³ BNSF lists the unit cost per car mile - running as { } and the unit cost per car mile - yard as { }. *See* "BNSF AEP Reply Prg.123," Tab "0," BNSF Exhibit II.A-1, page 11 of 14, Supporting workpaper 26 of 26, lines 13.a1. and 13.g, respectively.

⁵⁴ *See* "BNSF AEP Reply Prg.123," Tab "0," BNSF Exhibit II.A-1, page 11 of 14, Supporting workpaper 26 of 26, line 13.k.

AEP Texas would have preferred to base car repair costs on BNSF's actual car maintenance costs, but BNSF - the only party to this proceeding that possesses the required car repair information - refused to provide that information in discovery. *See* BNSF's response to Request for Production Nos. 31 and 32 at page 34 of BNSF responses to AEP Texas first discovery requests, reproduced in AEP Texas Rebuttal Work paper Vol. 1, pp. 0037-42. In the absence of such information, AEP Texas was forced to develop car repair costs using standard URCS costing procedures.

The unit cost per car day running computed in URCS (Worktable B7, Part2) is based on a computed number of active car days. This computation involves the total loaded and empty car miles traveled for each car type, the total system running train miles, and the system running train hours. The development of the computed active car days figure is based on the total car miles of each car type while the train miles and train hours are BNSF system totals. URCS first computes the car miles per train mile by dividing the car miles for a type of car by the system running train miles. The car miles per train mile are then multiplied by the system running train hours to compute the car hours running by car type. The active car days running are the result of dividing the total car hours running by 24 (the hours in a day). The computed active car days are then divided into the freight car expenses allocated to the particular car type to calculate the cost per car day running.

The freight car expenses included by URCS are drawn from the railroad's Annual Report Form R-1, or in some instances multiple R-1s for those freight car

expenses annualized over more than one year. The car day running freight car expenses assigned by URCS represent a calendar year period, or 365 days. Dividing calendar year expense by a lesser number of car days results in a cost per day that is artificially inflated. For example, the cost per car day running calculated by URCS for plain gondola freight cars (J-type cars) is based on BNSF's annual average active days per car. *See* AEP Texas Reply electronic workpaper file "Rebuttal Car Maintenance.123."

The adjustment included by AEP Texas restates the average active car days on a calendar day basis. This places the expense and service unit sides of the equation on the same basis. AEP Texas' 2000 adjustment divides the URCS active car days per car, of 169.9, by the 365 days in the year to recognize the portion of the calendar year not included in the URCS unit costs. On the BNSF system in 2000, the average active car days per car for plain gondola freight cars represents only a fraction of the actual number of calendar year days. Multiplying the URCS developed cost per active car day-running by the ratio of the URCS average active car days to calendar days restates the URCS cost per car day running on a calendar day basis.

In *TMPA* the Board stated:

Adjustments that alter the logic and assumptions in URCS, however, are a collateral attack on the model itself and are thus inappropriate here. *See TMPA* at 63.

AEP Texas' calculations do nothing to alter the logic of URCS. In fact, AEP Texas does nothing but convert an URCS unit cost stated on a cost per active car day basis to its equivalent value stated on a cost per calendar day basis. AEP Texas measured

car cycles in terms of total calendar days. Therefore, the unit cost against which Oklaunion train calendar days are applied must also be stated on a freight car cost per calendar day basis. Converting the URCS freight car cost per active car day to its equivalent value on a freight car cost per calendar day simply facilitates completion of the following cost calculation: multiplication of the Oklaunion train's cycle time in calendar days by the URCS freight car unit cost stated on the compatible cost per calendar day basis, not the cost per active day basis in which that URCS unit cost is generally stated.

ii. The Measurement of Freight Car Cycle Time

The same data set that was used to calculate cycle time for locomotives was used to determine car cycle time. The parties agreed on the locomotive cycle times, but use different values for car cycle times. The reason is simple: AEP Texas measured the cycle time for Oklaunion trains while BNSF measured the cycle times for system average trains.

Both parties determined locomotive cycle times by calculating the number of days in a cycle and capping the dwell time of the locomotives at yards. AEP Texas used this same data for determining car cycle times, but BNSF used system average data.

To determine car cycle time, AEP Texas determined the actual number of days in a cycle without capping the dwell time of the freight cars at yards because the cars, while idle in the yard, are still part of the train consist.

To determine car cycle time, BNSF divided the Oklaunion train round trip line-haul mileage by the system-average miles per day per freight car. BNSF then added

four days⁵⁵ for time in the terminal at both origin and destination.⁵⁶ Table II-A-37 below uses the Eagle Butte 1Q03 movement to illustrate that BNSF overstated the car day costs by 23% because of its failure to use Oklaunion train-specific data.

Table II-A-37 <u>Overstatement of Car Days Per Car By BNSF</u>			
	<u>Data</u> (1)	<u>Source</u> (2)	<u>Amount</u> (3)
1.	Cycle time hours: AEP Texas	Opr_stats C41	{ }
2.	Cycle days	L. 1 / 24	{ }
3.	Line-haul miles: BNSF	Opr_stats K23 +K27	2,220.2
4.	System car miles per day	Work_data D220	488.0891
5.	Car days running	L. 3 / L.4	{ }
6.	Terminal days	Adj. RR industry avg.	4.00
7.	BNSF car days	L. 5 + L. 6	{ }
8.	Overstatement of days	L. 7 - L. 2	{ }
9.	% Overstatement of days	L. 8 / L. 2	{ }
Source: Line 1 from "VC AEPTEX Rebuttal 2003.123", Lines 3 and 4 from BNSF Reply electronic workpaper file "BNSF AEP REPLY PRG.123".			

⁵⁵ At both origin and destination, BNSF added 0.5 days to switch a car into the mine or the plant, 1.0 days to load or unload the car, and 0.5 days to switch a car out of the mine or the plant. None of these elapsed times anything to do with Oklaunion service-specific times.

⁵⁶ See BNSF Reply electronic workpaper file "BNSF AEP Reply PRG.123", Tab "O". Cell G41 for any movement.

Obviously, BNSF's freight car cycle times bear no relationship to Oklaunion train-specific cycle times which involve loop track operations at both origin and destination. BNSF then multiplied the system average unit cost by the system average number of car days. BNSF erred by determining the system average time related car cost of the system average car, not the Oklaunion train-specific time related car cost of the Oklaunion train-specific car.

**iii. The Treatment of Car Maintenance
Covered by Full Service Leases**

At pages II-65 to 66 of its Reply, BNSF objects to AEP Texas' "percent maintained" adjustment on the following grounds:

1. AEP Texas eliminated the Western Farmers cars (initialed "WFAX" and "WFCX") from its "percent maintained" adjustment; and
2. AEP Texas' adjustment is "...wholly improper. ...".

**(a) AEP Texas Eliminated the Western Farmers
Cars (Initialed "WFAX" and "WFCX")
from its "Percent Maintained" Adjustment**

On Opening, AEP Texas eliminated the WFAX and WFCX cars from the determination of "percent maintained"⁵⁷ because BNSF did not provide the leases associated with those cars, so there was no way for AEP Texas to know whether or not those cars were under a full service lease.

⁵⁷ See, e.g., AEP Texas Op. Exhibit II-A-22, p. 1 of 3, Column (18).

At Reply, page II-61, BNSF claims to have “. . . produced or made available detailed accounting data and lease documents for the vast majority of freight cars used in Oklaunion service.” First, BNSF should have made available lease documents on *all*, not just *the vast majority* of leased freight cars. Second, BNSF did not make available the lease documents for the *vast majority* of freight cars.

BNSF did not provide the appropriate lease document for the WFAX and WFCX cars in spite of their prominence in the Oklaunion trains. At Reply page II-62, BNSF states, “In fact, Western Farmers’ cars account for approximately half of the cars used in Oklaunion service in 2002.” At Reply page II-63 BNSF states, “Approximately 93 percent of cars used in Oklaunion service in 2002 were gondolas and nearly half of the cars were owned by Western Farmers.” While BNSF promised to provide the lease through which the WFAX and WFCX were acquired,⁵⁸ what BNSF actually provided was only a table of contents and one page from an agreement {

} . See

BNSF Reply work papers Vol. I, p.III.A-0075-79. Because of this, AEP Texas cannot independently verify whether or not the WFAX and WFCX cars are subject to a full service lease since AEP Texas does not have the full { } lease document or the lease document through which Western Farmers originally acquired the WFAX and WFCX cars. BNSF’s { } agreement page says nothing about the maintenance agreement that Western Farmers might have with its car/maintenance provider.

⁵⁸ See AEP Texas Reb. Workpapers Vol. 1, p. 00185.

At Reply page II-63 BNSF states:

This is because the cars that BSNF provides to Western Farmers in exchange for the cars used in Oklaunion service are owned units. {

}.

BNSF has no basis for attempting to charge AEP Texas for BNSF cars used in Western Farmer's service. AEP Texas should only be held responsible for the cars that are actually used in its own Oklaunion train service. AEP Texas is not a party to the BNSF-Western Farmers car swap, and AEP Texas should bear no financial responsibility for that agreement.

AEP Texas believes that the WFAX and WFCX cars actually used in its service are under a full-service lease, but BNSF refused to provide AEP Texas with the lease documents that AEP Texas would need to prove that point. Nevertheless, because AEP Texas has no proof to the contrary, AEP Texas Rebuttal Evidence has accepted BNSF's claim and in this Rebuttal has treated the WFAX and WFCX cars as if they are not under a full service lease. *See, e.g.*, AEP Texas' Reb. Exhibit II-A-93, p. 1 of 4, Column (23).

(b) AEP Texas' Adjustment Is "...Wholly Improper..."

At Reply page II-67 BNSF states:

Further, AEP Texas' analysis of maintenance and operating costs started with system-average URCS unit costs that already reflect the fact that a percentage of the cars have been acquired under full-service leases. Thus, there is no need to adjust further downward its results, as the costs already reflect the associated 'Percent Maintained' factor.

Again, BNSF is wrong. R-1 Schedule 755 records at Lines 4-01x, the number of "RR Owned and Leased - Loaded" freight car miles while Lines 4-11x record the number of "RR Owned and Leased - Empty" freight car miles. Freight car miles loaded and empty for "Private Line Cars - Loaded" and "Private Line Cars - Empty" are recorded separately at Lines 4-13x and 4-15x, respectively.⁵⁹ The unit cost that AEP Texas used to calculate freight car maintenance costs pertained only to railroad owned cars,⁶⁰ none of which were under full service lease.⁶¹ On the other hand, every freight car that was under a full service lease was a privately owned car.⁶² Therefore, the unit cost that AEP Texas (and BNF) used does not "...already reflect the fact that a percentage of the cars have been acquired under full-service leases. . ." since, in AEP Texas Oklahoma service, only the private cars are under full service lease. This fact required AEP Texas to adjust the URCS unit cost to reflect the fact that the privately owned, full-service lease

⁵⁹ See AEP Texas Reb. Workpapers Vol. 1, pp. 00169-70.

⁶⁰ See AEP Texas Reb. electronic workpaper file "Rebuttal Car Maintenance.123," Tabs "2000," "2001," "2002," and "2003."

⁶¹ See AEP Texas Reb. electronic workpaper file "Rebuttal Car Maintenance.123," Tabs "2000," "2001," "2002," and "2003."

⁶² See AEP Texas Reb. electronic workpaper file "Rebuttal Car Maintenance.123," Tab "Cartype."

cars would not have freight car maintenance requirements that are BNSF's responsibility. See Exhibit II-A-93, Column (18), (note that Column (23) fully reflects the WFAX and WFCX cars assuming they are net leased, not full-service leased⁶³).

iv. Summary

The parties calculated Car Capital Costs using generally the same procedures, but BNSF overstated those costs by using system average yard switching miles and system average car days.

The parties calculated Car Operating Expenses using somewhat different procedures. Once again, BNSF overstated Car Operating Expenses by using system average yard switching miles and system average car days, and BNSF further overstated those costs because it failed to adjust for the active to calendar ratio and failed to reduce car maintenance costs to reflect the "Percent Maintained" factor.

The procedure used by AEP Texas calculates freight car costs that incorporate the actual statistics developed for AEP Texas train service. In addition, AEP Texas' unit costs have been adjusted where appropriate to assure that the variable unit costs and the statistics are determined on a comparable, calendar day basis. AEP Texas has also insured that the private cars that are under full service lease are reflected in the "Percent Maintained" adjustment.

⁶³ AEP Texas reflected the WFAX and WFCX cars as net lease cars even though they may very well be full service lease cars.

AEP Texas' car operating and capital costs should be accepted as the best evidence of record.

3. Locomotive Capital Costs

AEP Texas' position regarding Locomotive Capital Costs was stated on at pages II-A-25, 27, and 39 to 40 of its Opening Narrative and pages II-A-17 to 21 and 40 to 61 of its Reply Narrative. BNSF's position regarding these costs was stated at pages II-11 to 13 and 67 to 70 of its Reply Narrative.

At page II-67 of its Reply BNSF states:

The differences in the parties' calculations are primarily due to the different approaches they take with respect to the following factors: (a) spare margin; (b) development of lease and acquisition costs; and (c) the parties' different treatment of Accounts 76 and 90 (discussed above in section II-A.1.a.(1)).⁶⁴

BNSF says nothing more about the Accounts 76 and 90 issue, and AEP Texas had already addressed that issue at pages II-A-97 to 99 of its Reply Narrative. The two other issues raised by BNSF are addressed below.

a. Spare Margin

AEP Texas explained its calculation of locomotive spare margin at pages II-A-44 to 57 of its Reply. AEP Texas' Reply anticipated and fully rebutted almost all of BNSF's Reply points, and its Reply discussion will not be repeated here. However, AEP Texas will address the Board's *PSCo/Xcel* decision regarding spare margin, and respond to BNSF's Reply (at II-67 to 70) criticisms under the following topical headings:

⁶⁴ BNSF's Reply section II-A.1.a.(i) is located at pages II-5 to 6.

- a. The *PSCo/Xcel* decision;
- b. BNSF's claim (BNSF Reply at II-68) that AEP Texas' reliance on "availability guarantees" for determining spare margins is improper because maintenance contracts does not account for all the time that a locomotive is unavailable for railroad service;
- c. BNSF's claim that AEP Texas' reliance on "availability guarantees" for determining spare margins is improper because BNSF and EMD temporarily suspended the availability guarantees due to insufficient data (BNSF Reply, at II-69);
- d. BNSF's claim that AEP Texas' application of the Alstom agreement to the entire first quarter of 2003 was inappropriate (BNSF Reply at II-69); and
- e. BNSF's claim that AEP Texas' contract availability percentage applied as BNSF's locomotive spare margin is mathematically incorrect (BNSF Reply at II-69).

i. The PSCo/Xcel Decision

The Board covered Locomotive Spare Margin in Section 10, pages 142 and 143 of the *PSCo/Xcel* decision. The spare margin of 21-22% adopted in *PSCo/Xcel* was *four times* the spare margin adopted by the Board in the next-most-recent western coal rate case, *TMPA* (5.5%). Indeed, in only one previous coal rate reasonableness case has the Board used a spare margin greater than 10%. See Docket No. 40581, *Georgia Power Co. v. Southern Ry. Co. and Norfolk Southern Corp.*, Appendix, p. 31, ALJ Decision served August 20, 1993 (where the ICC used 12.1%) and AEP Texas Exhibit II-A-94.

Xcel had recommended a spare margin of 5.5% based on the procedure accepted by the Board in *TMPA* – the same procedure employed by AEP Texas herein. BNSF’s recommended spare margin of 21% to 22% was developed using the procedures that were rejected by the Board in *West Texas Utilities*. Even though over the years the Board in numerous proceedings has rejected BNSF’s proposed high spare margins, the Board reversed counsel in *PSCo/Xcel* and accepted the procedure it had continuously rejected in prior rate cases, stating only:

Here, in contrast, BNSF has submitted a well-supported study that quantifies the actual time that locomotives cannot be used for service for any reason.

PSCo/Xcel at 143. The Board did not explain how BNSF’s study overcame the Board’s problems under this same study in *West Texas Utilities*, *Arkansas Power & Light*, etc. AEP Texas shows below that BNSF’s spare margin study was poorly documented in *PSCo/Xcel*⁶⁵ and likewise in the instant proceeding, and cannot be relied upon.

The Board’s acceptance of BNSF’s locomotive spare margin calculation and the rejection of Xcel’s calculation of the locomotive spare margin was based on:

- a. The Board’s belief that the locomotive maintenance availability guarantees had expired;

⁶⁵ The time period for the instant proceeding (2Q00 through 1Q04) includes all of the time period covered in *PSCo/Xcel* (1Q01 through 1Q03). Both proceedings involved locomotives from the Alliance pool, the pool upon which BNSF based its locomotive spare margin study. The BNSF studies in both proceedings used the same procedures applied to a slightly different time frame. Both studies were based on the same locomotive utilization for the same pool for overlapping time frames.

- b. The Board's belief that BNSF presented a well supported study for this service;
- c. The Board's new interpretation of the ICC's precedents regarding spare margin;
- d. The Board's belief that Alliance pool utilization adequately represented Xcel utilization; and
- e. The Board's belief that BNSF's approach comported with URCS.

**(a) The Board's Belief That the Locomotive
Maintenance Availability Guarantees Had
Expired**

In *PSCo/Xcel* at 142, the Board stated:

[A]s BNSF notes, the availability guarantees to which Xcel refers expired in January 2001. Xcel's spare margin figure therefore must be rejected, as it is based on a contract that was not in effect during the period for which the variable costs are being calculated.

While the Board accepted BNSF's representation that the contract between EMD and BNSF was not in "effect," the fact is that the agreement in question {

⁶⁶ See BNSF Reply Workpapers Vol. I, pp. II.A-0057-58.

}

{

}⁶⁷

{

} Nevertheless, the Board reversed longstanding precedent and rejected the *TMPA* spare margin procedure for the entire 1Q01 through 1Q03 time period in *PSCo/Xcel*. AEP Texas respectfully submits that this was an error, and should not be repeated in the instant proceeding.

{

⁶⁷ *Id.*

}

Not one of these locomotive guarantees is taken into account in BNSF's presentation concerning locomotive spare margin in the instant proceeding, and there is no indication that they were considered in the Board's acceptance of BNSF's inflated spare margin calculation in *PSCo/Xcel*. {

}

{

} See BNSF Reply

workpaper Vol. I, p. II.A-0049 and AEP Texas' Rebuttal Restatement of the 2003 portion of its Exhibit II-A-19.⁶⁸

{

} See AEP Texas Op. Workpapers Volume 6, pp. 02884-885. {

}⁶⁹

{

⁶⁸ See AEP Texas Reb. electronic workpaper file "2000 Rebuttal Loco Maint AEPTEX.123", "2001 Rebuttal Loco Maint AEPTERX.123", "2002 Rebutal Loco Maint AEPTEX.123", and "2003 Rebuttal Loco Maint AEPTEX.123."

⁶⁹ Examples of the procedures and formula for calculating locomotive availability under maintenance contracts between GE and BNSF are included in AEP Texas Op. Workpapers Vol. 6 at the following pages:

1. GE contract effective 9/16/98, Section 8.2 pp. 02598 - 602;
2. GE contract effective 2/1/94, Section 8.2 pp. 02639 - 44;
3. GE contract effective 6/19/97, Section 8.2 pp. 02707 - 10; and
4. GE contract effective 9/9/02, Section 8.2 pp. 02746 - 50.

}

**ii. The Board's Belief That BNSF Presented
a Well-Supported Study for This Service**

BNSF's study herein consists of a single file with two spreadsheets that show monthly totals according to maintenance responsibility. *See* BNSF Op. electronic workpaper file "Spare Margin.xls". There is no supporting data that allows the amounts included in this file to be independently verified.⁷⁰ BNSF's study lists the total locomotive hours in each month, which is a simple multiplication of the days in the month times the number of locomotives times 24 hours in a day. This assumes that a locomotive was assigned to the pool for the entire month, but the total number of locomotives changed monthly, ranging from 756 to 783.

In *PSCo/Xcel* (at 143), the Board characterized BNSF's data by stating that it "quantifies the actual time that locomotives cannot be used for service for any reason." However, even the unavailable time computed by BNSF does not agree between its two data files purportedly showing the same information. The "Unavailable Hours" calculated by BNSF is nothing but a mathematical result that is not supported by any of

⁷⁰ Unless a party is able to show that its service-specific study is "demonstrably superior" to system average or the generally accepted 10% spare margin amount, the Board generally uses the 10% amount. *See* AEP Texas Exhibit II-A-94. In the absence of a fully documented, well-supported spare margin study, the Board properly cannot accept BNSF's inflated spare margin.

the detailed data that was used to calculate it. Further, BNSF's tabulations only result in the time the locomotives *are not* used in service, not the time that they *cannot* be used in service (*see below*).

BNSF's Opening electronic workpaper file "Spare Margin.xls", Tab "Data" shows the source of the information as "Source: Discovery file "Loco Utilization Jan 01 - Sept 03.xls" (CD 005)". This file includes the data pertaining to measurable, available, unavailable, utilized, and non-utilized time at the same summary level as shown in file "Spare Margin.xls". There are no numbers below the summary levels for any category of hours in file "Spare Margin.xls."

There are two areas of mathematical problems with BNSF's spare margin calculations. In January 2002, the locomotives maintained by BNSF show that the total number of hours "Utilized" plus "Non-Utilized" exceed the "Hours Available," but that is impossible. In addition, the total number of hours "Utilized" plus "Non-Utilized" also exceed the "Total Measurable" hours, but that too is impossible.

Further, "Hours Available" in any month would consist of and be classified as hours "Utilized" or "Non-Utilized". BNSF's Opening electronic workpaper "Spare Margin.xls" is the supporting documentation for its locomotive spare margin calculation. In BNSF's calculation of its locomotive spare margin in "Spare Margin.xls," there is not one month where the hours "Utilized" plus "Non-Utilized" are equal to the "Hours Available." As an example, the hours in all categories are shown below for January 2001 from BNSF's file "Spare Margin.xls":

Table II-A-38
Locomotive Hours Breakdown

<u>Category</u> (1)		<u>Hours</u> (2)
1.	Total Measurable	{ }
2.	Unavailable:	
	1. SFS	{ }
	2. Shop	{ }
	3. Other	{ }
3.	Total Unavailable	{ }
4.	Available	{ }
5.	Utilized	{ }
6.	Non-Utilized	{ }
7.	Total Utilized and Non-Utilized	{ }
8.	Unaccounted For	{ }

The data for January 2001 shows that { } hours or { } percent of the available hours are unaccounted for. This defect is present in each month included in BNSF's locomotive spare margin tabulation.

It is BNSF's burden to demonstrate that its spare margin study is "demonstrably superior" to past Board precedents. However, BNSF did not provide any data that supports the number of hours included in any category in any month. As a result, neither AEP Texas nor the Board is able to verify the sequence of the calculations. The "Total Measurable " hours equate to the "Equivalent Count"; *i.e.*, the number of locomotives, times the number of days in the month, times 24 hours in a day. The "Total

Measurable “ hours consist of the available hours plus the total of the three categories of unavailable hours. The unavailable hours in SFS and Shop have some identification as to what they represent; however, hours included as “Unavailable Other” simply appear to be the difference between the “Total Measurable “ and the total of available hours, plus the other categories of unavailable hours. BNSF never describes what situations are included in “Unavailable Other.” In calculating its “Unavailable Spare Margin,” BNSF uses the “Hours Available” as the base amount.

Longstanding precedent holds that spare margin is understood to be the percent of locomotives necessary to replace locomotive units while they are out-of-service for repairs and/or overhauls, *i.e.* unavailable to the railroad.⁷¹ BNSF’s procedure creates an additional allowance for providing spare locomotives to replace units while they sit in a BNSF facility, available but not being utilized.

BNSF’s spare margin determination excludes all locomotive hours when units *are not* used, *i.e.*, unavailable, non-utilized, and unknown, rather than the hours the units *cannot* be used, *i.e.*, unavailable for service due to repairs or overhauls.

Paradoxically, this method implies that BNSF needs more spare locomotives when demand for service declines, and suggests the view that BNSF should be able to charge captive shippers for all surplus, idle locomotive time, whether or not those locomotives are ever used to serve AEP Texas, or any other specific shipper.⁷² Prior to *PSCo/Xcel*, the

⁷¹ See *West Texas Utilities*, 1 S.T.B. at 690, n.109; *Georgia Power* at 41, n.11.

⁷² This is particularly troublesome because BNSF appears to be planning for lower locomotive utilization. {

Board had never permitted such an interpretation or tolerated such a poor linkage between the services provided to a captive shipper and the costs that the rail carrier was permitted to pass along to that shipper through the regulatory process. The costs related to an idle locomotive waiting to be added to a train destined for Minneapolis have no relationship to the locomotive needed for the AEP Texas Oklahoma movements.

Using BNSF's data, AEP Texas' procedure identified the number of total hours and the hours locomotives are unavailable in the shop. Provided the amounts could be verified and supported, Board precedents hold that these two categories of hours are the only BNSF data that should be used to determine the spare margin percentage. BNSF's tabulation is not "well-supported" or even mathematically correct. In addition, it does not represent the spare margin for locomotives in AEP Texas' service, or the service to any particular shipper. BNSF has presented no evidence that its calculations represent those for the AEP Texas movement with its specific movement characteristics.

}

**(b) The Board's New Interpretation of the
ICC's Precedents Regarding Spare Margin**

In previous maximum rate decisions, the Board and its predecessor defined spare margin as “. . .the number of diesel units a railroad keeps in reserve to cover diesel units that have power failures or require maintenance.”⁷³ *See also West Texas Utilities* 1 S.T.B. at 690 (“. . .we restate BN’s locomotive requirements to reflect a 10% spare margin markup for locomotives undergoing repairs.”). In *West Texas Utilities*, the Board rejected BNSF’s attempt to use a 25% spare margin that included other times when locomotives were unavailable, such as “loading delays at PRB mines, idle times when locomotives are available but there is no train, peak period demands, and major and minor locomotive repairs.” *Id.* The Board rejected these claims not on the basis of shortcomings in BNSF’s evidence, but as a matter of regulatory policy. The claims made by BNSF in *West Texas Utilities*, which are the same as those made here for some of the same traffic moving over the same route, had been repeatedly raised by BN and rejected by the Board and its predecessor in numerous prior cases. In an unexplained reversal of precedents, the Board in *PSCo/Xcel* expanded the scope of spare margin to include not just locomotives undergoing repairs, but all “. . .actual time that locomotives cannot be used for service *for any reason.*” *See PSCo/Xcel*, at 143 (emphasis added). In so doing, the Board suggested that the prior rule arose solely because of evidentiary shortcomings

⁷³ *See, e.g., Georgia Power*, at 41, n.11.

in prior cases. As shown above, and immediately below, however, that simply not the case.

PP. II-A-53 to 55 of its Reply, AEP Texas referenced several cases where the ICC rejected BNSF's spare margin procedures and study results. Among these is the ICC's 1987 ruling in Docket No. 36719, *Arkansas Power & Light Co. v. Burlington Northern Railroad*, Decision served May 13, 1987:

In sum, applying to an individual movement the average cycle experience for a pool serving numerous coal movements may result in significant distortion. For example, when an individual movement experiences an increase in cycle times, with no such increase occurring generally, the likelihood is that the relatively fixed number of non-cycle hours identifiable with that movement would constitute a smaller than average proportion of total cycle hours. Hence, in the absence of compelling reasons otherwise, the pool non-cycle factor would be inappropriately high for such a movement. Here we cannot test the BN study's reliability as applied to the pool as a whole or to the subject movement.

Id. at 5.

In *PSCo/Xcel* the Board did not address this precedent or the ICC's concern regarding the fairness of charging an individual shipper with expenses caused by the traffic movements of a much larger group of shippers. In the instant proceeding, BNSF provided no evidence that permitted the Board to distinguish BNSF's current Alliance pool spare margin study from BN's *Arkansas Power & Light* study in such a way as to overcome the agency's past objections to BN/BNSF's spare margin study, or avoid the same conclusions:

There is a problem with including all non-cycle hours from the Alliance Pool, as BN has done, and attributing that figure to the APL movements. The non-cycle factor appropriate to *coal pool locomotives* may reflect not only the traffic patterns of the various coal movements which draw power from the pool, but also the overall level of line congestion influenced by *non-coal movements*. For example, a decline in non-coal movements may have the effect of decreasing coal train running times. Whether such decrease would translate into a reduction in pool locomotive units would depend upon the ability of the mine or utility to handle the train at the origin or destination terminal upon arrival. However, the record does not disclose whether trains involved in the APL movements that arrive at a terminal ahead of schedule are handled immediately or must await scheduled loading/unloading times. (Emphasis supplied.)

Arkansas Power & Light at 4.

BNSF's study in this proceeding provides no evidence addressing the impact of non-coal shipper utilization on coal pool utilization, so BNSF's evidence does not justify a reversal of the principles of *Arkansas Power & Light* and subsequent cases.

At pages II-A-55 to 57 of its Reply, AEP Texas listed *seven* additional and distinct defects in the BNSF study and issues raised by the precedents cited by AEP Texas. None of these was addressed by the Board in *PSCo/Xcel*.

- BNSF excluded consideration of all non-SD70MAC locomotives. Non-SD70MAC locomotives constituted almost { } of the lower fees and AEP Texas/Oklahoma service in 2001.⁷⁴
- The calculation of the "Available Hours" excludes 9% of the total hours for mechanical shopping, sanding, fueling and servicing, and other included by BNSF for 2001.

⁷⁴ See AEP Texas Reply electronic workpaper file "2001 trn mvmnt hrs.xls," Tab "Summary Hrs01."

- {

}
- {

}
- According to the data included in BNSF's Opening file "Spare Margin.xls," the availability percent of total hours during 2001 ranged from { } percent. If all or most of this time element is related to shop time then { }. This compensation is not reflected in BNSF's locomotive capital calculations or its spare margin calculations.
- The difference between the "Available Hours" and the total of "Utilized" plus "Non-Utilized" would appear to be hours that BNSF locomotives are off-line in run through service on other railroads. The reciprocal of BNSF's locomotives being off-line is locomotives provided by other railroads to BNSF in run through service. Some adjustment needs to be made that recognizes the value of the differential between locomotives provided by BNSF in run-through service and the locomotives provided by other railroads.
- The "Non-Utilized" category includes elements that by their identification show that the locomotives have been released by the shop and are available for service, but not assigned to a specific train while other locomotives are available in the yard but not assigned to a train. There also appears to be some overlap or duplication of time between certain categories.

**(c) The Board's Belief That Alliance Pool
Utilization Adequately Represents Individual
Service Utilization**

In *PSCo/Xcel*, the Board stated:

Xcel argues that BNSF's study is invalid because: (1) it is based on all SD70MACs in the Alliance Pool and thereby excludes the other types of locomotives used in Pawnee service; (2) it conflicts with the availability guarantees in the maintenance agreements; and (3) it relies on an incorrect definition of spare margin.

The Board has considered Xcel's criticisms and finds them to be unfounded. First, BNSF's reliance on SD70MACs in the Alliance Pool is reasonable, as SD70MACs represent over 96.5% of the locomotives used in the Xcel service. Second, the Board has rejected the calculation of the spare margin based upon the maintenance agreements, those agreements do not provide a basis for challenging this study.

PSCo/Xcel at 142.

The Board would not be justified in ignoring non-SD70MAC locomotives in the instant proceeding. SD70MACs represent most of the locomotives used in the AEP Texas Oklaunion service, but other locomotives models were also used and account for up to { } of the total locomotives used in the AEP Texas Oklaunion service.⁷⁵ This is { } the 3.5% of non - SD70 MAC locomotives used in the *PSCo/Xcel* service (see *PSCO/Xcel* at 141).

BNSF's level of Alliance pool SD70MAC locomotive utilization measures the overall activity in the areas of the BNSF system in which they operate, but it excludes

⁷⁵ See AEP Texas Reb. electronic workpaper file "2001 trn mvmnt hrs.xls", tab "Summary Hrs01".

time utilized on other railroad systems in run-through service. The BNSF data does not represent the level of utilization in AEP Texas Oklaunion service, and the BNSF data still excludes time utilized on other railroad systems in run-through service. BNSF has not provided any evidence showing that the overall level of utilization calculated for the Alliance Pool is representative of the locomotives in AEP Texas service.

**(d) The Board's Belief That BNSF's
Approach Comported with URCS**

URCS system-average costs implicitly take into account all of the time that locomotives are not being used, and thus BNSF's measure comports with URCS. Because variable cost measures the actual operations of the railroad, and BNSF has submitted well supported evidence of the spare margin for this service, the Board relies on BNSF's study.

PSCo/Xcel at 143. While the statement refers to “. . .evidence of the spare margin for this service, BNSF has not produced any evidence in this case regarding the spare margin for the AEP Texas Oklaunion service. Rather, BNSF only provided information concerning non-utilized time for the Alliance Pool, without any effort to show a linkage to the AEP Texas Oklaunion service.

It should be noted that when special studies are completed and the results substituted for URCS system wide values, there is no requirement that they “comport” with the procedures in URCS that calculate a system-wide value. The locomotive capital costs per unit developed by applying URCS recognize the system-wide level of operations through the statistical, system-wide divisor. However, when expenses are calculated for a

specific service, the costs should represent the characteristics of that service. Here, the costs influenced by BNSF's inflated spare margin do not do so.

The variable costs produced in coal maximum rate cases include a mixture of service-specific and system-wide statistics and costs. Where special studies of the specific operational characteristics are not completed, system wide-values, *i.e.*, URCS values, are included in the cost calculations. In such a case, however, the resultant variable costs do not measure the "actual" cost for a specific traffic set unless that traffic has the same characteristics as the system average. Here, BNSF has not provided any evidence comparing system-average operations to the operation involved in providing the AEP Texas Oklahoma service operations. Similarly, BNSF has not provided any evidence comparing Alliance Pool operations to the AEP Texas Oklahoma service operations.

ii. BNSF's Claim (Reply at II-68) that AEP Texas' Reliance on "Availability Guarantees" for Determining Spare Margins Is Improper Because Maintenance Contracts Do Not Account for All the Time That a Locomotive Is Unavailable for Railroad Service

BNSF referenced the Board's observation in *TMPA* that "...locomotive maintenance contracts do not account for all maintenance needs. . . ." (BNSF Reply at II-68), then proceeded to give examples of circumstances that would not be considered as "unavailable" under the maintenance contracts, *i.e.* accidents, wrecks, or locomotives that run out of fuel. As a result, BNSF contended that the maintenance contracts could not be used to measure the availability of locomotives for AEP Texas revenue service.

However, AEP Texas showed that during the relevant time period, none of the circumstances referred to by BNSF occurred. *See* AEP Texas Reply at II-A-51.

To support the calculation of its locomotive spare margin, BNSF included in its Opening workpapers the electronic file “Spare Margin.xls.” These data calculate the hours of all SD-70 MSL locomotives in the Alliance Pool for several time categories related to availability and utilization. These time categories include: “Total Measurable,” “Hours Available,” “Unavailable SFS,” “Unavailable Shop,” and “Unavailable Other.” Table II-A-39 below quantifies the hours and percentage of the total hours that are in each of BNSF’s time categories for the year 2002 as an example.

Table II-A-39
BNSF’s Available and Unavailable Time Categories
for SD-70 Locomotives in the Alliance Pool in 2002

<u>Time Category</u> (1)	<u>Number of Hours</u> (2)	<u>Percent of Total Hours</u> (3)	<u>Spare Margin Percent</u> (4)
1. Unavailable Shop	{ }	{ }	{ }
2. Unavailable Other	{ }	{ }	{ }
3. Unavailable SFS	{ }	{ }	
4. Total Unavailable	{ }	{ }	{ }
5. Available	{ }	{ }	{ }
6. Total Measurable	{ }	100.00%	

Source: BNSF Opening Workpaper “Spare Margin.xls.”
Note: Total hours may not add due to rounding.

BNSF did not provide a description of the hours that are included in each of these categories. *See* BNSF Reply at II-67 to 70 and the electronic files to which those pages refer. The titles of each category make them somewhat self-explanatory, except for “Unavailable Other.” However, the BNSF data itself shows that the SD-70 MSL locomotives in the Alliance Pool were available { } percent of the time.⁷⁶ In other words, BNSF’s own data indicates a spare margin of { } percent for *all* SD-70 MSL locomotives in the Alliance Pool in 2002. This compares favorably with AEP Texas’ { } percent spare margin calculated for all locomotives, including the non-SD70’s, actually used in AEP Texas service. *See* AEP Texas Reb. Restated Exhibit II-A-19 and electronic workpaper file “2002 Rebuttal Loco Maint AEPTEX.123.” Table II-A-39 above also shows that the total time in the shops, which AEP Texas assumes to be for maintenance, overhauls, accidents and wrecks, equals only { } percent of the total hours for these locomotives.

In its spare margin calculations and procedure, BNSF has attempted to redefine locomotive spare margin as the additional locomotives required to account for hours when locomotives are not available for service, *and* when they are available for service but not being utilized. Under BNSF’s procedure, the more time locomotives sit around waiting to be assigned to train service (*i.e.*, available but not utilized), the higher

⁷⁶ Both BNSF and AEP Texas adjusted the number of unavailable hours to exclude hours categorized as “Unavailable SFS.” These hours are related to sanding, fueling and servicing (SFS) and have been included in BNSF’s own calculation of “Availability Percent.” *See* “Spare Margin.xls”, Tab “Summary” line 67, column N.

the spare margin, *i.e.*, the more locomotives are needed. Under BNSF's new definition of spare margin, purchasing new locomotives or a downturn in traffic levels would decrease the fleet's utilization and *increase* the spare margin requirement. Under BNSF's new definition of spare margin, the lower the utilization of the current locomotive pool the higher the spare margin requirement. This concept is ludicrous on its face. AEP Texas' procedure for calculating the locomotive spare margin reflects a proper definition of the term, and its evidence is consistent with established and long-settled agency precedent.

iii. BNSF's Claim (Reply at II-69) That AEP Texas' Reliance on "Availability Guarantees" for Determining Spare Margin Is Improper Because BNSF and EMD Abandoned the Availability Guarantees Due to Insufficient Data

In its earlier discussion of the handling of locomotive spare margin in *PSCo/Xcel*, {

},⁷⁷ and that {

⁷⁷ BNSF's Reply at page II-69 n.178 cites the sixth covenant to the Sixth Amendment between BNSF and EMD as {

}

{ }, or any of its other maintenance contractors regarding availability guarantees. Even if there were no availability agreements for the limited number (*i.e.*, { }) of locomotives involved, Table II-A-39, *supra*, shows that the availability of those locomotives was still high. Additionally, there were several measures still binding BNSF and EMD with regard to the { } locomotives that suggest high availability.

Other than the availability guarantees, the terms of the fourth and fifth Amendments { }.⁷⁸ These amendments called for {

}.⁷⁹ Clearly, when the MTBF is high, the availability of those locomotives is also high, thus corroborating the availability performance reported in Table II-A-39, *supra*.

⁷⁸ See AEP Texas Reply Exhibit II-A-86.

⁷⁹ See BNSF Reply Workpapers Vol. I, p. II.A-0049. Because AEP Texas was not given access to the required records, it is not possible for AEP Texas to determine how much of these Performance Payments was attributable to the performance of locomotives while in AEP Texas service.

{

}. See AEP Texas Op. Workpapers Vol.

6, pp. 02552 to 02554.

In addition, on { }, a BNSF and GE Transportation Services, Inc. entered into a locomotive maintenance agreement covering over { } locomotives. {

}. See AEP Texas Op. Workpapers Vol. 6, pp. 02746 to 02753.

Finally, two e-mails, dated March 31, 2003, between GM (EMD) personnel discussed {

}

It is apparent that BNSF does not consider availability guarantees as meaningless as related to the performance of its maintenance providers. And, as discussed above, BNSF's own calculations in its Opening electronic file "Spare Margin.xls" result in an availability for the SD-70 MSL locomotives that is very close to the spare margin calculated by AEP Texas for all locomotives in 2002.

iv. BNSF's Claim (Reply page II-69) That AEP Texas' Application of the Alstom Agreement to the Entire First Quarter of 2003 was Inappropriate

BNSF criticizes AEP Texas for including the availability requirements of the Alstom agreement for the entire first quarter of 2003, {

}. AEP Texas shows below that in its Opening

Exhibit II-A-19 (and on Reply and Rebuttal), AEP Texas has recognized that the Alstom Agreement has been in effect only since { }.

BNSF provided AEP Texas with train movement records only for the first 6 months of 2003. {

} . This calculation has been made more apparent in AEP Texas' Rebuttal Restatement of the 2003 portion of its Exhibit II-A-19.⁸⁰

v. BNSF Claims That AEP Texas' Contract Availability Percentage Applied as BNSF's Locomotive Spare Margin Is Mathematically Incorrect

BNSF's position is that the "spare margin is expressed as a percentage of the actual *available* time, and not as a percentage of *total* locomotive hours as AEP Texas calculates" (BNSF Reply at II-69; emphasis in original).

The maintenance contracts included in AEP Texas' Opening workpapers develop the availability percentage using the { }.

This time category is identified as "T" in the availability formulas of the contracts.⁸¹

Spare margin for equipment is generally defined as the number of locomotives necessary

⁸⁰ See AEP Texas Reb. electronic workpaper file "2003 Rebuttal Loco Maint AEPTEX.123", Tab "A".

⁸¹ See AEP Texas Op. Workpapers Vol. 6, pp. 02864 to 02867, 02552 to 02554, 02746 to 02753 and 02809 to 02815 as examples.

to replace units removed from service for repairs and/or maintenance. *See West Texas Utilities*, 1 S.T.B. at 690, n.109. The spare margin is to account for the difference between the total hours and those for which the locomotives are actually available. The spare margin percentage is a percentage of the total maximum hours that the locomotives were not available due to repairs and maintenance. AEP Texas' procedure correctly calculates the unavailable time deficit that must be covered by spare locomotives, and its calculation is mathematically correct.

b. Development of Lease Costs

In its Reply at II-70, BNSF raised the following objection to AEP Texas' development of locomotive lease costs:

AEP Texas used BNSF system-average locomotive ownership costs to calculate variable costs for this move. Since Oklaunion trains are predominantly powered by the most expensive locomotives in BNSF's fleet – SD70MAC's – this approach understates actual lease and ownership costs for the units that power the Oklaunion trains.

AEP Texas was forced to use system average locomotive capital costs because BNSF refused to provide lease documents covering 80.5% of all leased locomotives used in Oklaunion service. While BNSF claims that it made its locomotive lease documents available to AEP Texas during a field survey (*id.*), in fact the lease documents that BNSF made available covered only the newest, most expensive 19.5% of all leased locomotives in Oklaunion service.⁸² BNSF repeatedly refused to provide the lease contracts for the other 80.5% of the leased locomotives – the oldest and least

⁸² See AEP Texas Reb. electronic workpaper file "Loco Leases Received.xls".

expensive of all leased locomotives used in Oklaunion service. *See* AEP Texas Reply at II-A-41 to 42, which documents AEP Texas' efforts to acquire the lease contracts that became effective before 2000 but that related to locomotives that were used in Oklaunion service during the time period relevant to the instant proceeding.

AEP Texas has already addressed BNSF's other Reply objections at pp. II-A-58 to 61 of it Reply. First, BNSF continues to err by basing...

its lease costs on the average lease rate over the life of the lease agreement, the exact procedure rejected by the Board in *WPL*. In *WPL* the Board held that the lease rates should be those in effect for the time period being costed, not the average over the life of the lease because that average "would likely produce a different lease costs from that actually incurred" during the time period being costed.

See AEP Texas Reply at II-A-58-59. *PSCo/Xcel* (at 142) re-affirmed the Board's *WPL* ruling in this regard. Second, AEP Texas pointed out that in its locomotive capital cost calculations BNSF only considered 340 different locomotives, whereas 702 different locomotives actually powered the Oklaunion train in 2002. *See* AEP Texas Reply at II-60.

c. The Calculation of Acquisition Costs

BNSF used the wrong cycle times in calculating Locomotive Capital Costs. *See* AEP Texas Reply at II-A-17 to 21. Also, BNSF's calculation of the capital costs associated with the actual locomotives used does not take adequate account of the fact that the locomotives that BNSF uses as its basis are used in AEP Texas service only for a

few weeks out of the entire year, while BNSF's calculations assume that these locomotives are used in AEP Texas service during the entire year.

At pages II-A-60 to 61 of its Reply, AEP Texas' cites procedural errors made by BNSF in its determination of the actual locomotives used in AEP Texas service. A further BNSF methodological error lies in its use of a different group of locomotives for each of its three locomotive-related cost calculations. For determining spare margin, BNSF used only Alliance Pool SD70MSCs, even though more than five other locomotive types were used to provide the AEP Texas service. In determining locomotive maintenance costs, BNSF used system-average locomotives even though the maintenance cost characteristics of the newer, actual locomotives used to power the AEP Texas trains are dramatically lower than the maintenance costs of the much older system average locomotive. Only for weighting the lease costs of each locomotive type used to provide the AEP Texas service did BNSF utilize the actual locomotives.⁸³

4. Switching Costs (Excluding Fuel)

Switching costs were addressed by AEP Texas at pages II-A-27, 28, and 48 of its Opening Narrative and Exhibit II-A-25, and at pages II-A-21 to 26 and 61 to 62 of its Reply Narrative and Exhibit II-A-85. BNSF discussed switching at pages II-16 to 19 of its Reply Narrative.

⁸³ Even then, as cited in AEP Texas' Reply at II-A-60 to 61, BNSF made procedural errors in identifying the actual locomotives used in AEP Texas service.

AEP Texas' Rebuttal Exhibit II-A-88, page 19, Lines 3, 4, and 5 shows that the total difference between the parties' Switching Costs (excluding fuel) is \$24.39 per car or \$0.22 per ton for the 1Q03 Eagle Butte movement.

AEP Texas' Reply explained that BNSF erred by (1) using too few years of normalization in its development of the Switch Engine Minute unit cost and (2) dramatically overstating its switch engine minutes because BNSF contravened the Board's settled treatment of loading and unloading movements on the origin and destination loop tracks as an extension of the line-haul service. Because of this mistake and because of BNSF's normalization error, the Board should adopt AEP Texas' switching costs as the best evidence of record.

5. Maintenance of Way Costs (Including Joint Facilities)

At pages II-A-31 through II-A-34 of its Agency Narrative and Exhibits II-A-4 through II-A-13, AEP Texas explained the procedures it followed to calculate line-specific roadway maintenance-of-way costs for the AEP Texas route using the SFGT formula, along with the data used to develop the specific costs and justification for the Board's adoption of AEP Texas' calculation. These line-specific roadway maintenance-of-way costs calculated using the SFGT formula were benchmarked to actual BNSF MOW costs for year 2001. The results of the benchmarking are shown below in Table II-A-40.

Table II-A-40
BNSF Maintenance of Way Costs
Movements from the PRB Origins to the Oklahoma Station
2001 SFGT Results Benchmarked Against Actual BNSF MOW

<u>Origin Mine</u> (1)	<u>SFGT ¹</u> (2)	<u>Actual MOW ¹</u> (3)	<u>System Average ^{1/}</u> (4)	<u>SGFT as % of System Average ²</u> (5)	<u>Actual as % of System Average ³</u> (6)
1. Buckskin	\$246.30	{ }	{ }	{ }	{ }
2. Caballo Rojo	251.52	{ }	{ }	{ }	{ }
3. Jacobs Ranch	251.09	{ }	{ }	{ }	{ }
4. Black Thunder	250.87	{ }	{ }	{ }	{ }

Source:

SFGT from Exhibit II-A-8 and Actual MOW from Exhibit II-A-13.

¹ Dollars per million gross ton-miles.

² Column (2) divided by column (4).

³ Column (3) divided by column (4).

As displayed above, these results demonstrate that the SFGT formula accurately measures actual MOW costs attributable to unit train coal traffic.

In its Reply, BNSF criticizes AEP Texas' SFGT line-specific analysis and AEP Texas' analysis of actual BNSF MOW costs. BNSF does not restate AEP Texas' analysis; rather, it continues to rely upon the system-average maintenance-of-way calculation it utilized on Opening. BNSF claims that the actual MOW data it produced in discovery are incomplete and unusable, and BNSF identifies five alleged errors in AEP Texas' analysis:

- (i) AEP Texas' analysis does not include all expenses associated with the issue route because some expenses are not allocated to the AEP Texas route.
- (ii) AEP Texas includes a UP segment over which BNSF operates Oklaunion trains via trackage rights and misapplied the mix of routes that were used.
- (iii) The seven (7) percent reduction included by AEP Texas to account for a difference between the expenditures reported in BNSF's cost center data produced in discovery to AEP Texas and the total maintenance of way expenses reported in BNSF's Annual Report Form R-1, Schedule 410 is improper.
- (iv) AEP Texas incorrectly applies the BNSF system average variability factor to its line segment specific results.
- (v) AEP Texas inappropriately uses expense data for only one year.

In the remainder of this section, AEP Texas explains why four out of the five BNSF criticisms are not valid, and corrects its calculations in response to the one BNSF point which has merit. AEP Texas' line-specific analysis of actual BNSF MOW expenditures produces an accurate number to benchmark the line specific SFGT roadway maintenance-of-way costs for the route traversed by the Oklaunion trains.

a. Allocation of Expenses

On pages II-20 through II-27 of its Reply, BNSF criticizes AEP Texas for excluding maintenance-of-way expenses that are not captured at the line-specific level but rather are captured by a higher cost-center level. BNSF attempts to discredit AEP Texas' line-specific analysis by pointing to alleged deficiencies in the data BNSF produced to

AEP Texas in discovery, effectively confirming that BNSF did not produce the data that AEP Texas requested.

BNSF points to a November 25, 2003 letter from BNSF to AEP Texas as support for its position that BNSF notified AEP Texas that the line-specific cost center data did not include some monies that were only recorded on a system, regional or supervisory level.⁸⁴ But BNSF fails to mention that BNSF refused to provide system maintenance-of-way expenses captured in all line-specific, supervisory, regional or system cost centers as requested by AEP Texas.⁸⁵ Had BNSF produced this data, AEP Texas would be in a position to respond more specifically to BNSF's claims. Without the data that BNSF refused to provide, AEP Texas made a 7 percent adjustment for investments allocated at the system level, and a state-specific adjustment for investments allocated at the state level. The bases for these adjustments follow.

In discovery, BNSF produced a special study that purports to show that 15 percent of BNSF's 2001 maintenance-of-way expenses reported in Annual Report Form R-1, Schedule 410 are not captured in any line-specific cost center of Location ID.⁸⁶ The electronic file produced in discovery grouped the expenses into three (3) categories: system, state, or "all other" if the expenses did not fit into either of the first two. The 15 percent figure is comprised of 7 percent allocated at the system level and 8 percent

⁸⁴ See BNSF Reply Workpapers Vol. I, pp. II-A-0005 to 0006.

⁸⁵ See AEP Texas Reb. Workpaper Vol. 1, pp. 00013-15.

⁸⁶ See AEP Texas Reb. electronic workpaper file "R-1 MOW EXPENSE QUERY 2001.XLS."

allocated at the state level. The third group was intended to include all line-specific expenses and accounted for the remaining 85 percent.

In its Opening Evidence, AEP Texas included all three categories of expenses in its analysis. First, AEP Texas included all direct, line-specific expenses (comparable to BNSF's 85 percent). Next, AEP Texas included factors for each of the states that AEP Texas trains traverse to account for expenses that are assigned at a state-wide level (comparable to BNSF's 8 percent). Finally, AEP Texas included a 7 percent additive to account for expenses BNSF reports at a system-wide level.⁸⁷ BNSF's criticism is not valid, and no adjustment to AEP Texas' methodology is necessary.

b. Inclusion of a Union Pacific-Owned Segment and Weighting of Routes Traversed

BNSF makes two points with respect to the weighting of AEP Texas' line-specific maintenance-of-way calculations. First, at page II-24 of its Reply, BNSF correctly notes that AEP Texas included the segment between Sterling and Union, Co, that BNSF uses via a trackage rights agreement with UP (the segment's owner). In its Rebuttal restatement, AEP Texas has excluded all expenses and gross ton miles associated with this segment from its line-specific maintenance-of-way calculations.⁸⁸

Second, at pages II-24 to 25 of its Reply, BNSF criticizes the methodology AEP Texas uses to determine the proportion of time that each route is used. On Opening,

⁸⁷ See AEP Texas Op. electronic workpaper files "TOTAL ROUTE-2001 ORIGINS LOC.XLS" and "BN_01ST.XLS".

⁸⁸ See AEP Texas Reb. electronic workpaper file "TOTAL ROUTE-2001 ORIGINS LOC REBUT.XLS."

AEP Texas used a simple average of the frequency of shipments in the loaded and empty directions. Because AEP Texas is weighting costs per gross ton-mile, however, BNSF states that the calculation should reflect that more gross ton-miles are generated in the loaded direction. AEP Texas agrees, and on Rebuttal its calculation uses the weighted average of loaded and empty weights applied to the frequency of shipments in the loaded and empty directions.⁸⁹

**c. Discovery Maintenance-of-Way Cost Center
Data and Maintenance-of-Way Data in BNSF's R-1**

AEP Texas reconciled the line specific MOW data provided by BNSF with BNSF's R-1 MOW data. On pages II-22 at II-25 to 26 of its Reply, BNSF criticizes AEP Texas for this reconciliation, which adjusted the line-specific maintenance-of-way cost center expense data for year 2001 that BNSF produced in discovery to the maintenance-of-way expenses reported in BNSF's 2001 Annual Report Form R-1, Schedule 410 (Line 151, column F).⁹⁰ BNSF argues that the line-specific cost center data is comprised of different items than those that are used in the Annual Report Form R-1, Schedule 410. BNSF is once again attempting to discredit AEP Texas' line-specific analysis by (1) pointing to alleged deficiencies in data BNSF produced in response to AEP Texas' discovery requests, and (2) diverting attention away from the fact that BNSF did not produce all of the data that AEP Texas requested.

⁸⁹ See AEP Texas Reb. electronic workpaper "TOTAL ROUTE-2001 ORIGINS LOC REBUT.XLS."

⁹⁰ AEP Texas' adjustment is shown in AEP Texas' Op. electronic workpaper file "TOTAL ROUTE-2001 ORIGINS LOC.XLS."

On June 2, 2004, AEP Texas submitted a request for supplemental workpapers relating to BNSF's Reply. Request No. 1 related to the maintenance-of-way portion.⁹¹

At page II-26 of BNSF's Reply, BNSF states, "It is clear, however, that AEP Texas' { }-percent reduction is wrong." Please provide all evidence, studies, and/or analyses upon which BNSF's claim is based. BNSF's charge relates to AEP Texas' seven-percent adjustment used to reconcile the maintenance of way expenses in BNSF's Annual Report Form R-1 ("R-1"), Schedule 410 to the system maintenance of way cost center data provided in discovery.

BNSF responded by referring AEP Texas to a compact disk that BNSF produced in discovery (BNSF/AEPTX/CD 010) and to pages II-25 and II-26 of its Reply and the workpapers cited therein.⁹² However, the documents BNSF referred AEP Texas to does not contain the data responsive to AEP Texas' request. The compact disk referenced by BNSF contains two Excel spreadsheets related to maintenance-of-way and was produced in response to a December 16, 2003 request from AEP Texas that asked for follow-up information regarding discovery that BNSF had previously produced.⁹³ The first spreadsheet, "ROLLUP STRUCTURE.XLS," was produced in response to a follow-up request regarding the reporting structure of BNSF's maintenance-of-way cost centers. The second spreadsheet, "MOW_2001.XLS," was produced in response to a follow-up

⁹¹ See AEP Texas Reb. Workpapers Vol. 1, p. 00015.

⁹² See AEP Texas Reb. Workpapers Vol. 1, pp. 00025 to 29.

⁹³ See AEP Texas Reb. Workpapers Vol. 1, pp. 00002 to 5.

request regarding why the expenses in BNSF spreadsheet “R-1 MOW EXPENSE QUERY 2001.XLS” did not tie to the expenses in BNSF’s 2001 Annual Report Form R-1, Schedule 410 , Line 151, Column F. The expenses in spreadsheet "R-1 MOW EXPENSE QUERY 2001.XLS" equal \$571.6 million while the expenses in BNSF's Annual Report Form R-1, Schedule 410, line 151, Column F, less depreciation (lines 136-138) equal \$594.8 million. BNSF produced the file to explain the \$23.2 million difference “R-1 MOW EXPENSE QUERY 2001.XLS” from the expenses in BNSF's Annual Report Form R-1, Schedule 410. The file was not produced in response to AEP Texas’ request for BNSF to provide the Annual Report Form R-1, Schedule 410 accounts which correspond to each of BNSF’s accounting cost center value.⁹⁴ BNSF objected to and did not produce anything in response to this specific request.⁹⁵

The point here is that the files on the discovery document that BNSF referred AEP Texas to do not pertain to the claim that BNSF makes in its Reply evidence that AEP Texas’ “seven-percent reduction is wrong.” BNSF is attempting to support its claim by referring to data that has no bearing on the issue at hand.

BNSF's reference to pages II-25 and II-26 of its Reply only accentuates BNSF's lack of support for its claim. BNSF claims it would take a “burdensome special study” to prove that AEP Texas’ “seven-percent reduction is wrong.” However, AEP Texas easily explained above just how the reduction was derived and used. BNSF has not

⁹⁴ See AEP Texas Reb. Workpapers Vol. 1, pp. 00002-10.

⁹⁵ See AEP Texas Reb. Workpapers Vol. 1, pp. 00013-14.

shown that AEP Texas' adjustment is inappropriate, and its attempt to discredit AEP Texas' analysis through misdirection and its lack of response to AEP Texas' legitimate workpaper requests should not be accepted.

d. Variability

On page II-26 of its Reply, BNSF argues that AEP Texas' use of BNSF's system average variability percentage for running maintenance-of-way expenses in its line-specific analysis is incorrect. As explained in AEP Texas' Exhibit II-A-91, pages 22 to 30, BNSF's position regarding line-specific variability and road investment is in error, and many of the same faults apply to its position regarding the use of line-specific variability percentages.

The STB correctly noted in *PSCo/Xcel* that URCS variability must be used for joint facility costs: "Because the variability factor calculated for joint facility expenses is an average that applies to all the accounts contained in the group, if one expense item from the group that is more variable than average were removed, the group average for the remaining expense items would decrease." *Id.* at 144. The same issue applies to line-specific maintenance of way variable costs. In fact, the regression applied to joint facilities (URCS Regression No. 2) is based on a group of accounts that include the maintenance of way overhead accounts (URCS, D Table, Lines 114 through 156). The same logic that requires the use of URCS variability for joint facilities therefore requires the use of URCS variability for line-specific maintenance of way variable costs.

e. Time Period of Maintenance-of-Way Data

BNSF criticizes AEP Texas (BNSF Reply at II-23 and II-27) for using only one year of data (*i.e.*, 2001) in its analysis of maintenance-of-way costs. As AEP Texas explained on page 1 of its Opening Exhibit II-A-12, all of the data provided by BNSF in discovery was used. AEP Texas requested MOW data for years 2000 to the present, but BNSF only provided complete data for 2001 and partial data for 2002. AEP Texas cannot be faulted for not reflecting data that BNSF refused to provide.

BNSF produced complete-year line-specific and complete year system-wide data for 2001. For 2002, BNSF produced complete-year line-specific but only partial-year system-wide data.⁹⁶ AEP Texas' analysis of the 2001 actual maintenance of way data produces a valid benchmark against which the results from the SFGT formula were compared. BNSF's 2002 data could not be and therefore was not used to replicate the exercise for the 2002 SFGT results.⁹⁷ However, the high degree of correlation shown for 2001 demonstrates the reliability of the SFGT formula.

f. Summary - Maintenance of Way Costs

AEP Texas has calculated line-specific maintenance-of-way costs by using the SFGT formula and then benchmarking those costs against actual maintenance of way data produced by BNSF in discovery. BNSF did not take issue with AEP Texas' general

⁹⁶ Without the system-wide data, an analysis comparable to 2001 cannot be completed.

⁹⁷ An analysis of the 2002 line specific data is included in AEP Texas Reb. electronic workbook file "TOTAL ROUTE-2002 ORIGINS LOC REBUT.XLS".

approach; rather it attempted to discredit the data that it provided. BNSF has not proven its contentions and its attempt to manipulate the discovery process in order to force the use of system-average maintenance-of-way and structures costs should be rejected. AEP Texas' line-specific analysis of roadway maintenance-of-way costs for the AEP Texas route is the most accurate and should be accepted.

Table II-A-41 below benchmarks the rebuttal SFGT results to the rebuttal actual maintenance-of-way costs.

Table II-A-41 BNSF Maintenance of Way Costs Movements from the PRB Origins to the Oklaunion Station <u>2001 SFGT Results Benchmarked Against Rebuttal Actual BNSF MOW</u>					
<u>Origin Mine</u> (1)	<u>SFGT ¹</u> (2)	<u>Actual MOW ¹</u> (3)	<u>System Average ^{1/}</u> (4)	<u>SGFT as % of System Average ^{2/}</u> (5)	<u>Actual as % of System, Average ^{3/}</u> (6)
1. Buckskin	\$246.30	{ }	{ }	{ }	{ }
2. Caballo Rojo	251.52	{ }	{ }	{ }	{ }
3. Jacobs Ranch	251.09	{ }	{ }	{ }	{ }
4. Black Thunder	250.87	{ }	{ }	{ }	{ }
Source: SFGT from AEP Texas Op. Exhibit II-A-8 and Actual MOW from AEP Texas Reb. Exhibit II-A-90b.					
¹ Dollars per million gross ton-miles. ² Column (2) divided by column (4). ³ Column (3) divided by column (4).					

When BNSF's few valid criticisms are considered, the actual MOW cost per million gross ton-miles is increased only slightly over the costs presented by AEP Texas on Opening. As shown above, the maintenance-of-way costs calculated using the SFGT formula are accurate when compared with BNSF's actual maintenance-of-way costs.

g. Joint Facilities Costs

AEP Texas' position regarding Joint Facilities Costs was explained at pages II-A-28, 34-35 of its Opening Narrative and Exhibit II-A-3, and pages at II-A-34-35 of its Reply Narrative. BNSF covers joint facilities at pages II-14 and 71 to 72 of its Reply Narrative. BNSF used URCS system-average expenses in developing the variable costs for AEP Texas' route of movement.⁹⁸ BNSF's use of system-average costs is contrary to the STB's preference for line-specific costs.

BNSF objects to AEP Texas' application of a variability factor (arguing instead for 100% variability). However, the Board in *PSCo/Xcel* addressed the same issues raised by BNSF herein, and ruled: "Accordingly, the Board rejects BNSF's adjustment and uses the URCS system-average variability percentage of 59.8%." *See PSCo/Xcel* at 145.

⁹⁸ *See* BNSF Op. at II-13.

AEP Texas' use of actual joint facility expenses in its maintenance-of-way line-specific analysis is demonstrably superior to BNSF's use of system-average data. AEP Texas continues to rely on this approach on Rebuttal. The Board should find AEP Texas' joint facility evidence to be the best evidence of record.

6. Locomotive Maintenance Costs

AEP Texas covered locomotive maintenance costs at pages II-37 to 39 of its Opening Narrative, and Exhibit II-A-19, and at pages II-A-63 to 67 of its Reply Narrative, and Exhibit II-A-86. BNSF covers locomotive maintenance at pages II-43 to 51 of its Reply Narrative. AEP Texas reflects each of BNSF's locomotive agreements only for the time periods for which they are effective. BNSF erred by using system-average locomotive maintenance costs in both Opening and Reply.

a. BNSF's Drive Toward System Average Locomotive Maintenance Costs

As with road property, BNSF tactically tries to force the use of system average Locomotive Maintenance Costs. In the past, BN maintained locomotive maintenance and utilization information in its SMD-510 and LCP-003 Reports, respectively. Now BNSF claims that:

BNSF does not maintain data that capture the costs of maintaining any specific locomotive or class of locomotives.⁹⁹

While BNSF states that it no longer maintains its SMD-510 and LCP-003 Reports, it is highly unlikely that BNSF does not maintain data that capture the costs of

⁹⁹ BNSF Reply, at II-43.

maintaining specific locomotives or groups of locomotives. Given that locomotives are among BNSF's most critical operating assets, BNSF records that information in its computers in some form, even if it no longer keeps it in the form of a report on a regular basis. BNSF needs locomotive maintenance information to support its Locomotive Distribution System, its locomotive capital expenditure program, its locomotive shops, and to insure that its locomotive fleet is adequate and mechanically able to support its overall traffic demand.

Rather than attempting to force the Board and AEP Texas to use system average costs for this cost component, BNSF should have furnished actual expenses to the extent BNSF has them. However, because BNSF did not provide any such information, AEP Texas used the locomotive maintenance contracts that BNSF maintains with its equipment providers and maintenance vendors to determine Locomotive Maintenance Costs specific to the AEP Texas service to Oklahoma.

In Exhibit II-A-88, page 19 of 26, AEP Texas shows that the difference between BNSF's system-average and AEP Texas' service-specific costs for Locomotive Maintenance is \$15.91 per carload or \$0.14 per ton. At the jurisdictional threshold level, \$0.14 per ton equates to \$0.25 per ton (that is, \$0.14 times 1.8). On an annual basis, \$0.25 per ton for the 2,723,213 tons of coal that AEP Texas consumes equates to almost \$0.7 million (or almost \$7 million over a 10-year period) just for locomotive maintenance.

On Reply, BNSF criticizes AEP Texas' locomotive maintenance costs in the following four respects:

- a. BNSF claims that “AEP Texas Fails to Account for Non-Routine Locomotive Maintenance Costs” (*see* BNSF Reply at II-44);
- b. BNSF claims that “AEP Texas Fails to Account for Overhaul Expenses” (*see* BNSF Reply at II-45);
- c. BNSF claims that “AEP Texas Misapplies BNSF’s Maintenance Contracts” (*see* BNSF Reply at II-48); and
- d. BNSF claims that “There is No Reason to Expect BNSF’s Maintenance Costs for the Locomotives that Power the Oklaunion Train to be Less than BNSF’s System-Average Maintenance Costs” (*see* BNSF Reply at II-50).

Each of BNSF’s claims is without merit, as shown below.

i. BNSF’s Claim that “AEP Texas Fails to Account for Non-Routine Locomotive Maintenance Costs”

At pages II-44-45 and footnotes 95 and 96 of its Reply, BNSF argues that AEP Texas has not properly accounted for non-routine locomotive maintenance costs because “payments made pursuant to BNSF’s locomotive maintenance contracts account ‘for only routine locomotive maintenance costs.’” AEP Texas anticipated this agreement and fully rebutted it at pages II-A-63 to 67 of its Reply Narrative. BNSF’s charge that AEP Texas did not include non-routine locomotive maintenance costs is simply wrong.

After AEP Texas filed its Reply evidence, the Board issued its decision in *PSCo/Xcel*. In *PSCo/Xcel* (and *TMPA*) the Board rejected the Complainant’s Locomotive Maintenance Costs and accepted BNSF’s argument that “payments made pursuant to BNSF’s locomotive maintenance contracts account ‘for only routine locomotive

maintenance costs.” The problem with this ruling is that while BNSF’s point is true, it is irrelevant. BNSF’s claim assumes that AEP Texas only included locomotive maintenance costs from BNSF’s contracts with its service providers. As AEP Texas shows below, however, AEP Texas included *both* (1) routine locomotive maintenance costs based on BNSF’s contracts with its service providers (*see* AEP Texas Reb. electronic workpaper file “2003 Rebuttal Loco Maint AEPTEX.123”), *and* (2) non-routine locomotive maintenance costs included at the system-average or unadjusted level. It is only the first portion, that is, the routine portion of those costs, that AEP Texas adjusted by the ratio of AEP Texas-specific locomotive maintenance costs to system-average locomotive maintenance costs.

AEP Texas’ Rebuttal Exhibit II-A-134, which involves the 1Q03 movement from Eagle Butte, is typical of all the other variable cost exhibits. Each exhibit covers Locomotive Maintenance Costs in two parts: (a) the GTM part and (b) the LUM part. Below, AEP Texas discusses the GTM part of Locomotive Maintenance costs, but the discussion applies equally to the LUM portion. AEP Texas’ Exhibit II-A-134 will be used to demonstrate AEP Texas’ coverage of non-routine expenses.¹⁰⁰ Each exhibit covers non-routine expenses at the system average level without adjustment at Page 7 of 15, line 6.b.6., All Other Road Opr - GTM.¹⁰¹ Each exhibit covers routine expenses at the

¹⁰⁰ AEP Texas Reply at II-A-64 to 66 also discussed the issue of “non-routine” locomotive maintenance.

¹⁰¹ Note that Line 6.b.6. is derived by removing Total Loco Repairs and Loco Fuel from Line 6.b. Road Operations. Line 6.b.6. includes non-routine locomotive repairs.

system average level at Page 7 of 15, lines 6.b.4. Total Loco Repairs - GTM. Each exhibit adjusts routine expenses from Line 6.b.4. at Line 6.d.

Page 7 of 15 of Exhibit II-A-134, line 6.b., Road Operations expenses are recorded in URCS core number D3L191C10, that is, Work Table (“WT”) D3, Part 1, Line 191, C10. This sum in URCS is calculated by adding the distinct expense components of Total Road Operations from Lines 101, C10 through Line 190, C10. Locomotive Equipment Damaged expenses from WT D3, Part 1, Line 136, C10 are included in this range, and thus are included in Line 6.b. Road Operations. *See* AEP Texas Rebuttal electronic workpaper file “BNSF_03.zip” which is the BNSF URCS run for 2003 developed by AEP Texas.¹⁰² The next 4 lines, Lines 6.b.1 through 6.b.4, separate out the routine portion of Locomotive Repairs for later adjustment at Line 6.d. Tracing through Line 6.b. shows that Locomotive Equipment Damaged from WT D3, Part 1, Line 136, C10 is never eliminated from the GTM costs and it is never adjusted, thus proving that BNSF is wrong when it charges that AEP Texas has not included non-routine costs in Locomotive Maintenance Costs.

D3L136C10, non-routine maintenance costs¹⁰³ are recorded in the Board’s Uniform System of Accounts (USOA) as “Equipment Damaged,” not as “Repair and

¹⁰² *See* AEP Texas Op. electronic workpaper files “BNSF00.UR2”, “BNSF01.UR2” and “BNSF02.UR2” which are the Board’s official BNSF URCS runs for 2000, 2001, and 2002.

¹⁰³ Non-routine maintenance costs include such items as costs incurred due to wrecks, derailments, vandalism, abuse, or running out of fuel. Those non-routine maintenance costs are included by AEP Texas on an URCS system average basis, the same way they were treated by BNSF.

Maintenance.” *See* AEP Texas Reply at II-A-65, n.65. When the USOA was revised by the ICC effective January 1, 1978, one of the primary purposes was to allow for a more precise identification of expenses for costing purposes. Within this revision was a subdivision of equipment repairs among maintenance, the repair of damaged equipment and train inspection and lubrication.¹⁰⁴ Repair and Maintenance expenses are included in sub-function “41” in the USOA while Damaged Equipment is included as sub-function “48.” Damaged Equipment expenses are recorded in line 204 of Schedule 410 in the Annual Report Form ACAA - R1. Section 3 (b)(2)(48) of 49 CFR Part 1201 sub-function “48” defines Equipment Damaged to include non-routine Locomotive Maintenance.¹⁰⁵ As such, while “non-routine” locomotive maintenance costs are not covered by BNSF’s locomotive maintenance agreements, those “non-routine” costs are included in AEP Texas’ Locomotive Repair Costs.

Thus, AEP Texas and BNSF both used system average data for non-routine locomotive maintenance costs. BNSF erred in its treatment of routine, not non-routine, locomotive maintenance costs by using system-average locomotive maintenance costs when BNSF’s own records showed that service-specific locomotive maintenance costs were significantly lower.

¹⁰⁴ *See* 49 CFR Part 1200 to End, Revised as of October 1, 2002, Part 1201, Operating Expense Accounts-Conversion Table, page 131, “Locomotive Repairs”, included as AEP Texas Reb. Workpapers Vol. 1, p. 00190.

¹⁰⁵ *See* 49 CFR Part 1200 to End, Revised as of October 1, 2002, Part 1201, page 99, included as AEP Texas Reb. Workpapers Vol. 1, p. 00189.

BNSF also claims that AEP Texas has excluded certain compensation items not covered by BNSF's agreements with its service providers. BNSF characterizes its agreements {

}. (See BNSF Reply at II-44 to 45, n.97). To support this position BNSF includes Reply Workpapers Vol. I, pp. II.A-0047 to 48. These workpapers are two non-consecutive pages from a maintenance agreement covering a specific group of locomotives {

}¹⁰⁶ The maintenance agreement was not

¹⁰⁶ See AEP Texas Reb. electronic workpaper file "Oakway Loco use.xls."

included in AEP Texas' Opening or Reply workpapers because it was not provided to AEP Texas in discovery.

Even if the Oakway units had been used more frequently in AEP Texas service, BNSF's charge regarding unreimbursed costs would still have been wrong. To support its claim BNSF's Reply (page II-45, n.97), refers to Section 6.B(1) of an EMD agreement with BN to maintain certain locomotives made available to BN by Oakway.

{

}

On June 2, 2004, AEP Texas submitted a second request for supplemental workpapers relating to BNSF's Reply evidence that a requested all of the pages of the agreement from which BNSF's Reply workpapers Vol. I, pp. II.A-0047 to 48 were taken. The contract pages received in response to this request are identified as BNSF.RP.SUPP.WP.II.A-001 to 011.¹⁰⁷ BNSF supplemental workpaper BNSF.RP.SUPP.WP.II.A-005 includes Section 6.B(3) on page 5 of the contract, which includes {

¹⁰⁷ These supplemental workpapers are included herein as AEP Texas Reb. Workpapers Vol. 1, pp. 00191-201.

}

{

}.¹⁰⁸ Thus, BNSF

has not produced any evidence that supports its claim of unreimbursed labor costs applicable to locomotives in AEP Texas service.

The last category of expenses that BNSF claimed was un-reimbursed under the locomotive maintenance agreements is “facilities.” *See* BNSF Reply at II-44. BNSF provides no Reply discussion of this claim, so AEP Texas can only speculate regarding the basis of BNSF’s objection.

The original source of the expense for “Loco Shop Repair” is included in URCS WT D3, Part 1, Line 111, C3 is “Shop Buildings - Locomotives,” line 28 of Schedule 410, Annual Report Form R-1. The GTM and LUM portions of this expense, columns 10 and 20 respectively, are included in the total expense calculated for Road

¹⁰⁸ *See* Resource Agreement included as AEP Texas Op. Workpapers Vol. 6, pp. 02758 to 2760, 02560 to 2561, 02886 to 2887, and 02614 to 2616 as examples of labor additions.

Operations in WT D3, Part 1, Line 191, C 10 and C 20. The inclusion of the GTM portion of the cost from WT D3, Part 1, Line 191, C 10 in Page 7 of 15 of AEP Texas Reb. Exhibit II-A-134 was discussed previously in this section. The expenses related to locomotive repair facilities are included in AEP Texas' variable cost calculations on a system-average level. AEP Texas has not adjusted this category of locomotive maintenance cost.

iii. BNSF's Claim that "AEP Texas Fails to Account for Overhaul Expenses"

BNSF also charges that labor costs associated with overhauls are not covered in AEP Texas' evidence. *See* BNSF Reply at II-45, n.97 and BNSF Reply Workpapers Vol. I, pp. II-0037, 0042. The locomotives referenced in Workpaper.II-0037 are those covered by the Fourth Amendment to the EMD agreement and are referred to by BNSF as Group 2 locomotives. The locomotives referenced in Workpaper II-0042 are those covered by the Fifth Amendment and are referred to by BNSF as Group 3 locomotives. Both of these locomotive groups are covered by the following language:

{

}

See BNSF Reply Workpapers Vol. I, pp. II.A-0037, 42. AEP Texas' Reply electronic workpaper "MAC payments 00 - 03.xls", Tab "Payments" (which is also included as

BNSF Reply Workpapers Vol. I, pp. II.A-0049 to 50) lists all payments by BNSF to EMD for the SD70MAC's. {

}, which means that no overhauls were performed on those locomotives for years 2000 through 2003.

For the Group 1 locomotives, the {

}. But recall that AEP Texas' Locomotive Maintenance Costs were based on the locomotive maintenance agreements for any time period for which the locomotive maintenance agreements were in effect, and on system average for any period during which a locomotive maintenance agreement was not in effect. Therefore, locomotive overhauls for Group 1 locomotives during the interim period 2002 through March of 2003 were covered under AEP Texas' (and BNSF's) system average locomotive maintenance costs. *See e.g.*, AEP Texas Op.

Exhibit II-A-19, at 2, Column 13, showing that AEP Texas applied system average costs to all non-agreement locomotives.¹⁰⁹

Regarding the Group 1 locomotives for the time periods for which the T&MS/Alstom Agreement was in effect, AEP Texas has included the overhaul costs on an actual cost basis as is set out in AEP Texas Reply electronic workpaper “MAC payments 00 - 03.xls,” Tab “Payments.”¹¹⁰

At page II-45 of its Reply, BNSF misleadingly states:

¹⁰⁹ AEP Texas submitted Exhibit II-A-19 on Opening. On Reply, AEP Texas submitted Restated Exhibit II-A-19 as electronic file “2000 [through 2003] Reply Loco Maint AEPTEX.123” so as to place into the record new Locomotive Maintenance Costs reflecting the agreed T&O and the use of the newly available 2003 BNSF URCS. On Rebuttal, AEP Texas is re-submitting Restated Exhibit II-A-19 as electronic file “2000 [through 2003] Rebuttal Loco Maint AEPTEX.123” so as to place into the record a more descriptive source coding in Column (2) of each year’s data. In Exhibit II-A-19, each page represents an individual year on Sheet A of the electronic file. The calculations on Sheet A are supported by further calculations on Sheet B. Previously, the source codes in Column (2) of Sheet A had not made that clear. For example, Restated Exhibit II-A-19, page 2 of 4, Line 1, Column (2) lists “1/Column (2).” “1/Column (2)” comes from Sheet B, footnote 1, Column (2) which is the agreed upon round trip miles.

¹¹⁰ See AEP Texas Op. electronic workpaper file “2001 LOCO MAINT AEPTEX.123,” Tab “B,” cell G204. This same calculation was also included in AEP Texas’ Reply and Rebuttal electronic workpapers.

AEP Texas purports to have included overhaul costs for each locomotive used in Oklahoma service by spreading the cost of the overhaul over the miles the locomotive was utilized in the year that AEP Texas estimated that the unit would have been overhauled. The problem with this approach is it produces substantial swings in locomotive maintenance costs.

Locomotives that AEP Texas calculates as having maintenance costs that are on average 56 percent of system-average in 2001 and 2003 are over 300¹¹¹ percent of system-average in 2002 when AEP Texas estimates that they are overhauled. To avoid these wild fluctuations, URCS normalizes locomotive repair costs over a three-year period to reflect a longer maintenance cycle.

BNSF's statement is misleading on several counts. First, AEP Texas did not use an estimate of the timing of overhauls for any of the SD70MAC's, and those locomotives account for greater than { } of the locomotives used in Oklahoma service.¹¹² AEP Texas Op. Exhibit II-A-19 showed the estimated timing calculations for all locomotives, but only used the estimates for those locomotives for which no actual overhaul data was provided by BNSF. For the SD70MACs, AEP Texas based its overhaul costs on the actual costs and the actual timing of overhaul occurrences reported in BNSF Reply Workpapers Vol. I, pp. II.A-0049-50. There was no need to estimate when overhauls occur for these locomotives, while again rebutted { } of the

¹¹¹ In 2002, these locomotives represented { } of total hours.

¹¹² See AEP Texas Opening Exhibit II-A-19 for 2001, line 10, which shows that SD70MAC's locomotive hours in Oklahoma service were { } of the total. Also see AEP Texas Reply Restated Exhibit II-A-19 included in electronic files "2001 Reply Loco Maint AEPTEX.123", "2002 Reply Loco Maint AEPTEX.123", and "2003 Reply Loco Maint AEPTEX.123."

locomotives used in Oklaunion service. For the other { } of locomotives used in Oklaunion service, AEP Texas estimated the year of overhaul because BNSF did not provide any evidence of overhaul year even though BNSF's databases record that information. In order to estimate the year of overhaul, AEP Texas used the Oklaunion service-specific T&O characteristics, not the utilization of those locomotives in all other coal services for which these same locomotives may be called upon, because the utilization of these locomotives while they are being used in other services is not relevant to the locomotive overhaul cost for the Oklaunion service.

In regard to the SD70MAC locomotives under the EMD T&MS agreement, BNSF, criticized AEP Texas for understating overhaul costs by allegedly overstating the number of locomotive miles per month in 2001:

As the actual miles utilized were less than the guaranteed miles, dividing the overhaul cost by the higher guaranteed mileage produces a lower overhaul cost per mile that, when applied to the actual miles in Oklaunion service, results in understated variable costs for AEP Texas. This error alone reduced overhaul costs from the SD70MAC locomotives from { } per LUM to approximately { } per LUM- an 82 percent reduction.

See BNSF Reply at II-47. BNSF's contention is wrong and mathematically incorrect. First, BNSF bases its position on AEP Texas' Opening evidence where the average miles per month were slightly less than the minimum miles used in the calculation of the overhaul cost per LUM, { } miles, respectively. (See AEP Texas Op. Exhibit II-A-19, Line 4.) Using the minimum miles per month would

BNSF Reply (at II-46 and II-47) stresses the calculation of the estimated year of overhaul for the Group 2 and Group 3 locomotives covered by the Fourth and Fifth Amendments. BNSF's comments are wrong and irrelevant because AEP Texas based the timing of the overhaul occurrences on BNSF Reply Workpapers Vol. I, pp. II.A-0049-50, which reported actual as opposed to estimated occurrences for the SD70MACs. It makes no sense to estimate that timing when BNSF's workpapers provided AEP Texas with the actual timing. On page II-46, BNSF states,

Under this approach the 209 Alliance Pool SD70MAC locomotives that are covered by the Fourth Amendment would have been overhauled in { }. But AEP Texas included no overhaul costs for these units.

AEP Texas did not include these overhaul costs because BNSF Reply Workpapers Vol I, pp. II.A-0049 to 50 showed that no overhaul costs actually were incurred.

Second, BNSF's statement is misleading in that it never cites AEP Texas' exhibits and calculations. Instead it refers only to BNSF's calculations. At page II-45, of its Reply, BNSF claims that AEP Texas used maintenance costs as a percent of system-average of 56%, 300%, and 56% for 2001, 2002, and 2003, respectively.¹¹⁵ AEP Texas' Exhibit II-A-19 shows that AEP Texas actually used 102%, 80%, and 75% for 2001, 2002, and 2003, respectively. BNSF's calculations illustrate how inappropriate it is to include overhauls even though they were not actually performed.

¹¹⁵ The percents BNSF quoted are for individual groups of C44-9s, not the overall percents for all locomotive types.

Third, BNSF's statement at page II-45 of its Reply (that is, "To avoid these wild fluctuations, URCS normalizes locomotive repair costs over a three-year period to reflect a longer maintenance cycle") is misleading because it ignores Board precedent regarding the proper accounting for overhaul expenditures and it ignores that fact that AEP Texas has determined Oklahoma-specific locomotive maintenance costs, rather than using URCS system-average costs as BNSF did. Furthermore, AEP Texas included locomotive maintenance costs for four years, one year longer than URCS normalization cycle.

AEP Texas' procedure is not inconsistent with URCS because the expense included in URCS for direct locomotive repairs is replaced by the amount developed from the maintenance contracts. The basis upon which the URCS direct locomotive repair cost is computed is replaced by the special study results. The STB's position on including overhauls in the year they actually occur was clearly stated in its 1977 *APS* decision as follows:

We agree with Arizona that the variable cost associated with the overhaul of locomotives should only be included in the year the maintenance takes place. Santa Fe's procedure is contrary to the procedure used to develop URCS variable costs, which records expenses when they occur.¹¹⁶

Neither does BNSF acknowledge that AEP Texas has applied its procedure consistently even when it produces locomotive maintenance costs greater than system average. BNSF Reply Workpapers Vol. I, pp. II.A-0049 to 50 showed that some of the

¹¹⁶ See *APS*, 2 STB at 425.

Group 1 locomotives, *i.e.*, those subject to the T&MS agreement, were overhauled in 2001. That these overhauls occurred is shown on the OH (that is, overhaul) line and in the note on page II.A-0050 that shows that when { } SD70MAC locomotives under the T & MS agreement were overhauled BNSF invoiced EMD { } for overhaul labor. AEP Texas' Exhibit II-A-19, page 2 of 4, Column (10) shows that the ratio of Oklahoma-specific to system average locomotive maintenance costs was { } for the year 2001.

**iii. BNSF's Claim that "AEP Texas
Misapplies BNSF's Maintenance Contracts"**

At pages II-48 to 50 of its Reply, BNSF argues that the maintenance cost per mile for the SD70MAC locomotives covered by the EMD agreements should have been calculated by dividing the payments made to EMD by the miles recorded by BNSF. BNSF bases this argument on information in its Reply Workpapers Vol. I, pp. II-A-0052 to 55 that shows that the 2000 through 2003 average miles per month for all locomotives (not just those in AEP Texas service) under the 4th and 5th Amendments to the EMD agreement was between { } miles. These workpapers also show that the 2000 through 2003 average miles per month for all locomotives (not just those in AEP Texas service) under the T&MS/Alstom Agreement was between { } miles. BNSF contends that the actual SD70MAC miles in all services, rather than the actual SD70MAC miles in AEP Texas service (which are greater than { } miles per month), should be used to determine the payments made under these amendments. AEP Texas disagrees and believes that the movement-specific miles are the more appropriate.

AEP Texas showed that locomotives used by BNSF in AEP Texas coal service have a higher utilization than the system average utilization. *See* AEP Texas Reply at II-A-67. In addition, locomotives in AEP Texas service have a higher level of utilization than the SD70MAC locomotives under the 4th and 5th Amendments used in all services. This is illustrated by BNSF's own data, which purports to show that the average monthly mileage for these locomotives was { } miles in 2002 compared with AEP Texas' locomotives' { } miles per month.¹¹⁷

iv. BNSF's Claim that "There is No Reason to Expect BNSF's Maintenance Costs for the Locomotives that Power the Oklaunion Trains to be Less than BNSF's System-Average Maintenance Costs"

BNSF claims at pages II-50 to 51 of its Reply that one should not expect locomotive maintenance costs for the Oklaunion-train locomotives to be less than system-average, but AEP Texas shows below that even BNSF's own data disprove BNSF's claim.

BNSF's claim responds to (1) AEP Texas' position that using AC locomotives results in lower maintenance costs than the older DC locomotives, and (2) AEP Texas' position that the average age of the locomotives used in AEP Texas service is only { } (see AEP Texas

¹¹⁷ *See* Restated Exhibit II-A-19, p. 3, line 4 included as AEP Texas Reb. electronic workpaper file "2002 Rebuttal Loco Maint AEPTEX.123."

Reply at II-A-43), leading to the expectation that maintenance costs should be lower for the AEP Texas' specific locomotives.

BNSF states p. II-50 of its Reply:

After an overhaul, a locomotive should operate like new. Therefore, assuming that age indicates a unit's reliability, a new locomotive used on Oklahoma Union trains should generally have the same reliability as average seven-year-old locomotives, because the average system unit would have just been overhauled.

BNSF misses the point. First, BNSF provided no evidence that older locomotives are as reliable as newer locomotives in spite of the fact that machinery of any kind becomes more costly to maintain as it ages. Second, BNSF compares newer locomotives to

{

}. Third, BNSF speaks of the unit's reliability, but Locomotive Maintenance Cost, not reliability, is the issue here. Because BNSF used system average locomotive maintenance costs, including the maintenance costs of DC locomotives and of way freight locomotives, BNSF has not addressed the difference between older locomotives used in sporadic service versus newer coal pool locomotives used in steady, repetitive unit train service. A proper comparison would also have to consider other factors such as the AEP Texas vs. system average tons per train and the AEP Texas vs. system average length of haul per train. BNSF has presented no evidence to illustrate this comparison. AEP Texas presents this evidence in Table II-A-42 below:

Table II-A-42

Comparison of Statistics Oklaunion Trains vs. BNSF System Average - 2002

<u>Item</u>	<u>Source</u>	<u>BNSF System 2002 ^{1/}</u>	<u>AEP Texas Trains 2002 ^{2/}</u>
(1)	(2)	(3)	(4)
1. Loco Unit Miles (000)	A1L108C01	420,527	
2. Train-Miles (000)	A1L104C01	145,232	
3. Locos Per Train	L1 / L2	2.90	{ }
4. Gross Ton-Miles (000)	A1L122C01	872,837,824	
5. Gross Tons Per Train	L4 / L2	6,010	{ }
6. Car Miles (000)	A1L114C01	9,178,935	
7. Cars Per Train	L6 / L2	63.2	{ }
8. Tons Per Car	L4 / L6	95.1	{ }
9. Tons Revenue Freight (000)	A1L124C01	497,145	
10. RTM's - Road (000)	Sch 755, L.108	488,330,590	
11. Miles - One Way	L10 / L9	982.3	{ }
12. GTM's Per Train	L5*L11	5,903,623	16,541,340

¹ Source: STB's BNSF 2002 URCS, "BNSF02.UR2" and BNSF R-1-2002.

² Source: Jacobs Ranch trains 4Q02, AEP Texas' Reply Exhibit II-A-84, page 12 of 23.

The dramatic differences between system-average train characteristics and Oklaunion train characteristics suggest that BNSF is wrong to base Oklaunion Locomotive Maintenance Costs on system-average trains bearing no resemblance to Oklaunion trains. As an example, BNSF bases its locomotive maintenance costs on the system-average trains moving 6 million GTM's per train and then applies that cost to Oklaunion trains moving 16.5 million GTM's per train. (See Line 12 of Table II-A-42).

Each of these statistics confirm AEP Texas' expectation and proves that AEP Texas is correct to expect efficiencies in maintenance costs for the locomotive and the Oklahoma Union trains. The AEP Texas trains are longer and heavier, and are powered by more locomotives. AEP Texas' quantitative locomotive maintenance cost comparison based on service-specific maintenance costs is "demonstrably superior" to the qualitative comparison proffered by BNSF. On balance, one would expect AEP Texas-specific locomotive maintenance costs to be less than system-average locomotive maintenance costs.

Finally, BNSF states at pages II-50 to 51 of its Reply that, "AEP Texas has presented no evidence that any alleged higher utilization results in maintenance costs that are lower than system-average." On the contrary, AEP Texas did show that higher utilization impacts the maintenance costs of locomotives. BNSF's maintenance contracts include stratified maintenance charges per mile that decrease as the monthly mileage increases (*see e.g.*, BNSF Reply Workpaper Vol. I, p. II.A-0041). The Board may deduce directly from BNSF's locomotive maintenance contracts with BNSF's locomotive maintenance providers that as utilization increases, locomotive maintenance costs decrease on a per service unit basis.

v. **Summary - Locomotive Maintenance Costs**

In summary, as with other cost components, BNSF has spread system-average locomotive maintenance costs over system-average service units, whereas AEP Texas has spread AEP Texas train-specific locomotive maintenance costs over AEP

Texas train-specific service units. AEP Texas' locomotive maintenance costs are "demonstrably superior" to BNSF's, and the Board should accept AEP Texas' locomotive maintenance costs as the best evidence of record.

7. Crew Wage Costs

On Opening and Reply, AEP Texas' calculated crew wage costs in reliance on BNSF payroll data provided in discovery,¹¹⁸ as well as sample Train Activity Reports (TAR's) collected at BNSF's Alliance, NE and Gillette, WY stations.¹¹⁹ In contrast, BNSF originally presented crew wage costs developed on an URCS system average basis. On Reply, BNSF restated its crew wage expenses on a service-specific basis. BNSF's service-specific crew wage costs should have been submitted on Opening as part of its case in chief. Because of this, AEP Texas reserves the right to respond to any new evidence that BNSF may submit on in Rebuttal.

BNSF's Reply accepted much of AEP Texas' Opening special study wages, with the following exceptions:¹²⁰

- BNSF developed its own flawed non train-related mark-up ratio;

¹¹⁸ BNSF crew wage payroll data received in Discovery on BNSF/AEPTX/TAPE 127 and BNSF/AEPTX/TAPE 128. See AEP Texas Op. electronic workpaper file "AEPTX Full Wages.Zip."

¹¹⁹ See AEP Texas Op. Workpapers Vol. 8, pp. 03946-04871.

¹²⁰ See BNSF Reply at II-52.

- BNSF included crew wages for loading crews at Black Thunder Mine;
- BNSF failed to adjust the crew wage data for obviously erroneous payroll records;
- BNSF arbitrarily used wages from another mine as a surrogate for shipments originating at Rawhide mine, rather than using actual data where available and average wages by crew district where wage data was incomplete; and
- BNSF included payments related to the Productivity Fund Agreement with the UTU.

These five discrepancies, discussed in greater depth below, result in a significant overstatement of the variable crew wage expenses for the Oklaunion trains. It must also be noted that BNSF's use of URCS system averages to develop crew wages on Opening results in our wage expenses that far exceeds those incurred in unit train service. This overstatement is illustrated, by origin mine and quarter, in Table II-A-43 below.

Table II-A-43
Comparison of Crew Wage Expenses
BNSF Opening, AEP Texas Opening, and BNSF Reply
Wages per Train, by Origin Mine and Quarter

<u>Mine</u> (1)	<u>Qtr.</u> (2)	<u>BNSF Opening</u> (3)	<u>AEP Texas Opening and Reply</u> (4)	<u>BNSF Reply</u> (5)	<u>Reply Difference BNSF vs. AEP Texas Amount</u> (6)	<u>%</u> (7)
Black Thunder	2Q02	{ }	{ }	{ }	{ }	{ }
	3Q02	{ }	{ }	{ }	{ }	{ }
	4Q02	{ }	{ }	{ }	{ }	{ }
Caballo	3Q02	n/a ^{1/}	{ }	{ }	{ }	{ }
	4Q02	n/a ^{1/}	{ }	{ }	{ }	{ }
	1Q03	n/a ^{1/}	{ }	{ } ^{2/}	{ }	{ }
Caballo Rojo	2Q03	n/a ^{1/}	{ }	{ }	{ }	{ }
Cordero	2Q03	n/a ^{1/}	{ }	{ }	{ }	{ }
Eagle Butte	1Q03	{ }	{ }	{ }	{ }	{ }
	2Q03	{ }	{ }	{ }	{ }	{ }
Jacobs Ranch	1Q02	{ }	{ }	{ }	{ }	{ }
	3Q02	{ }	{ }	{ }	{ }	{ }
	4Q02	{ }	{ }	{ }	{ }	{ }
N. Rochelle	3Q02	n/a ^{1/}	{ }	{ }	{ }	{ }
Rawhide	1Q02	n/a ^{1/}	{ }	{ }	{ }	{ }
	2Q02	n/a ^{1/}	{ }	n/a ^{1/}	n/a	n/a
	3Q02	n/a ^{1/}	{ }	n/a ^{1/}	n/a	n/a
	4Q02	n/a ^{1/}	{ }	n/a ^{1/}	n/a	n/a
	1Q03	n/a ^{1/}	{ }	{ }	{ }	{ }
	2Q03	n/a ^{1/}	{ }	n/a ^{1/}	n/a	n/a

¹ BNSF did not present variable cost evidence for trains originating at these mines.

² BNSF shows these costs in 2Q03.

At page II-12 of its Reply, BNSF implies that AEP Texas costs reflect incorrect crew districts, stating that “AEP Texas misidentified, however, the starting point of the first crew district as ‘PRB mine origins’ and the ending point of the last crew district as ‘Oklaunion.’ While AEP Texas’ narrative description of the crew districts did indeed misstate the origin and end points of the crew districts,¹²¹ its variable cost evidence does not. The variable cost evidence reflects the crew districts as identified by BNSF, including the correct origin and end points.

a. BNSF Developed Its Own Flawed Non-Train-related Mark-up Ratio

BNSF and AEP Texas differ in the development of the non-train related mark-up on four points: (a) the development of a service-specific mark-up; (b) the wage data time period for the 2003 mark-up; (c) consolidation of the brakeman occupation codes 04 and 05; and (d) engineer guarantees in 2003.

i. The Development of a Service-specific Mark-up

On Opening, AEP Texas developed the non-train related mark-up percent consistent with the methodology repeatedly accepted by the STB.¹²² In its Reply, however, BNSF attempts to modify this methodology by developing separate non-train related mark-up ratios for each different type of service. The Board accepted this “separate non-train related mark up” ratio procedure for the first time in *PSCo/Xcel*. AEP

¹²¹ See AEP Texas Op. at II-A-26 to 27.

¹²² See *TMPA*, at 60.

Texas respectfully submits that the Board erred on this issue in *PSCo/Xcel*, as BNSF's approach is severely flawed.

BNSF's methodology yields drastically skewed and incorrect results due to the restricted sample size resulting from the attempted segregation of non-train related wages by service type, the allocation of the same non-train related wages multiple times to multiple service types, and its inability to either isolate the service specific constructive allowances or to relate them solely to the service to which they apply.

BNSF claims its methodology is more accurate and develops the mark-up ratio to reflect constructives paid only for a specific type of service. BNSF argues that AEP Texas' development of a single mark-up ratio for each occupation is "flawed" and "not specific to the crew wages to which they are applied."¹²³ As an example, BNSF states that AEP Texas' "mark-up for engineers is based on the combination of non-train related wages paid to all engineers, regardless of whether the engineer worked a loading, helper, and/or road crew."¹²⁴ BNSF fails to state, however, that its own "service specific" data contains significant payments for activity related to service other than the service for which the mark-up is calculated. For example, less than 20% of the records in the loading crew data base actually relate to loading crews.¹²⁵ The vast majority of the records and

¹²³ See BNSF Reply at II-53.

¹²⁴ *Id.*

¹²⁵ See loading crew wage files "rolodall02", "splodall02" and "yalodall02" in AEP Texas Reb. electronic workpaper file "fullwage2002.zip." Data extracted using queries "rebuttal loading crew data only by occ & train road," "rebuttal loading crew data only by occ & train spcl," and "rebuttal loading crew data only by occ & train yard" and imported

payments used to develop the non-train related mark-up percent for loading crews relate to linehaul movement of unit coal trains (approximately 40%), while the remainder of the records are payments for deadhead moves, helpers (8%), and other manifest train and yard activity.¹²⁶ The mark-up BNSF applies to loading crews is not the result of work performed solely by loading crews, as BNSF implies.¹²⁷ This is further illustrated in the BNSF loading crew mark-up calculation.¹²⁸ Although BNSF's payroll records show that not one single crew member working on a loading crew claimed payment for CA Code 30-Held Away from Home Terminal, BNSF's calculation of the loading crew mark-up ratio includes over { } in payments for this CA Code, overstating its "service-specific" mark-up ratio by { }.¹²⁹

Because BNSF's payroll system fails to assign each non-train related payment to specific train symbols, BNSF's approach to developing service-specific mark-ups is flawed. Whereas some constructive allowance payments are associated with payroll records for specific trains, others are paid under "catchall" train symbols, such as "YCLMSET" or "90010," and cannot be identified as relating to loading crew activity.

into "Rebuttal - loading crew payroll records by train id.xls."

¹²⁶ *Id.*

¹²⁷ See BNSF loading crew payroll data in AEP Texas Opening Electronic Workpaper "AEPTX Full Wages 2002.mdb," tables "roloall02," "sploall02," and "yaloall02."

¹²⁸ See BNSF Reply Electronic Workpaper "aep tx.bnsf markup 2002.xls," at Tab "SMOCCALC."

¹²⁹ *Id.*

For this reason, BNSF must include the payments for the other service types in its “service-specific” calculation, and therefore cannot present a mark-up ratio that relates to the specific service.

BNSF’s methodology assumes a uniformity in the application of the non-train related constructive allowance payments. If each constructive allowance related uniformly to the train related wages, then mathematically BNSF’s methodology is acceptable. However, this is not always the case. AEP Texas Rebuttal Exhibit II-A-95, at 1 illustrates the mathematical application of BNSF’s methodology to a hypothetical “sample” of wages, calculating the mark-up for only one constructive allowance -- vacations. As vacation payments are paid to all employees in all service types, development of separate mark-up ratios by service type is acceptable, as the amount paid to the employee relates to his gross earning so the relationship to a subset of earnings remains the same. AEP Reb. Exhibit II-A-95, at 1, illustrates that for constructive allowances like vacations, which are paid to employees regardless of the type of service they are in, BNSF’s methodology calculating separate mark-ups by service type will return the correct number.

BNSF’s methodology, however, distorts the constructive allowance payment allocation for constructive allowances that are not universal, but rather apply to specific types of service or operations. This is illustrated by applying BNSF’s methodology to the allocation of deadhead pay.

Deadhead pay is paid as a constructive allowance generally to road crews ordered to reposition to a terminal “separate and apart.” In these instances, it is more economical for the railroad to deadhead the employee “separate and apart” and pay him only one basic day’s pay than in “combined service,” where the deadhead miles are added to the worked miles and the employee is paid for the total miles traveled, deadhead and worked.¹³⁰

Generally, only crews working in through freight or unit train service will earn deadhead pay as a constructive allowance (“separate and apart” deadhead) since the other three types of service typically go on and off duty at the same terminal and earn wages based on time, not miles. To develop a service-specific mark-up, this constructive allowance needs to be isolated from the wage sample and applied only to the service to which it relates: road crews. BNSF’s methodology, however, fails to do this and instead distorts the allocation of this wages payment by failing to exclude the wage payments for other service types from its “service-specific” calculation.

AEP Texas’ Rebuttal Exhibit II-A-95, page 2 of 3, establishes the hypothetical earnings of 5 employees and shows an amount earned by each, hypothetically, for deadhead pay. For this example, AEP Texas assumed that deadhead pay is only related to road crew service (as discussed above), and for simplicity sake

¹³⁰ Deadheading in combined service is more economical for the railroad when the deadhead distance is less than the basic day’s miles, or a basic day’s pay. This type of deadhead pay is captured in the employee’s regular straight time and overtime wages and not identified as a separate constructive allowance payment and therefore not included in the non-train related mark-up ratio.

calculated it to be 10% of the train related wages. Note that, in this example, the overall blended deadhead percent is 3.69%. Utilizing BNSF's methodology to calculate the non-train related mark-up percent for deadhead pay alone, by service type, results in an inaccurate calculation of deadhead pay, as illustrated in Exhibit II-A-95, page 2 of 3.

In the example in Exhibit II-A-95, page 2 of 3, because BNSF is not able to segregate the constructive allowance deadhead amount, applying BNSF's methodology results in an understatement of the deadhead pay allocation by 5.5%. AEP Texas' methodology, developing a blended mark-up to reflect the fact that train and engine service employees work in more than one type of service, yields an accurate result. The flaw in BNSF's methodology resulting from the distortion of the constructive allowance allocation is detailed further in Exhibit II-A-95, page 3 of 3.

Exhibit II-A-95, page 3 of 3, restates the calculation of the deadhead mark-up ratio shown above by altering the distribution of trips by type of service. Note that in this final example, BNSF's methodology is skewed in the opposite direction, overstating the ratio of deadhead wages to total train related wages by 2.1%, while AEP Texas' methodology once again yields an accurate result.

Regardless of the mix of trips, AEP Texas' methodology always returns the correct constructive allowance payment. Because BNSF's methodology attempts to calculate separate mark-ups by service type, it improperly allocates the constructive allowance payment to base wages to which they bear no relationship. AEP Texas' mark-up calculation is demonstrably superior.

ii. Wage Data Time Period for the 2003 Mark-up

On Opening, AEP Texas developed the non-train related mark-up for 2003 wages based on the full wages file for 2003 provided by BNSF in discovery,¹³¹ which contained payroll records for all BNSF employees having worked an Oklaunion train during the first six months of 2003. On Rebuttal, AEP Texas restates the calculated non-train related mark-up to present data for the twelve months ending June, 2003 by adding wages for July through December from the 2002 full wages file for all employees who worked on Oklaunion trains in the first six months of 2003.¹³² This responds to BNSF's Reply objection (at II-54) regarding AEP Texas' failure to normalize cyclical payments such as vacations, and improves upon BNSF's calculation by making full use of the latest available wage data. To accomplish its normalization, BNSF erroneously assumed that the full year 2002 data could be used as an approximation of year 2003 mark-ups.

¹³¹ See AEP Texas Op. electronic workpaper file "AEPTX Full Wages.zip."

¹³² See AEP Texas Reb. electronic workpaper file "Rebuttal-Mark-ups, 2003 total data.xls."

iii. Consolidation of the Brakeman Occupation Codes 04 and 05

In its Reply evidence, BNSF combines payments for Occupation Codes 04 and 05.¹³³ BNSF's description of occupation codes, provided in discovery,¹³⁴ clearly shows that code 04 is used to capture wages for "Road-Rear Brakeman," "Road-Conductor-Trainee," "Road-Trainman-Trainee," and "Special-Guarantee-Brakeman." These wage payments are different from those captured under occupation code 05, identified as "Road-Head-Brakeman." AEP Texas' process, developing the separate mark-up for each of these occupation codes, is more accurate.

iv. Engineer Guarantees in 2003

On Opening, AEP Texas inadvertently omitted payments made to Occupation Code 00 - Engineer Guarantees, from the non-train related mark-up calculation. AEP Texas corrects this oversight on Rebuttal.¹³⁵

¹³³ See BNSF Reply Electronic workpaper file "aeptx.bnsf markup 2002.xls".

¹³⁴ See AEP Texas Reb. Workpaper Vol. 1, p. 00205.

¹³⁵ See AEP Texas Reb. electronic workpaper file "Rebuttal-Mark-ups, 2003 total data.xls."

**b. BNSF Included Crew Wages for
 Loading Crews at Black Thunder Mine**

In Reply, BNSF adds crew wage expenses for loading crews originating trains at Black Thunder Mine. BNSF relies on statements by Mr. Anthony W. Deichert to justify the expense.¹³⁶ BNSF provides no evidence documenting Mr. Deichert's claim.

AEP Texas' review of the BNSF Train Activity Report (TAR) sample collected at Gillette, WY indicates that, in fact, road crews, not loading crews, perform the loading at Black Thunder Mine.¹³⁷ For example, the TAR for train EOKOBTM029A from Guernsey to Gillette¹³⁸ indicates that the crew arrived at Black Thunder Mine at {

}. Clearly, no loading crew was required to load the train. Similar activity is indicated on the other TAR's.

Rather than providing specific evidence illustrating the use of loading crews at Black Thunder Mine, BNSF simply offers the statement of operating personnel, while ignoring its own records which indicate the contrary. By including crew wages for loading crews, its Reply evidence overstates the crew wage expense for Oklahoma Union trains originating at Black Thunder by as much as { } per train, as Table II-A-44 below illustrates.

¹³⁶ See BNSF Reply at II-55.

¹³⁷ See AEP Texas Op. Workpapers Vol. 9, pp. 04196, 04197, 04277, 04287, and 04288.

¹³⁸ See AEP Texas Op. Workpapers Vol. 9, p. 04196.

Table II-A-44
BNSF Overstatement in Loading Crew Wages in Reply
Trains Originating at Black Thunder Mine, Cost per Train

<u>Quarter</u>	<u>Base Wages, incl. Non-Train Related Mark-Up ¹</u> (1)	<u>Crew Wage Special Study Factor ¹</u> (2)	<u>URCS Variability Factor ¹</u> (3)	<u>URCS Departmental Overheads ¹</u> (4)	<u>Total Overestimate Loading Crew Wages</u> 5)=(1)/(2)* (3)*[1+(4)]
2Q02	{ }	{ }	83.191%	39.057%	{ }
3Q02	{ }	{ }	83.191%	39.057%	{ }
4Q02	{ }	{ }	83.191%	39.057%	{ }

¹ See BNSF Reply Electronic Workpaper "BNSF-T&E-ADJ-02&03 REPLY.123", TAB "2002".

AEP Texas' evidence showing the use of road crews to load Oklahoma Union trains at Black Thunder Mine is demonstrably superior. BNSF's addition of loading crew expenses to AEP Texas' Reply evidence crew wages is unsubstantiated. These wages account for approximately one third of the overstatement in BNSF's calculated crew wage expenses for Black Thunder Mine, and should be excluded.

c. BNSF Failed to Adjust the Crew Wage Data for Obviously Erroneous Payroll Records

On Opening and Reply, AEP Texas developed the average crew wage expense specific to Oklaunion trains, by mine, per quarter, by processing and reviewing nearly 50,000 records BNSF identified as related to Oklaunion trains and provided in discovery. AEP Texas undertook an extensive review of the payroll data provided by BNSF in order to develop the most accurate representation of the costs associated with the movement of coal to AEP Texas' Oklaunion plant. This involved a detailed investigation of the payroll records, by occupation code, of over 100 crews where the records indicated payments exceeded the minimum for the district and train by 100% (in other words, the train showed payments more than double the minimum payment). Table II-A-45 below categorizes the conclusions reached:

Table II-A-45 <u>Summary of AEP Texas' Review of Anomalous Payroll Records</u>				
<u>Origin Mine/Year</u>	<u>Total Crew Records Reviewed</u>	<u>No Adjustment Made</u>	<u>Excluded - Carryover from prior year</u>	<u>Erroneous Payroll record - Sp. Study wages adjusted</u>
(1)	(2)	(3)	(4)	(5)
<u>2002</u>				
Black Thunder	37	26	0	11
Caballo Rojo	7	5	0	2
Jacobs Ranch	55	11	33	11
<u>2003</u>				
Cordero	5	1	0	4
Caballo Rojo	1	1	0	0
Eagle Butte	10	9	0	1
Rawhide	46	2	36	8
Total Records Reviewed	161	55	69	37

On Reply, BNSF only reviewed the payroll adjustments made to 2002 wages for trains from Black Thunder and Jacobs Ranch, and to 2003 wages for trains from Eagle Butte, a total of 23 adjustments. BNSF reversed fifteen of these adjustments in its Reply (9 for Black Thunder, 5 for Jacobs Ranch, and 1 for Eagle Butte), ignoring all indications that, like the 8 adjustments BNSF accepted, the payroll records contain flawed data and cannot be identified as Oklaunion costs.

1. **Black Thunder Train 20** - { }.¹³⁹ The data for the second crew does not conform to information in the BNSF's Train Movement file, which indicates that this train arrived at Guernsey with { }.¹⁴⁰ Further, the BNSF Train Activity Report for this train conforms to the Train Movement file and shows { }¹⁴¹ – the extra crew is clearly not a relief crew. Instead, it is more likely that the crew merely entered the wrong train ID into the payroll system. It is not assumed that the crews operating the train were not paid, but rather, that its wages were misidentified and should be assigned to another train symbol. BNSF reversed this adjustment because the crew district endpoints and the date agree with the correct payroll record, even though the car count does not. Also, BNSF fails to offer an explanation of why a second crew would have been required for this train in this crew district. BNSF's reversal of this adjustment overstates the average per train wage by { }.
2. **Black Thunder Train 25** - { }.¹⁴² AEP Texas adjusted the wages

¹³⁹ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls," TAB "adjustments" at lines 49-52.

¹⁴⁰ See BNSF Op. electronic workpaper file "AEP OKO Trains Y2002.xls" at line 14192-14201.

¹⁴¹ See AEP Texas Op. Workpapers Vol. 9, p. 04272, BNSF Train Activity Report for Train CBTMOKO020A from Gillette to Guernsey.

¹⁴² See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls", Tab "adjustments" at lines 178-182.

for this train to exclude this payment for two reasons; first, the Train Movement File does not show that this train made a side trip, but rather the crew traveled the { },¹⁴³ and second, the nature of unit coal operations does not require side trips, so if a side trip was made, it did not relate to AEP Texas' train. BNSF reverses this adjustment without addressing these inconsistencies. This reversal overstates average wages per train by { }.

3. **Black Thunder Train 27** - Payroll records show {

{ }.¹⁴⁴ Also, the stray engineer claims overtime pay for { } hours, even though the Train Movement File shows the trip from Sterling to Denver only took { }.¹⁴⁵ Clearly, these wages belong to another train. BNSF reversed this adjustment, citing that the erroneous payroll has the same date as the correct ones, even though no other data in the records agrees. Reversing this adjustment results in an overstatement of average wages per train by { }.

4. **Black Thunder Train 33** - Payroll records for the empty train from Alliance to Edgemont show {

{ }.¹⁴⁶ This conforms to the BNSF Train Activity Report for this train in this district, {

{ }.¹⁴⁷ Engineer Miner did not work on this train. AEP Texas' adjustment deducts a record for the extra engineer, whose payroll record is obviously showing the incorrect train symbol. BNSF reverses this adjustment, but offers no explanation for why the wages for an extra engineer who, the evidence shows, did not operate on the Oklaunion train should be included as an Oklaunion train expense. BNSF's reversal of this adjustment results in an overstatement in the average wages per train of { }.

¹⁴³ See BNSF Op. electronic workpaper file "AEP OKO Trains Y2002.xls" at lines 15738-15743.

¹⁴⁴ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 59-62.

¹⁴⁵ See BNSF Op. electronic workpaper file "AEP OKO Trains Y2002.xls" at lines 16378-16385.

¹⁴⁶ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 195-198.

¹⁴⁷ See AEP Texas Op. Workpapers Vol. 9, p. 04493.

5. **Black Thunder Train 33** - As with Black Thunder Train 25 above, {

}.¹⁴⁸ AEP Texas adjusted the wages for this train to exclude this payment for two reasons. First, the Train Movement File does not show that this train made a side trip, although it does indicate it took the crew nearly { } to travel the segment.¹⁴⁹ Second, if a side trip was made, it should not relate to Oklahoma trains, given the nature of unit coal operations. BNSF reverses this adjustment without addressing these inconsistencies, thereby overstating the average wages by { } per train.

6. **Black Thunder Train 34** - Payroll records show {

}.¹⁵⁰ In addition, BNSF includes {

}, AEP Texas concluded the record contained the wrong train ID and excluded it. BNSF reversed this adjustment, offering no explanation for the extra engineer on the train, resulting in an overstatement in the average wages of { } per train.

7. **Black Thunder Train 35** - Payroll records show {

} . In addition, BNSF includes an extra, lone conductor in turnaround service out of Alliance, with { } cars on his train, claiming { }.¹⁵¹ BNSF's Train Movement file indicates the trip was made in just over { }.¹⁵² Because neither the car count nor the miles for the lone conductor record agree with those of the other two crew members, AEP Texas concluded the record contained the wrong train ID and

¹⁴⁸ See AEP Texas Reb. electronic workpaper file "Rebuttal Road Crew Wages, 2002.xls," Tab "adjustments," lines 206-209.

¹⁴⁹ See BNSF Op. electronic workpaper file "AEP OKO Trains Y2002.xls" at lines 21212-21217.

¹⁵⁰ See AEP Texas Reb. electronic file "Rebuttal - Road Crew Wages, 2002.xls," Tab "Adjustments" at lines 99-102.

¹⁵¹ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 211 - 216.

¹⁵² See BNSF Op. electronic workpaper file "AEP OKO Train Y2002.xls," lines 22600-22606.

excluded it. BNSF reversed this adjustment, offering no explanation for the extra conductor on the train. Its reversal overstates the average wages per train by { }.

8. **Black Thunder Train 39** - Payroll records for this train, {

}.¹⁵³ BNSF offers no explanation for this train requiring two engineers. AEP Texas' adjustment averages the two engineer records to reflect the standard 2-man crew operation. The impact of this adjustment on the average crew wages is { } per train.

9. **Black Thunder Train 43** - Payroll records for this train, {

}.¹⁵⁴ BNSF reverses this adjustment, indicating that the train ID on at least one of these payroll records is incorrect, and should in fact be CBTMOKO42, as the wage calculation for Train 42 is missing engineer's wages for this district. AEP Texas accepts this, and modifies the adjustment to deduct only one engineer. Since it cannot be determined which engineer actually worked on Train 42, an average of the two will be taken as an adjustment. What is certain, however, from the sample TAR's collected at Gillette, is that neither of the extra engineers worked on train 43.¹⁵⁵ AEP Texas' restates this adjustment from { } per train.

10. **Jacobs Ranch Train 20** - AEP Texas' adjustment deducts payments for an extra conductor's payroll record, operating in the wrong direction. BNSF reverses this adjustment, claiming the wages belong to the loaded train from Pueblo to Trinidad. In other words, BNSF admits the data in the record is incorrect, and the wages belong to another leg of the move. AEP Texas accepts that the Pueblo-Trinidad leg is missing wages for a conductor, and accepts the reversal of this adjustment, increasing the average wages per train by { }.

11. **Jacobs Ranch Train 25** - Payroll records for this train show {

}.¹⁵⁶

¹⁵³ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 116-119.

¹⁵⁴ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages.2002.xls," tab "Adjustments," lines 134-138.

¹⁵⁵ See AEP Texas Reb. Workpapers Vol 1, p. 00213.

¹⁵⁶ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 330-336.

{ }. Because it cannot be determined which is the mislabeled payroll record, AEP Texas' adjustment is based on the average of the two similar records. BNSF reverses this explanation, stating that they were "actual wages paid to engineer,"¹⁵⁷ ignoring the fact that the record, as with Black Thunder Train 20 above, contains an incorrect train ID. BNSF's reversal results in an overstatement of the average crew wages by { } per train.

12. **Jacobs Ranch Train 26** - Payroll records for this train, { }.¹⁵⁸ The BNSF Train Activity report for this train, however, shows that { }¹⁵⁹ AEP Texas adjusts the wages for this train to exclude those incorrectly showing this train symbol. BNSF reverses this adjustment, claiming the wages belong to train 28 because the dates match. BNSF fails to mention, however, that the calculated wages already include wages for the crew from Gillette to Guernsey for train 28 as well. Obviously the train symbol on these payroll records is incorrect, and these wages cannot be allocated to an Oklahoma train. This reversal overstates the average wages per train by { }.

13. **Jacobs Ranch Train 30** - Payroll records for this train include { }.¹⁶⁰ One pair of the payroll records obviously contains the incorrect train ID. The BNSF Train Movement File shows this train { }¹⁶¹ Therefore, AEP Texas concluded that the records showing { } cars must contain the wrong train ID, and adjusted the wage calculation accordingly. BNSF reverses this adjustment and assesses the cost of this extra crew because the dates on the payroll records match.

¹⁵⁷ See BNSF Reply electronic workpaper file "BNSF corrections to base wages.xls," line 15.

¹⁵⁸ See AEP Texas Reb. electronic workpaper "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 344-348.

¹⁵⁹ See AEP Texas Reb. Workpapers Vol. 1, p. 00214.

¹⁶⁰ See AEP Texas Reb. electronic workpaper "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 368-372.

¹⁶¹ See BNSF Op. electronic workpaper "AEP OKO Trains Y2002.xls," Lines 25566-25573.

These wages clearly do not relate to Oklahoma train operations, and including them in the average wages results in a significant overstatement, by { } per train.

14. **Jacobs Ranch Train 39** - Payroll records show {

}.¹⁶² The miles for this record do not agree with the other records, nor does the payroll system include { }, therefore AEP Texas concluded the payroll record was incorrect and deducted the wages accordingly. BNSF reverses this adjustment without explaining why a second engineer would be required on this train, overstating wages by { } per train.

15. **Eagle Butte Train 22** - Payroll records include {

}.¹⁶³ Because unit train service operates with a 2-man crew, AEP Texas adjusts the calculation to reflect only one engineer. BNSF reverses this adjustment solely because the dates and car count on the payroll records match; no actual basis is offered for a second engineer. BNSF overstates the average wages per train by { }.

Table II-A-47 below illustrates the impact of these BNSF reversals of AEP Texas' corrections for erroneous payroll records, including AEP Texas' adjustment to Black Thunder train 43 and Jacobs Ranch train 20, on the calculated average crew wage expense per train, by mine and quarter.

¹⁶² See AEP Texas Reb. electronic workpaper "Rebuttal-Road Crew Wages, 2002.xls," Tab "adjustments" at lines 639-642.

¹⁶³ See AEP Texas Reb. electronic workpaper file "Rebuttal-Road Crew Wages, 2003.xls," Tab "adjustments" at lines 106-109.

Table II-A-47
Impact of BNSF Reply Reversal to AEP Texas' Corrections to Payroll
Data on Oklaunion Average Wages per Train, by Mine and by Quarter

<u>Origin Mine</u> (1)	<u>Quarter</u> (2)	<u>Train Number</u> (3)	<u>BNSF Reply Reversal of Adjustment</u> ¹ (4)	<u>Overstatement of Average Total Wage/Train</u> ² (5)
Black Thunder	2Q02	20	{ }	{ }
		25	{ }	{ }
	3Q02	27	{ }	{ }
		33	{ }	{ }
		33	{ }	{ }
		34	{ }	{ }
		35	{ }	{ }
	4Q02	39	{ }	{ }
		43 ^{3/}	{ }	{ }
Jacobs Ranch	3Q02	20 ^{3/}	{ }	{ }
		25	{ }	{ }
		26	{ }	{ }
	4Q02	30	{ }	{ }
		39	{ }	{ }
Eagle Butte	2Q03	22	{ }	{ }

1 See BNSF Reply Electronic Workpaper "BNSF corrections to base wages.xls."

2 See AEP Texas Reb. electronic workpaper file "Impact of Individual Payroll Record Adjustments.xls."

3 AEP Texas accepts BNSF explanation for reversal of one extra engineer for Black Thunder train 43, and for conductor's wages for Jacobs Ranch train 20 in Rebuttal.

d. BNSF Arbitrarily Used Wages from Another Mine as a Surrogate for Shipments Originating at Rawhide Mine, Rather than Using Actual Data Where Available and Average Wages by Crew District Where Wage Data Was Incomplete

In its Reply, BNSF claims that “. . .the Rawhide movement was not the subject of discovery.”¹⁶⁴ This statement is misleading. As noted on Opening,¹⁶⁵ AEP Texas’ Request for Production No. 19 requested crew wage data “for each AEP Texas train.” BNSF, however, refused to provide the requested data with respect to Rawhide trains. BNSF’s failure to provide the data necessitated that AEP Texas estimate the Rawhide wage expenses.

AEP Texas developed the crew wages for Rawhide trains from the “full-wages” file (used to develop the non-train related mark-up percent). AEP Texas extracted the payroll records for all Rawhide trains, then sorted and aggregated them by train number and crew district, for each occupation code. As noted on Opening, although this data provided the actual wages paid to the Rawhide crews, the total wages for a given train were often missing wages for at least one crew district. Rather than ignore the available actual wage payments, however, AEP Texas completed the wages for trains missing payments in crew districts by applying an average for the crew district, by occupation code, calculated from the complete Rawhide train wage records, to the

¹⁶⁴ See BNSF Discovery File “AEP OKO Trains Y2002.xls” at lines 23849-23858 included as AEP Texas Reb. electronic workpaper file “AEP OKO Trains Y2002.xls.”

¹⁶⁵ See AEP Texas Reb. electronic workpaper file “Rebuttal-Road Crew Wages, 2002.xls,” Tab “adjustments” at lines 368-372.

missing crew districts.¹⁶⁶ In its Reply, BNSF notes AEP Texas overstated the loaded train count divisor for 1Q03 by one train, and the empty train count divisor for 2Q03 also by one train.¹⁶⁷ AEP Texas restates the Rawhide Mine crew wages for these two quarters in this Rebuttal to reflect this correction.

Rather than accepting the actual data available to develop the costs for the Rawhide move, BNSF elects to ignore the actual data and to apply costs from a neighboring mine as a surrogate instead. This is improper and leads to inaccurate results.

e. BNSF Included Payments Related to the Productivity Fund Agreement with the UTU

In its Reply restatement of crew wage expenses, BNSF included a “productivity fund” payment of { } per “short-crew” in addition to the “Reduced Crew Allowance” payments captured under CA Code 32 in its payroll system.¹⁶⁸ AEP Texas subsequently filed supplemental workpaper requests requesting clarification of the application of this payment, however, BNSF was non-responsive, claiming that the requests were “burdensome” and a “special study would be required to develop and

¹⁶⁶ See BNSF Discovery File “AEP OKO Trains Y2002.xls,” included in AEP Texas Reb. electronic workpaper files “AEP OKO Trains Y2002.xls,” as lines 25566-25573.

¹⁶⁷ See AEP Texas Reb. electronic workpaper file “Rebuttal-Road Crew Wages, 2002.xls,” Tab “adjustments” at lines 639-42.

¹⁶⁸ See AEP Texas Reb. electronic workpaper file “Rebuttal-Road Crew Wages, 2003.xls,” Tab “adjustments” at lines 106-09.

produce the required data.”¹⁶⁹ AEP Texas’ attempt to confirm that these payments were not already included in the payroll system was ignored. BNSF’s inability to provide payroll records showing payment of the “productivity fund” through the company’s payroll system raises the concern that BNSF’s inclusion of this payment is in fact a double-count, and that the payment already is captured in the non-train related mark-up. Further, the documentation provided by BNSF to support including this charge in the crew wage expenses is three pages from BNSF’s November 1, 1993 crew consistent with the UTU.¹⁷⁰ BNSF’s application of this charge, however, is to the wages for the entire crew, clearly an overstatement, since nearly half of BNSF’s T&E service employees belong to the BLE.¹⁷¹ Clearly, this cost is questionable, and should not be included in the variable cost to provide train service to AEP Texas trains.

Table II-A-47 below summarizes the adjustments AEP Texas makes on Rebuttal¹⁷² to the special study crew wages presented on Opening.¹⁷³

¹⁶⁹ See AEP Texas Reb. Workpapers Vol.1, p. 00219-220 (20% belong to BLE and 25% belong to UTU).

¹⁷⁰ See BNSF/AEPTX 58994-58996 included as AEP Texas Reb. Workpapers Vol. 1, p. 00215-217.

¹⁷¹ See Burlington Northern Santa Fe Corporation 2003 Annual Report , pp. 19-20 included as AEP Texas Reb. Workpapers Vol. 1, pp. 00219-20. (20% belong to BLE and 25% belong to UTU).

¹⁷² See AEP Texas Reb. Electronic Workpapers “Rebuttal-Wages Summary-2002.xls” and “Rebuttal-Wages Summary-2003.xls”.

¹⁷³ See AEP Texas Op. Electronic Workpapers “Open-Wages Summary-2002.xls” and “Open-Wages Summary-2003.xls”.

Table II-A-47
Summary of Rebuttal Adjustments Made to Opening
Special Study Crew Wages By Mine and By Quarter

Origin Mine (1)	Qtr. (2)	Opening Wages Per Train (3)	Payroll Record Adjust ¹ (4)	Train Count Adjust ¹ (5)	Rebuttal		Rebuttal Wages Per Train (8)
					Adjust 2003 Mark-ups (6)	Total (7)	
Black Thunder	2Q02	{ }	\$0	\$0	\$0	\$0	{ }
	3Q02	{ }	0	0	0	0	{ }
	4Q02	{ }	{ }	0	0	{ }	{ }
Caballo	3Q02	{ }	0	0	0	0	{ }
	4Q02	{ }	{ }	0	{ }	0	{ }
	1Q03	{ }	0	0	{ }	{ }	{ }
Caballo Rojo	2Q03	{ }	0	0	{ }	{ }	{ }
Cordero	2Q03	{ }	0	0	{ }	{ }	{ }
Eagle Butte	1Q03	{ }	{ }	0	{ }	{ }	{ }
	2Q03	{ }	0	0	{ }	{ }	{ }
Jacobs Ranch	1Q02	{ }	0	0	0	0	{ }
	3Q02	{ }	{ }	0	0	{ }	{ }
	4Q02	{ }	0	0	0	0	{ }
North Rochelle	3Q02	{ }	0	0	0	0	{ }
Rawhide	1Q02	{ }	0	0	0	0	{ }
	2Q02	{ }	0	0	0	0	{ }
	3Q02	{ }	{ }	0	0	{ }	{ }
	4Q02	{ }	0	0	0	0	{ }
	1Q03	{ }	0	{ }	{ }	{ }	{ }
	2Q03	{ }	0	{ }	{ }	{ }	{ }

¹ See AEP Texas Electronic workpaper file "Changes - Opening to Rebuttal."

Because BNSF (i) erred in developing its own non train-related mark-up ratio; (ii) included crew wages for loading crews at Black Thunder Mine; (iii) failed to adjust the crew wage data for obviously erroneous payroll records; (iv) arbitrarily used wages from another mine as a surrogate for shipments originating at Rawhide mine, rather than using actual data where available and average wages by crew district where wage data was incomplete; and (v) included payments related to the Productivity Fund Agreement with the UTU, the Board should find that AEP Texas' crew wage costs are the best evidence of record.

8. Fuel Costs (Including Overheads)

Variable locomotive fuel costs were covered in AEP Texas' Reply at pages II-A-74 to 91 and on Opening at pages II-A-38 to 39. BNSF covered fuel costs in its Reply at pages II-42 to 43. For all quarters through 1Q03, BNSF used system average fuel costs. For 2Q03, BNSF estimated fuel costs based in part on a made-for-litigation fuel study using locomotive event recorder data and conducted by former BNSF employee Warren H. Wasserburger. *See* BNSF Op. at II-14 and Exhibit II.A-3. BNSF's special study estimated fuel consumption for a total of { } Black Thunder and { } Eagle Butte trains that moved to Oklaunion during 4Q03 and applied the results to { } 2Q03 Eagle Butte trains. BNSF made no showing that Black Thunder train fuel consumption is representative of Eagle Butte train fuel consumption, nor did BNSF show that 4Q03 (*i.e.*, fall/winter) fuel consumption is representative of 2Q03 (*i.e.*, spring/summer) fuel

consumption--or of consumption for prior quarters when Oklaunion train lengths of locomotive consists were different.

In its Reply at II-A-75, AEP Texas showed that BNSF's fuel study caused BNSF to overstate Oklaunion train fuel costs by \$10.11 per carload for 2Q03.

Specifically, AEP Texas showed the following:

- The results of BNSF's event recorder fuel study could not be verified because BNSF refused to provide either the computer program or even the printouts of the data until just before the due date for Reply evidence. *See* AEP Texas Reply pp. II-A-76 to 80.¹⁷⁴
- BNSF's event recorder fuel study was flawed because 1) BNSF applied fuel consumption tables in its fuel study that produce higher fuel consumption estimates than the fuel consumption tables BNSF uses in its normal course of business (*see* AEP Texas Reply at II-A-82 to 83); 2) BNSF's fuel study trains deviated from standard BNSF operating procedures designed specifically to conserve fuel (*see* AEP Texas Reply at II-A-83 to 86); 3) BNSF did not utilize the actual miles traveled by the locomotives on the fuel study trains (*see* AEP Texas Reply at II-A-86 to 88); and 4) BNSF's study contained numerous other methodological flaws and data anomalies, including the fabrication of study data (*see* AEP Texas Reply at II-A-88 to 91).

AEP Texas' Rebuttal of BNSF's fuel costs will not repeat its Reply.

Instead, AEP Texas will cover two new issues that have arisen since the AEP Texas Reply filing. These issues are:

- (i) The Board's handling of a BNSF event recorder fuel study in *PSCo/Xcel*; and

¹⁷⁴ The Board cannot accept the results of one party's study when that party has refused to provide the other party (or the Board) with the tools necessary to analyze and assess the validity of the study results.

- (ii) AEP Texas' review of the late-provided BNSF fuel study workpapers shows that BNSF understated locomotive isolation time and violated its own operating rules.

**a. The Board's Handling of the BNSF
Event Recorder Fuel Study In *PSCo/Xcel***

In *PSCo/Xcel*, the Board based its determination of fuel costs on a BNSF event recorder study. See *PSCo/Xcel* at 137-38. Therein, the Board relied heavily on its ruling on the same issue in *TMPA*. AEP Texas submits that those proceedings do not provide a valid basis for acceptance of BNSF's flawed study in this case, for at least three reasons:

- a. The Board's *TMPA* and *Xcel* fuel study precedents do not apply to BNSF's fuel study herein;
- b. The Board should not ignore the impact of different fuel consumption tables; and
- c. The Board should not accept the extent to which BNSF substituted data in place of invalid event recorder data.

**i. The Board's *TMPA* and *Xcel* Fuel Study Precedents
Do Not Apply to BNSF's Fuel Study Herein**

In *PSCo/Xcel* at page 137 the Board states:

Xcel claims that BNSF's fuel study relied on faulty data and methodology. But BNSF's study is consistent with the methodology used in *TMPA*, which was also based on event recorders and the manufacturer's fuel consumption tables. Field tests found the event recorder calculations to be within 1% of actual fuel consumption.

One distinction between *TMPA* and the instant proceeding is that in *TMPA*, both parties submitted the results of event recorder fuel studies, so the Board chose between two studies. In the instant proceeding, only BNSF submitted an event recorder fuel study, whereas AEP Texas relied on system average fuel consumption.¹⁷⁵ It is BNSF's burden to prove that the results of its event recorder fuel study are "demonstrably superior" to system average fuel consumption. In Reply, AEP Texas showed BNSF's event recorder fuel consumption estimates to be flawed and inferior. Additionally, BNSF did not even attempt to benchmark its event recorder fuel consumption estimate (based primarily on 4Q03 Black Thunder train movements) against actual fuel consumption for 2Q03 Eagle Butte movements or movements from any other mine origin.¹⁷⁶

ii. The Board Should Not Ignore the Impact of Different Fuel Consumption Tables

The event recorder methodology seeks to estimate fuel usage by multiplying throttle hours by a fuel consumption rate per hour. Because actual fuel consumption is not being recorded but only estimated, the results of the study will be influenced by the fuel consumption figure that is applied. For example, if a certain locomotive is in notch

¹⁷⁵ In the instant proceeding, BNSF did not provide detailed fuel consumption information in discovery, so AEP Texas could not base fuel consumption on actual data. Instead, AEP Texas used system-average fuel consumption rather than participate in an event recorder study, the efficacy of which AEP Texas seriously doubted. As AEP Texas demonstrated on Reply, its reservations regarding an event recorder fuel consumption study were borne out.

¹⁷⁶ In *PSCo/Xcel* at 137, the Board "...found the event recorder calculations to be within 1% of actual fuel consumption." In the instant proceeding, BNSF did not even bother with any benchmarking to actual fuel consumption.

seven for three hours, and a fuel consumption rate of 200 gallons per hour is used, then the resulting estimate will be significantly higher than the same calculation using a fuel consumption rate of 150 gallons per hour. Different fuel consumption tables are produced by both the manufacturers of the locomotives and other sources (*See TMPA* at 58, n.101), and each table would produce a different fuel consumption estimate. In its study, BNSF has chosen to use a single table for the Oklaunion movement. *See BNSF Opening Workpaper Vol.*, p. II-A-0028. AEP Texas shows, *infra*, that BNSF's chosen table in the instant proceeding is the same table that the Board rejected in *TMPA*. The fact that other tables would produce varied results reinforces the inherent unreliability of using event recorders to estimate fuel consumption.

It is evident from the *PSCo/Xcel* decision that the Board relied heavily on *TMPA* as its basis for accepting BNSF's fuel study. In *PSCo/Xcel*, the Board stated that it accepted BNSF's fuel study in part because "BNSF's study is consistent with the methodology used in *TMPA*, which was also based on event recorders and the manufacturer's fuel consumption tables."¹⁷⁷ However, in *TMPA*, the Board rejected the use of the fuel consumption table used by BNSF in its fuel study, stating that "BNSF has not shown that the figure it used is superior" to other fuel consumption tables.¹⁷⁸ Moreover, according to BNSF's own evidence, the fuel consumption table BNSF used in

¹⁷⁷ *See PSCo/Xcel* at 137.

¹⁷⁸ *See TMPA* at 58, n.101.

PSCo/Xcel was the same fuel consumption table rejected by the Board in *TMPA*.¹⁷⁹

BNSF also used the same *TMPA*-rejected fuel consumption table in the instant proceeding.¹⁸⁰

**iii. The Board Should Not Accept the
Extent to Which BNSF Substituted Data
in Place of Invalid Event Recorder Data**

In *PSCo/Xcel*, the Board accepted BNSF's inputting of event record data from our locomotive to another:

. . .to correct data collection problems that are inherent to studies of this nature. . . . For example, in two instances, BNSF reasonably substituted data from another locomotive in the same consist when the event recorder in one locomotive failed¹⁸¹

Whatever the merits of the determination made there, the Board's *PSCo/Xcel* ruling should not be used as a guide in the instant proceeding, because the fact differentials invalidate any precedential value that *PSCo/Xcel* might have otherwise had. In the instant proceeding, the extent to and the manner in which BNSF substituted data dramatically exceeds that cited in *PSCo/Xcel*.

¹⁷⁹ See *PSCo/Xcel* Petition for Reconsideration, Public Version at 19.

¹⁸⁰ In its Reply evidence, BNSF introduced what it claims is the fuel study it conducted in the *TMPA* proceeding. Included in that evidence is the fuel consumption table it utilized in its *TMPA* study, the same table the Board rejected in *TMPA*. See BNSF Reply Workpaper Vol. I, p. III.D-0092. The Board also may compare its *TMPA* record against the BNSF Workpaper Vol. I, p. II-A-0028 fuel consumption rate table used by BNSF herein to confirm that the tables are identical.

¹⁸¹ See *PSCo/Xcel*, at 138.

On Reply AEP Texas' showed that BNSF imputed fuel statistics on 60 percent of the fuel study trains.¹⁸² By way of contrast, the Board in *PSCo/Xcel* observed that BNSF substituted fuel consumption data on two of its study trains. Since BNSF utilized 31 trains in its *PSCo/Xcel* fuel study,¹⁸³ the two substitutions represented 6.5 percent of the trains.¹⁸⁴ While the Board could have concluded that it was reasonable to substitute data on 6.5 percent of the locomotives used in study trains, substituting data on 60 percent of the study trains clearly is *not* reasonable, and the results from BNSF's AEP Texas event recorder fuel study should be excluded.

Data substitution takes place when, for some reason, the event recorder documentation is faulty or is not available. Data substitution creates an additional problem since without a locomotive's event recorder data, it is impossible to tell if the locomotive was isolated and, thus, consuming less fuel than while operating at higher throttle positions. Instances of isolating a locomotive occur, for example, on the empty portion of a train cycle in which BNSF needed the full tractive effort of four locomotives to pull the loaded train, but did not need the tractive effort of all four locomotives for the empty portion of the round trip cycle. When that occurs, BNSF normally isolates one or

¹⁸² See AEP Texas Reply electronic workpaper file "Tx_North_Fuel_Stdy_15_Trains(isolated).123." BNSF imputed fuel consumption data on 9 of 15 fuel study trains.

¹⁸³ See BNSF Reb. Evidence and Argument in *Public Service of Colorado D/B/A Xcel Energy v. The Burlington Northern and Santa Fe Railway Co.* (Public Version) at II-45. A copy of the relevant page is included in AEP Texas' Reb. Workpapers at Vol. 1, p. 00233-236.

¹⁸⁴ Two trains with substituted data ÷ 31 total study trains = 6.5%.

more locomotives on the empty portion of the cycle. The isolated locomotive is placed in the idle throttle position producing no tractive effort, and relies on the other locomotives in the consist for propulsion. Because a locomotive might consume fuel at the rate of 200 gallons per hour in notch eight, but only three gallons per hour in idle, the process of isolating a locomotive reduces BNSF's fuel consumption substantially. When the number of trains requiring data substitution is large, serious overstatements of fuel consumption are possible due to missed instances of this reduced fuel consumption through locomotive isolations.

BNSF's fuel expert, Mr. Wasserburger, adjusted fuel consumption estimates downwards whenever he determined that a locomotive had been "isolated." BNSF claimed in Opening Exhibit II.A-3 that Mr. Wasserburger's fuel consumption estimates took into account those instances when the locomotive operator "isolated" one or more of the locomotives for portions of the return movement of empty cars. *See* BNSF Op. Exhibit II.A-3 at 5. Mr. Wasserburger was able to identify those locomotives that were isolated by reviewing their event recorder tractive effort data to determine when the locomotive was not generating electricity. When Mr. Wasserburger identified an isolated locomotive, he adjusted its fuel consumption statistics. The adjustment took the form of manually replacing the nominal fuel consumption rate of, for example, 200 gallons per hour with the idle fuel consumption rate of, for example, three gallons per hour. Without the required locomotive event recorder tractive effort data, Mr. Wasserburger could not tell if the locomotive was actually in isolation. Data substitution can overstate fuel

consumption because it may assume that the locomotive was actually pulling the train rather than running while isolated. The following example will illustrate how this assumption could result in an overstatement of fuel consumption.

BNSF's workpapers show that the study train operators isolated locomotives on the Oklaunion to Alliance or Guernsey ("Empty") line segment.¹⁸⁵ BNSF's workpapers show, however, that BNSF substituted fuel consumption data on three trains, CBTMOKO009A, CBTMOKO011A and CBTMOKO027A, while operating over the Empty line segment.¹⁸⁶ The data substitution suggests that the event recorder data was not otherwise available. Without reviewing the event recorder data for the locomotives operating on these trains, it is impossible to determine whether the locomotives were isolated or not. BNSF's substitution of fuel consumption rates assumes the same level of fuel consumption as other locomotives on the consist. Locomotives with substituted data may have been imputed high fuel consumption rates consistent with high throttle positions, when in fact they were isolated in idle.

AEP Texas submits that it would be an abuse of discretion if the Board accepted as reasonable the manner and the extent to which BNSF has relied on imputed fuel consumption in developing its study results in this case.

¹⁸⁵ See, e.g., BNSF Op. Workpapers Vol. I, p. II.A-0062 and Vol. I, p. II.A-0101.

¹⁸⁶ See BNSF Op. electronic workpaper file "Tx North Fuel Stdy_15_Trains.123."

b. AEP Texas' Review of the Late-Provided BNSF Fuel Study Workpapers Shows that BNSF Understated Locomotive Isolation Time and Violated Its Own Operating Rules

At pages II-A-76 to 80 of its Reply, AEP Texas explained that it was unable to test the validity of BNSF's fuel study because BNSF did not initially provide AEP Texas either (1) access to the Quantum computer program¹⁸⁷ that is required to process the raw event recorder data, or, until a few days before the due date for Reply filings, (2) copies of printouts of the Quantum event recorder data files used to develop fuel consumption data for individual locomotives.¹⁸⁸ The Board cannot accept the results of one party's study when that party has refused to provide the other party (or the Board) with the tools necessary to analyze and assess the validity of the study results.

Late on May 19 and 20, 2004 – or only four days before the due date for Reply evidence – BNSF provided 2,157 pages of printouts of event recorder data files.¹⁸⁹ Without sufficient time to analyze this voluminous data before Reply, AEP Texas reserved the right to address BNSF's fuel study further on Rebuttal.

Even though BNSF has provided copies of the printouts of the event recorder data files, which allows AEP Texas at least to review BNSF's data, BNSF still

¹⁸⁷ BNSF uses Quantum Engineering, Inc.'s Quantum Desktop Playback ("Quantum") software to analyze locomotive event recorder data. The Quantum software includes an analysis package that estimates locomotive fuel consumption using time in each throttle position and fuel consumption tables provided by the locomotive manufacturer.

¹⁸⁸ See AEP Texas Reply at II-A-76 to 77.

¹⁸⁹ See AEP Texas Reply at II-A-79.

has not provided a copy of the Quantum event reader software as requested, which would have allowed AEP Texas to accurately restate BNSF's analysis. The event recorder data printouts are not detailed enough in themselves to allow for a restatement. For example, BNSF's fuel witness Mr. Wasserburger used the Quantum software to estimate the amount of fuel consumed on locomotives that have been isolated on the empty portion of the train cycle.¹⁹⁰ Without the Quantum software, it is not possible to determine the time spent in each throttle position, and, thus, the estimated fuel consumed. Therefore, while AEP Texas has been able to effectively rebut BNSF's AEP Texas fuel study by showing that BNSF has made several material errors, it has not been able to definitively restate the study.

**i. BNSF Has Understated The
Time Locomotives Are Isolated**

BNSF's Opening Evidence states that it took into account the fact that the locomotive operator may turn off, or "isolate," one or more of the locomotives for

¹⁹⁰ A good example of this is shown in BNSF's Reply workpapers where BNSF provides copies of the workpapers for its *TMPA* fuel study. BNSF stated in its Opening Evidence that it used the same fuel study methodology in this case as it used in *TMPA*. See BNSF Op. at II-14. Using the BNSF's *TMPA* fuel study workpapers provides a more clear example than using its AEP Texas fuel study workpapers because the former are more clearly annotated and describe the process better than the latter. Given that BNSF states that the studies were performed in the same manner, using *TMPA* data to illustrate this example is appropriate. Vol. I, p. III.D-0099 of BNSF's Reply workpapers shows the fuel consumption for a locomotive that was isolated on the empty portion of the movement, including the adjustment for fuel consumed when the locomotive was isolated. The next page of BNSF's Reply work papers Vol. I, p. III.D-0100, displays the estimated fuel consumption report generated by the Quantum software during the time the locomotive was isolated, and the adjusted empty segment fuel consumption.

portions of the return movement of empty cars and thus conserve fuel.¹⁹¹ Therefore, according to BNSF, Mr. Wasserburger's analysis of the AEP Texas fuel consumption reflects BNSF locomotive engineers' efforts to conserve fuel.

AEP Texas was unable to confirm Mr. Wasserburger's calculations in BNSF Reply Evidence, because BNSF did not provide the locomotives' event recorder data in a timely manner. Now that AEP Texas has access to the event recorder data printouts and has had a chance to review the information, it has determined that BNSF has underestimated the amount of time that locomotives are isolated on the return trips, and subsequently overstated fuel consumption.

Using the Quantum software estimated fuel consumption reports presented in BNSF's Opening Evidence, AEP Texas was able to identify the time each locomotive was operating on a train returning empty to Alliance or Guernsey. AEP Texas then reviewed the Quantum event recorder data printouts to: 1) confirm if the locomotives BNSF stated were isolated in its Opening Evidence actually were isolated; and 2) to determine if any other locomotives than those identified by the BNSF also were isolated on the return trip. Using the Quantum event recorder data printouts, AEP Texas was able to confirm that the locomotives BNSF stated were isolated in its Opening Evidence actually were isolated.

AEP Texas also was able to confirm that a significant number of other locomotives operating on the returning trains were isolated, but that BNSF did not adjust

¹⁹¹ See BNSF Op. Exhibit II.A-3 at 5.

its fuel consumption estimates to account for this fact. AEP Texas has included in its Rebuttal workpapers an electronic file listing: (1) the locomotives that operated on the AEP Texas trains returning from the Oklaunion Generating Station; (2) whether BNSF adjusted the fuel consumption on the locomotive because it was isolated; and (3) whether the event recorder data showed the locomotive was isolated on the return trip and BNSF had failed to adjust for its fuel consumption.¹⁹² As AEP Texas shows, BNSF failed to adjust its fuel consumption for isolated locomotives on seven of its 15 study trains. Without the Quantum software, it is impossible to determine the extent of BNSF's overstatement of fuel consumption. But given the number of trains that show this infirmity, it would be unfair to base fuel consumption on a fuel study that is obviously materially flawed.

**ii. The BNSF Study Trains
Violated BNSF Operating Rules**

AEP Texas explained in Reply how BNSF was apparently operating its fuel study trains differently than other empty coal trains by violating its own operating rules. Specifically, AEP Texas demonstrated that on the empty segment between Oklaunion and Alliance or Guernsey, BNSF should be isolating and idling one locomotive on trains operating with three-locomotive consists, and two locomotives on trains operating with four-locomotive consists for a large portion of the trip, to comply with BNSF operating Rule 106.1.3 which states that empty coal trains should not operate with more than 9,000

¹⁹² See AEP Texas Reb. electronic workpaper file "Tx_North_Fuel_Study_15_Trains (no TE).123," worksheet "4."

operating horsepower.¹⁹³ Based on the limited evidence BNSF provided in its Opening Evidence, AEP Texas estimated that 11 of the 15 or 73% of the study trains were operating over the 9,000 horsepower limit.¹⁹⁴

Now that BNSF has provided printouts of the event recorder data and AEP Texas has had the opportunity to analyze the data, AEP Texas has determined that it had over-estimated the amount of active horsepower on the empty trains. In reality, 3 of the 15 trains or 20% of the study trains were operating over the 9,000 horsepower limit.¹⁹⁵ If BNSF had operated these trains as instructed per Rule 106.1.3, its fuel study consumption rate would have been lower.

c. Conclusions

BNSF's made-for-litigation event recorder fuel study overstates BNSF's actual fuel consumption in Oklaunion service. In carrying out its fuel study, BNSF erred by (1) not showing that its Black Thunder train fuel study applied to Eagle Butte or any other mine origin; (2) not showing that its 4Q03 fall/winter fuel study applied to 2Q03 fall/summer fuel consumption; (3) not benchmarking its event recorder fuel study against actual fuel consumption; (4) applying fuel consumption tables that produce higher fuel consumption estimates than the fuel consumption tables BNSF uses in its normal course

¹⁹³ See AEP Texas Reply at II-A-83 to 86.

¹⁹⁴ See AEP Texas Reply electronic workpaper file "Tx_North_Fuel_Study_15_Trains (isolated).123," worksheet "HP Summary."

¹⁹⁵ See AEP Texas Reb. electronic workpaper file "Tx_North_Fuel_Study_15_Trains (no TE).123," worksheet "HP Summary."

of business; (5) deviating from standard BNSF operating procedures designed specifically to conserve fuel; (6) failing to use the actual miles traveled by the locomotives on the fuel study trains; and (7) making numerous other methodological errors and embracing data flaws including the imputation of study data from one locomotive to others on a 60 percent of the study trains. BNSF has not shown that its event recorder fuel study produces fuel consumption estimates that are demonstrably superior to system average results. AEP Texas' system average fuel consumption estimates should be accepted as the best evidence of record.

9. Other Costs (Including Helper Service Costs)

Other costs include Carload Originated and Terminated - Clerical, Carload Handling - Other, Expenses for Loop Track Movements, Train Mile-Other, Car Repairs - User Responsibility, EOTD Ownership, Helper Service, and Loss and Damage.

The parties' stipulated agreements included the cost components (1) Carload Handling - Other and (2) Loss and Damage, as well as the indices for all cost components. *See* AEP Texas Reply at II-A-14. Car Repairs - User Responsibility Costs are not relevant when, as here, railroad owned cars are being used. Additionally, the parties' costs for Carload Originated and Terminated - Clerical are nearly identical. As a result, these four cost components will not be discussed.

Loop Track Costs were covered by AEP Texas in its Reply at II-A-21 to 26 and II-A-61 to 62. There, AEP Texas explained that the parties agreed on both origin and

destination loop track mileages, but disagreed on the proper treatment of the related costs. BNSF erred by treating the loop track operations as switching in contravention of the Board - approved treatment of these operations as an extension of the line haul service. As a result, BNSF has understated Loop Track Costs as zero, but has dramatically overstated switching costs.

There are three other areas in which AEP Texas' variable Other Costs calculations differ from those submitted on behalf of BNSF:

- (i) Car Inspection Costs;
- (ii) End-of-Train-Device Costs; and
- (iii) Helper Service Cost.

Each of these cost items is discussed below.

a. Car Inspection Costs

At page II-A-43 of its Opening Narrative and page II-A-93 of its Reply Narrative, AEP Texas discussed its development of car inspection costs in a special study described in Opening Exhibit II-A-21. In Reply at II-51, BNSF simply states “Differences in the parties ‘train mile-other’ expenses [of which Car Inspection Costs are a large portion] are minimal.” Because AEP Texas’ car inspection costs are based on a well-supported, un-rebutted,¹⁹⁶ service-specific car inspection study that has been shown

¹⁹⁶ Any rebuttal that BNSF had to AEP Texas’ Train Mile-Other Costs (including the Car Inspection Costs) should have been filed in BNSF’s Reply.

to be demonstrably superior to BNSF's system-averages, AEP Texas' Train Mile-Other and Car Inspection Costs should be accepted as the best evidence of record.

b. End-of-Train Device Costs

AEP Texas addressed End-of-Train-Device ("EOTD") costs at pages II-A-27 and II-A-43 of its Opening Narrative and pages II-A-93 to 94 of its Reply Narrative. BNSF used system average costs and did not separately identify EOTD costs.¹⁹⁷ AEP Texas' EOTD Costs are based on a well-supported study developing service-specific costs and, thus, are demonstrably superior to BNSF's system average costs and should be accepted as the best evidence of record.

c. Helper Service Costs

Helper Service Costs were addressed in AEP Texas' Opening Narrative at pages II-A-28, 46 to 47, and in Reply at pages II-A-94 to 97. At page II-12 of its Opening Narrative BNSF referenced its use of system average costs for this component. On Reply, BNSF covered Helper Service Costs at pages II-14 and II-57 to 60. BNSF's service-specific Reply Helper Service Costs should have been filed an Opening as part of its case in chief. Because of this, AEP Texas reserves the right to respond to any new evidence that BNSF may file in Rebuttal.

¹⁹⁷ While BNSF did not separately identify its EOTD Costs, AEP Texas' Exhibit II-A-88 went into BNSF's system average development of Train Mile-Other Costs, segregated out BNSF's EOTD costs, and used the result to compare the parties' EOTD costs.

Exhibit II-A-88, page 19, Line 10 compares AEP Texas' helper service cost with BNSF's Reply estimate. Column (16) of that Exhibit shows that the total difference between the parties is \$7.16 per car or \$0.07 per ton for the Eagle Butte 1Q03 movement.

On Reply, AEP Texas explained that in the Technical Conference, the parties agreed on the number of locomotives per train, including a fourth road locomotive to replace the helper locomotive over what used to be the Denver Helper District.¹⁹⁸ AEP Texas also explained its use of movement-specific helper service costs including the actual frequency of using helper service where and when helper districts are encountered. AEP Texas has reflected these frequency factors in its Helper Service Costs and explained why helper service requirements have declined over the years due, in part, to the use of distributed power ("DP") locomotives. AEP Texas showed that BNSF uses locomotives in a DP configuration on the Oklaunion trains.¹⁹⁹ Where the requirement to use helpers is marginal, such as on the southbound Logan grade on BNSF's Orin Subdivision in the PRB, DP locomotives make helpers unnecessary. DP locomotives eliminate both the associated Helper LUM costs and crew wage costs, as well as delays for adding and removing helpers.

BNSF overstated the frequency with which it uses the helper services available at each location. AEP Texas' Helper Service Costs reflect the frequency of use

¹⁹⁸ See BNSF Op. at II-9 where BNSF states: "Among other things, the additional unit eliminated the need for the AEP Texas train to be helped at Denver."

¹⁹⁹ See AEP Texas Reply electronic workpaper file "DPPower.pdf."

of helper services as determined from BNSF's Train Activity Reports ("TARs").²⁰⁰ AEP Texas' analysis of BNSF's TARs shows BNSF's frequency of use of helper service is { } for Belle Ayr helpers and { } for Crawford helpers.

Differences in the helper service crew wage calculations contribute to a small amount of the difference between the parties' Helper Service Costs. AEP Texas' discussion of its calculation of helper wages is included in section 7, Crew Wages, *supra*.

On Reply, BNSF criticizes AEP Texas' Helper Service Costs. With no corroborating evidence from BNSF's records taken in the normal course of business (*e.g.* train or equipment movement records, wage documents for the involved employees, reports of activities of the specific helper locomotives involved, etc.) BNSF's operating witness Deichert explains:

. . . that *all* loaded unit coal trains originating in the PRB that travel east from Donkey Creek are helped at Crawford Hill and generally, at one other location. Loaded unit coal trains that originate on the Joint Line and exit it via Donkey Creek are helped at Belle Ayr. Loaded unit coal trains that originate at mines located on the Campbell Subdivision, including Buckskin, Eagle Butte, and Rawhide, are helped at Campbell. Prior to Third Quarter 2002, when a fourth locomotive was placed on the train between Alliance/Guernsey and Amarillo, Texas, all loaded Oklaunion trains were also helped at Palmer Lake, south of Denver, Colorado.

See BNSF Reply at II-58.

AEP Texas' experts have considerable experience with BNSF's records, and have observed its operations on many occasions. Mr. Deichert is wrong. If he were right

²⁰⁰ See AEP Texas Reply at II-A-96.

he would have availed himself of BNSF's corporate books and records and documented his unsupported claims. He did not document his claims. His claims may be a statement of the way that he believes BNSF's operations should take place, but the Board bases its decisions on actual operations, not hypothetical operating goals.

Mr. Deichert explains further that:

. . .TARs [Train Activity Reports] are not a reliable indicator of whether a train was helped or not. In most cases, cutting on and off the helper locomotive is performed quickly and is not a source of delay for the train. Since it is a routine event that is part of the standard operating procedure for the train, many crews do not report the fact that the train was helped, although reporting practices vary by territory and by crew.

See BNSF Reply at II-59.

Again, Mr. Deichert is wrong. The purpose of the TARs is to record the activities of the train crew from the time they arrive until the time they tie up at the end of the work shift. BNSF's statement that some crews fail to record their activities, such as helping trains, is not supported by BNSF's own records. AEP Texas copied and placed into the record hundreds of TARs, and an inspection of those records proves Mr. Deichert wrong.²⁰¹ Many of these TARs were filled out by crew members working with the helper locomotives themselves. Mr. Deichert cannot claim that a helper crew would not record helper service on its TARs. Those crews only perform helper service, so helper service activities are the only services that they can record.

²⁰¹ *See AEP Texas Op. Workpapers Vol. 8, p. 03946 to Vol. 10, p. 04871.*

Mr. Deichert misrepresents the documentation placed on the TARs. Above, Mr. Deichert claims “. . . Loaded unit coal trains that originate on the Joint Line and exit it via Donkey Creek are helped at Belle Ayr.”²⁰² But AEP Texas’ review of BNSF’s own records taken in the normal course of business prove otherwise. BNSF’s frequency of use of helper service at Belle Ayr is actually only { }. This { } result is consistent with the Belle Ayr helper service for several unit coal trains exiting the Joint Line via Donkey Creek. It is incumbent upon BNSF and Mr. Deichert to support their claims with evidence. An unsupported claim is not evidence.

Mr. Deichert also is wrong when he states “. . . many crews do not report the fact that the train was helped. . .” Mr. Deichert cannot square that claim with AEP Texas’ documentary evidence in this proceeding that { } of the Crawford helper crews reported the fact that they helped the Oklaunion train.²⁰³ For some helper services and other proceedings, BNSF employees report nearly 100% of the trains helped. The recording of helper services depends upon the frequency that the trains are actually helped, not on the willingness of the crews to correctly fill out the BNSF TARs. If that were not the case, TARs would serve no purpose and BNSF would discontinue their use. These facts taken from BNSF’s records debunk Mr. Deichert’s unsupported claims.²⁰⁴

²⁰² The Belle Ayr helper is an “exception helper” that only assists trains needing “. . . assistance because of operational conditions. . .”. See BNSF Reply, at II-59.

²⁰³ See BNSF Reply at II-59 and AEP Texas Reply electronic workpaper file “Reply Routing & Helper Summary. 123.”

²⁰⁴ While the Board’s evidentiary standards may be somewhat less rigid than a court’s, no standard would accept Mr. Deichert’s unsupported claims when compared

BNSF also claimed to have uncovered several errors in AEP Texas' calculations, but closer inspection shows that BNSF is wrong. These alleged errors are covered under the following topical headings:

- a. BNSF claims that AEP Texas made errors in its TARs calculations; and
- b. BNSF claims that AEP Texas failed to account for its exception helpers.

**i. BNSF Claims That AEP Texas
Made Errors In its TARs Calculations**

BNSF criticized AEP Texas for using the wrong TARs, claiming 1) that trains were not helped when the TARs showed Oklaunion trains actually being helped; and 2) crews “. . . worked the empty train from Gillette to the mine but did not work the loaded train.”²⁰⁵ The support for BNSF's claim is included in its Reply Workpapers Vol. I, pp. II.A-0069- 0074. These workpapers consist of TARs for the following trains:

- 1. CBTMOKO045A
- 2. CEBMOKO001A
- 3. CBKOKO017A
- 4. EOKOJRM005A
- 5. EOKOJRM014A

The first three loaded trains in BNSF's data were not selected in AEP Texas' sampling procedure and therefore were excluded from the study. The fourth and

with AEP Texas' evidentiary documentation.

²⁰⁵ See BNSF Reply at II-59.

fifth trains in BNSF's data were excluded because empty trains were not selected by the sampling procedure. The subsequent loaded trains (*i.e.*, CJRMOKO08A and CJRMOKO10A, respectively) for each of the empty trains were also not selected by the sampling procedure.

BNSF assumes that all loaded trains from a specific mine travel the same route during every year at issue in this proceeding. AEP's helper costs are based on the percent of helpers as calculated from the TARs and the percent of trains from each origin mine actually using each alternative routing options. These calculations are included in AEP Texas Reply electronic workpaper file "Reply Routing & Helper Summary.123". AEP Texas' procedure for calculating the cost of helper service accurately identifies and quantifies the characteristics of BNSFs' trains that transport coal to the Oklahoma plant.

ii. BNSF Claims That AEP Texas Failed to Account for its Exception Helpers

Earlier, BNSF was quoted as saying, "Among other things, the additional [locomotive] unit eliminated the need for the AEP Texas train to be helped at Denver."²⁰⁶ BNSF now disagrees with that earlier statement and claims that allowance must also be made for the incremental costs associated with "exception helpers." BNSF allocates a portion of the cost of these "exception helpers" to AEP Texas under the guise of keeping

²⁰⁶ See BNSF Op. at II-9.

“...the flow of traffic through the helper district fluid.” *See* BNSF Reply at II-59 to 61.²⁰⁷

BNSF is not justified in allocating “exception helpers” to the Oklaunion trains. In its Reply at II-59, BNSF states:

Exception helpers do not assist every train, but only those trains that need assistance because of operational conditions, *e.g.* a locomotive powering the train is suffering mechanical problems or there are severe weather conditions.

AEP Texas’ helper service frequency measurement procedure directly measures the use of “exception helpers” required “...because of operational conditions...”. An additional across the board allocation of exception helpers, as BNSF has carried out,²⁰⁸ would double-count AEP Texas’ direct measurements. Oklaunion trains have already borne the additional cost of a fourth locomotive on every train. While “exception helpers” might properly be charged to some trains without the extra fourth locomotive and without the DP configuration, the Oklaunion trains have both. BNSF has provided no evidence that the Oklaunion trains need these BNSF double-counted “exception helpers.”

10. Conclusion

As described in AEP Texas’ Reply and this Rebuttal, the evidence submitted by BNSF and AEP Texas differs on a number of cost factors influencing BNSF’s variable

²⁰⁷ BNSF also makes mathematical errors in its already flawed calculation of “exception helpers” attributable to AEP Texas operations over Palmer Lake and Logan. *See* AEP Texas Reb. electronic workpaper files “2002 Palmer and Logan Modified.wpd” and “2002 Palmer and Logan Modified.123.”

²⁰⁸ *See* BNSF Reply at II-60.

cost of providing service for unit coal trains moving to AEP Texas' Oklaunion Station. AEP Texas has accepted a number of adjustments suggested by BNSF, and restated its variable costs. The results are shown in Tables II-A-48 to 51 below.

Table II-A-48

**Summary of BNSF's Rate, Variable cost and Ratio of
Revenue to Variable Cost - Campbell Branch Mines - 2Q00 through 1Q04**

Origin/ Time Period	BNSF Rate/Ton ¹	<u>AEP Texas' Reply</u>		<u>AEP Texas' Rebuttal</u>		Jurisdictional Threshold ⁶
		Variable Cost/Ton ²	R/VC Ratio ³	Variable Cost/Ton ⁴	R/VC Ratio ⁵	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Buckskin Mine						
1. 2Q00	\$13.68	\$6.38	214%	\$6.53	209%	\$11.75
2. 3Q00 ⁷	15.78	6.39	247%	6.55	241%	11.79
3. 4Q00	15.78	6.62	238%	6.77	233%	12.19
4. 1Q01	15.78	6.77	233%	6.96	227%	12.53
5. 2Q01	15.78	6.78	233%	6.98	226%	12.56
6. 3Q01	15.78	6.83	231%	7.03	224%	12.65
7. 4Q01	15.78	6.72	235%	6.92	228%	12.46
8. 2Q03 ^{7,8}	18.04	7.22	250%	7.43	243%	13.37
9. 4Q03	18.04	7.01	257%	7.23	250%	13.01
B. Rawhide Mine						
10. 1Q02	\$15.78	\$6.46	244%	\$6.64	238%	\$11.95
11. 2Q02	15.78	6.77	233%	6.95	227%	12.51
12. 3Q02 ⁷	13.68	7.08	193%	7.27	188%	13.09
13. 4Q02	13.68	7.05	194%	7.24	189%	13.03
14. 1Q03	13.68	7.12	192%	7.32	187%	13.18
15. 2Q03	13.68	7.12	192%	7.34	186%	13.21
C. Eagle Butte Mine						
16. 1Q03	\$17.25	\$7.11	243%	\$7.31	236%	\$13.16
17. 2Q03 ⁷						
117 cars	18.04	6.75	267%	6.94	260%	12.49
18. 2Q03 ⁷						
128 cars	18.04	6.70	269%	6.88	262%	12.38
19. 3Q03	18.04	6.88	262%	7.08	255%	12.74
20. 4Q03	18.04	6.88	262%	7.08	255%	12.74
21. 1Q04	18.83	6.96	271%	7.16	263%	12.89

¹ Source: The Pricing Letters.

² See AEP Texas Reply Table II-A-26 at II-A-104.

³ Column (2) ÷ Column (3).

⁴ AEP Texas Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

⁵ Column (2) ÷ Column (5).

⁶ Column (5) x 180%.

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklaunion during this time period.

Table II-A-49
Summary of BNSF's Rate, Variable Cost and Ratio of
Revenue to Variable Cost - Orin Line Mines - 2Q00 through 1Q04

Origin/ Time Period	BNSF Rate/Ton	AEP Texas' Reply		AEP Texas' Rebuttal		Jurisdictional Threshold ⁶
		Variable Cost/Ton ²	R/VC Ratio ³	Variable Cost/Ton ⁴	R/VC Ratio ⁵	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Jacobs Ranch Mine						
1. 2Q00	\$13.68	\$5.82	235%	\$5.97	229%	\$10.75
2. 3Q00	15.78	6.17	256%	6.33	249%	11.39
3. 1Q01	15.78	6.59	239%	6.80	232%	12.24
4. 2Q01	15.78	6.60	239%	6.80	232%	12.24
5. 3Q01	15.78	6.46	244%	6.66	237%	11.99
6. 4Q01	15.78	6.53	242%	6.73	234%	12.11
7. 1Q02	15.78	6.20	255%	6.39	247%	11.50
8. 3Q02 ⁸	17.25	6.59	262%	6.78	254%	12.20
9. 4Q02	17.25	7.07	244%	7.28	237%	13.10
10. 2Q03 ^{7,8}	18.04	7.32	246%	7.53	240%	13.55
B. Black Thunder Mine						
11. 1Q01	\$15.78	\$6.27	252%	\$6.47	244%	\$11.65
12. 3Q01	15.78	6.80	232%	7.01	225%	12.62
13. 4Q01	15.78	6.34	249%	6.54	241%	11.77
14. 2Q02	15.78	6.57	240%	6.77	233%	12.19
15. 3Q02 ⁸	17.25	6.63	260%	6.82	253%	12.28
16. 4Q02	17.25	7.08	244%	7.29	237%	13.12
17. 2Q03 ^{7,8}	18.04	7.05	256%	7.26	248%	13.07
18. 4Q03	18.04	6.91	261%	7.12	253%	12.82
19. 1Q04	18.83	7.03	268%	7.24	260%	13.03
C. Caballo Rojo Mine						
20. 2Q00	\$13.68	\$6.29	217%	\$6.44	212%	\$11.59
21. 3Q00 ⁸	15.78	6.28	251%	6.43	245%	11.57
22. 4Q00	15.78	6.49	243%	6.65	237%	11.97
23. 1Q01	15.78	6.64	238%	6.85	230%	12.33
24. 2Q01	15.78	6.49	243%	6.69	236%	12.04
25. 3Q01	15.78	6.78	233%	6.99	226%	12.58
26. 4Q01	15.78	6.79	232%	7.00	225%	12.60
27. 2Q03 ^{7,8}	18.04	7.53	240%	7.75	233%	13.95

¹ Source: The Pricing Letters.

² See AEP Texas Reply Table II-A-27 at II-A-105.

³ Column (2) ÷ Column (3).

⁴ AEP Texas Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

⁵ Column (2) ÷ Column (5).

⁶ Column (5) x 180%.

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklaunion during this time period.

Table II-A-50
Summary of BNSF's Rate, Variable Cost and Ratio of
Revenue to Variable Cost - Orin Line Mines - 2Q00 through 1Q04

Origin/ Time Period	BNSF Rate/Ton ¹	<u>AEP Texas' Reply</u>		<u>AEP Texas' Rebuttal</u>		
		Variable Cost/Ton ²	R/VC Ratio ³	Variable Cost/Ton ⁴	R/VC Ratio ⁵	Jurisdictional Threshold ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. North Antelope Mine						
1. 2Q03 ^{7,8}	\$18.04	\$6.85	263%	\$7.05	256%	\$12.69
2. 3Q03	18.04	6.81	265%	7.01	257%	12.62
B. Caballo Mine						
3. 2Q02	\$15.78	\$7.06	224%	\$7.27	217%	\$13.09
4. 3Q02	17.25	6.48	266%	6.67	259%	12.01
5. 4Q02	17.25	7.36	234%	7.58	228%	13.64
6. 2Q03 ⁷	18.04	7.07	255%	7.28	248%	13.10
C. Cordero Mine						
7. 2Q03 ⁷	\$18.04	\$6.68	270%	\$6.87	263%	\$12.37
D. North Rochelle Mine						
8. 3Q02	\$17.25	\$7.12	266%	\$7.33	235%	\$13.19
9. 2Q03 ^{7,8}	18.04	6.88	262%	7.09	254%	12.76
10. 4Q03	18.04	6.52	277%	6.72	268%	12.10
E. Antelope Mine						
11. 2Q03 ^{7,8}	\$18.04	\$6.69	270%	\$6.89	262%	\$12.40
12. 4Q03	18.04	5.79	312%	5.97	302%	10.75
13. 1Q04	18.83	6.86	274%	7.06	267%	12.71

¹ Source: The Pricing Letters.

² See AEP Texas Reply Table II-A-28 at II-A-106.

³ Column (2) ÷ Column (3).

⁴ AEP Texas Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

⁵ Column (2) ÷ Column (5).

⁶ Column (5) x 180%.

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklahoma during this time period.

Table II-A-51
Summary of BNSF's Rate, Variable Cost and Ratio of Revenue to
Variable Cost Other PRB Mines from Which no Traffic Moved During 2Q03

Origin/ Time Period (1)	BNSF Rate/Ton ¹ (2)	AEP Texas' Reply Variable Cost/Ton ² (3)	R/VC Ratio ³ (4)	AEP Texas' Rebuttal Variable Cost/Ton ⁴ (5)	R/VC Ratio ⁵ (6)	Jurisdictional Threshold ⁶ (7)
A. Belle Ayr Mine						
1. 2Q03 ^{7,8}	\$18.04	\$7.31	247%	\$7.52	240%	\$13.54
B. Dry Fork Mine						
2. 2Q03 ^{7,8}	\$18.04	\$7.20	251%	\$7.41	243%	\$13.34
C. Fort Union Mine						
3. 2Q03 ^{7,8}	\$18.04	\$7.20	251%	\$7.41	243%	\$13.34
D. Clovis Point Mine						
4. 2Q03 ^{7,8}	\$18.04	\$7.20	251%	\$7.41	243%	\$13.34
E. Coal Creek Mine						
5. 2Q03 ^{7,8}	\$18.04	\$7.32	246%	\$7.53	240%	\$13.55
F. Rochelle Mine						
6. 2Q03 ^{7,8}	\$18.04	\$7.29	247%	\$7.50	241%	\$13.50

¹ Source: The Pricing Letters.

² See AEP Texas Reply Table II-A-29 at II-A-107.

³ Column (2) ÷ Column (3).

⁴ AEP Texas Exhibits II-A-87 and II-A-151 and electronic workpaper files "VC AEPTEX Rebuttal 2000.123", "VC AEPTEX Rebuttal 2001.123", "VC AEPTEX Rebuttal 2002.123", and "VC AEPTEX Rebuttal 2003.123".

⁵ Column (2) ÷ Column (5).

⁶ Column (5) x 180%.

⁷ The rate changed during this time period.

⁸ No traffic moved from this mine to Oklahoma during this time period.

Tables II-A-48 through II-A-51 show that the common carrier rates at issue in this proceeding exceed the 180% jurisdictional threshold set forth in 49 U.S.C.

§ 10707(d)(1)(A). The Board's jurisdiction to adjudicate the reasonableness of the rate instituted in BNSF's Pricing Letters is established, and BNSF's significant overstatements of its variable cost of providing service from the PRB to the Oklahoma Station should be rejected.