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PUBLIC VERSION

September 16, 2004

BY HAND

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board
1925 K Street, N.W.
Washington, D.C. 20423-0001



Re: Docket No. 42058, Arizona Electric Power Cooperative, Inc. v. The Burlington Northern & Santa Fe Ry. and Union Pacific R.R.

Dear Secretary Williams:

Enclosed for filing in the above-referenced proceeding are the original and ten copies of the Public version of the Joint Brief of The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company. In addition, we have enclosed three copies of the Public version of the Brief on compact disc.

Two additional copies are enclosed. Please indicate receipt and filing by date-stamping the enclosed extra copies and returning them to our messenger.

Thank you for your assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Michael L. Rosenthal'.

Michael L. Rosenthal

Enclosures

cc: Christopher A. Mills (via messenger)
Anthony J. LaRocca (via messenger)

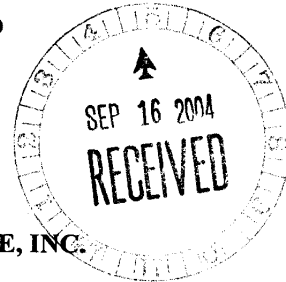
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PUBLIC VERSION

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Docket No. 42058



**ARIZONA ELECTRIC POWER COOPERATIVE, INC.
v.
THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY AND
UNION PACIFIC RAILROAD COMPANY**

**JOINT BRIEF OF THE BURLINGTON NORTHERN
AND SANTA FE RAILWAY COMPANY AND
UNION PACIFIC RAILROAD COMPANY**

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September 16, 2004

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TABLE OF ABBREVIATIONS

ACE	Apache, Cochise & Eastern Railroad
AEPCO	Arizona Electric Power Cooperative, Inc.
BMR	Basic Mileage Rate
BNSF	The Burlington Northern and Santa Fe Railway Company
DCF	Discounted Cash Flow
DOT	Department of Transportation
Exh.	Exhibit
FIRE	Foundation for Intermodal Research & Education
ICC	Interstate Commerce Commission
ITS	Intelligent Transportation System
MOW	Maintenance of Way
MSP	Modified Straight Mileage Prorate
Nar.	Narrative
Op.	Opening
RCAF-A	Rail Cost Adjustment Factor—Adjusted
RCAF-U	Rail Cost Adjustment Factor—Unadjusted
R/VC	Revenue to Variable Cost
Reb.	Rebuttal
SAC	Stand-Alone Cost
SARR	Stand-Alone Railroad
SP	Southern Pacific
STB	Surface Transportation Board
Supp.	Supplemental
T&E	Train and Engine

TPS	Train Performance Simulator
UP	Union Pacific Railroad Company
URCS	Uniform Railroad Costing System
USGS	United States Geological Survey

CASE NAMES

<i>AAR</i>	<i>Association of American Railroads v. Surface Transportation Board</i> , 146 F.3d 942 (D.C. Cir. 1998)
<i>APS</i>	<i>Arizona Public Service Co. v. The Atchison, Topeka & Santa Fe Railway Co.</i> , 2 S.T.B. 367 (1997)
<i>August 2002 Decision</i>	<i>Arizona Electric Power Cooperative, Inc. v. The Burlington Northern and Santa Fe Railway Co.</i> , STB Docket No. 42058 (served Aug. 20, 2002)
<i>Bottleneck I</i>	<i>Central Power & Light Co. v. Southern Pacific Transportation Co.</i> , 1 S.T.B. 1059 (1996)
<i>Coal Rate Guidelines</i>	<i>Coal Rate Guidelines, Nationwide</i> , 1 I.C.C.2d 520 (1985)
<i>CP&L</i>	<i>Carolina Power and Light Co. v. Norfolk Southern Railway Co.</i> , STB Docket No. 42072 (served Dec. 23, 2003)
<i>December 2001 Decision</i>	<i>Arizona Electric Power Cooperative, Inc. v. The Burlington Northern and Santa Fe Railway Co.</i> , STB Docket No. 42058 (served Dec. 31, 2001)
<i>Duke/CSX</i>	<i>Duke Energy Corp. v. CSX Transportation, Inc.</i> , STB Docket No. 42070 (served Feb. 4, 2004)
<i>Duke/NS</i>	<i>Duke Energy Corp. v. Norfolk Southern Railway Co.</i> , STB Docket No. 42069 (served Nov. 6, 2003)
<i>FMC</i>	<i>FMC Wyoming Corp. v. Union Pacific Railroad Co.</i> , STB Docket No. 42022 (served May 12, 2000)
<i>General Procedures</i>	<i>General Procedures for Presenting Evidence in Stand-Alone Cost Rate Cases</i> , STB Ex Parte No. 347 (served Mar. 9, 2001)
<i>McCarty Farms I</i>	<i>McCarty Farms, et al. v. Burlington Northern Inc.</i> , 4 I.C.C.2d 262 (1988)
<i>McCarty Farms II</i>	<i>McCarty Farms, et al. v. Burlington Northern Inc.</i> , STB Docket No. 37809 (served Feb. 13, 1995)

November 19 Decision *Arizona Electric Power Cooperative, Inc. v. The Burlington Northern and Santa Fe Railway Co.*, STB Docket No. 42058 (served Nov. 19, 2003)

OPPD *Omaha Public Power District v. Burlington Northern Railroad Co.*, 3 I.C.C.2d 853 (1987)

TMPA *Texas Municipal Power Agency v. The Burlington Northern and Santa Fe Railway Co.*, STB Docket No. 42056 (served Mar. 24, 2003)

WTU *West Texas Utils. Co. v. Burlington Northern Railroad Co.*, 1 S.T.B. 638 (1996)

Xcel *Public Service Co. of Colorado d/b/a Xcel Energy v. The Burlington Northern and Santa Fe Railway Co.*, STB Docket No. 42057 (served June 8, 2004)

DEFENDANTS' FINAL BRIEF

Pursuant to the Board's August 2, 2004 Order, defendants hereby file their final brief.

I. INTRODUCTION

This rate reasonableness proceeding has been pending for nearly four years. It should have been dismissed long ago. AEPCO is responsible for its long and complex history. AEPCO initially challenged a joint BNSF/UP rate for transporting New Mexico coal to its Apache Generating Station. It later expanded its complaint to challenge certain joint and single-line rates for Wyoming and Colorado coal. However, after two years of pursuing its expanded claims, it withdrew them just before filing opening evidence.¹

AEPCO also extended and complicated this proceeding through its attempts to manipulate the SAC test. The Board has twice found AEPCO's SAC theories to be defective,² and two rounds of SAC presentations have been required as a result of AEPCO's ill-conceived and error-ridden SAC evidence.

¹ BNSF believes that there is no valid reason for this case to have proceeded beyond February 2003, when AEPCO and UP entered into a settlement agreement that led AEPCO to withdraw its expanded claims. At that time, AEPCO should have withdrawn its complaint rather than draw out the litigation in the hope of obtaining a windfall. The settlement agreement included a new contract for the transportation of Colorado and Wyoming coal to the Apache Generating Station, {

} See BNSF Reply Exh. I-1 at 2-3, 15.

As BNSF explained in its May 27, 2003 Reply Evidence, {

} BNSF Reply Evidence at I-35 to 36; *id.* III.H-1 to 3 and Exh. III.H-1. Accordingly, BNSF takes the position that, if the Board does not dismiss AEPCO's claims now, there would have to be another round of evidence to determine whether AEPCO is entitled to any monetary relief in light of its settlement with UP.

² See December 2001 Decision at 5-6; November 19 Decision at 4-6.

AEPCO's Opening Evidence contained two significant flaws that should have led the Board to dismiss the complaint. First, AEPCO proposed a traffic group that, as the Board recognized, "did not correspond to any real-world figures." November 19 Decision at 4. AEPCO's evidence was indisputably erroneous: AEPCO assumed that the intermodal traffic moving over the replicated BNSF lines in New Mexico generated revenues that exceeded BNSF's intermodal revenues *over BNSF's entire system*. BNSF Reply Nar. at I-10. Second, AEPCO posited a SARR that relied on trackage rights over one of the joint defendants – an approach that, as the Board recognized, "would defeat the SAC test." November 19 Decision at 6.

Despite finding these two serious flaws in AEPCO's evidence, the Board in its November 19 Decision did not dismiss AEPCO's complaint. Instead, it required defendants to submit reply evidence. That decision unlawfully shifted the burden of proof from AEPCO to defendants and unduly extended these proceedings.³ The Board should revisit that ruling in its final decision, both to correct its error and to send a clear message that complainants must submit a viable case-in-chief on opening.

In other SAC cases decided subsequent to the November 19 Decision, the Board reaffirmed its long-standing rule that the complainant has the burden of proof with respect to SAC issues, and that it is required to present a fully supported case-in-chief on opening.⁴ If this

³ BNSF notes that it has pointed out in another pending matter that 49 U.S.C. § 11701(c) provides for the automatic dismissal of proceedings that are not concluded within three years. See BNSF's Petition for Reconsideration, STB Docket No. 42057 at 4 (filed June 28, 2004).

⁴ See *Duke/NS* at 13, 15; see also *General Procedures* at 5.

rule is to have any meaning, a complainant's failure to posit a viable case-in-chief on opening must result in dismissal of the complaint.⁵

In its November 19 Decision, the Board explained that it would not dismiss AEPCO's complaint because "railroads have a responsibility to provide information needed by the Board." November 19 Decision at 2. That responsibility, however, is satisfied by complying with the complainant's discovery requests. Defendants met their discovery obligations in this case by producing in discovery nearly 80,000 pages of information and scores of electronic files related to their infrastructure, operations, traffic levels, and revenues.

Once the defendant meets its discovery obligations, the complainant is required to present a case-in-chief supporting its claim that the challenged rates are unreasonable. The Board's November 19 Decision confused the parties' respective obligations and unlawfully reversed the burden of proof when it purported to require defendants to submit SAC evidence regardless of the validity of AEPCO's case-in-chief, which was clearly flawed. This decision vitiated the meaning of a case-in-chief, deprived the defendants of their right to reply to the complainant's case, and contravened the Board's repeated holdings that defendants may not posit the traffic and other assumptions required to conduct a SAC analysis.⁶

Even after the Board gave AEPCO a further chance to prove its case through an additional round of evidentiary filings, AEPCO did not repair the fundamental flaws in its SAC

⁵ *Sea-Land Service Inc. v. New York Central Railroad Co.*, 329 I.C.C. 589 (1967). In *Sea-Land*, which involved a challenge to trailer-on-flatcar rates, the ICC stated that, "[i]n proceedings such as this, the burden of proof rests with the complainant; initially, it must make out a prima facie case before a defendant is required to respond." 329 I.C.C. at 591. The ICC reasoned that an order compelling the defendant to respond when the complainant itself had failed to open with a viable case-in-chief was "tantamount to compelling the defendants to make out a case against themselves." *Id.* at 592. See also *McCarty Farms II*, where the ICC stated that the patent infeasibility of a complainant's opening evidence would support dismissal of a claim.

⁶ See *AAR*, 146 F.3d at 945; *McCarty Farms I*, 4 I.C.C.2d at 271.

evidence. As the record stands today, AEPCO's SAC presentation is fatally deficient in at least two respects.

First, AEPCO's SARR consists predominantly of intermodal and automotive traffic that is handled as cross-over traffic. Intermodal and automotive traffic is exempt from regulation because it faces pervasive non-rail competition that keeps rates at reasonable levels. But AEPCO's SAC results purport to show that defendants are earning monopolistic profits on this traffic. The Board cannot accept evidence that presents such implausible results, especially where defendants have presented better evidence supporting results that are more reasonable. Defendants showed that AEPCO reaches its implausible result by using the MSP methodology to allocate an excessive share of cross-over revenues to the SARR. AEPCO did not even attempt to show that the MSP methodology comports with the cost-based standard for divisions that the Board articulated in *Duke/NS* and *CP&L*. Defendants proffered alternative cost-based evidence on the allocation of revenue for cross-over traffic that is the best evidence in this case.

Second, AEPCO continues to posit a SARR that relies upon trackage rights over one of the defendants (*i.e.*, UP's Vaughn-El Paso line) without any effort to demonstrate how the SAC costs of that line would compare to SAC revenues from traffic on that line. Defendants showed that the trackage rights fee posited by AEPCO was plainly inadequate for purposes of a SAC analysis, and that an appropriate fee could not be calculated without a full SAC analysis. Because AEPCO declined its opportunities to perform such an analysis or even to present the evidence necessary to do so, its case-in-chief remains defective.

These deficiencies are fatal to AEPCO's claims, and the Board should dismiss the complaint without further analysis of the SAC evidence. If the Board does address the merits of the parties' SAC calculations, it should accept defendants' alternative SAC evidence presented in response to the Board's November 19 Decision, showing that SAC costs for AEPCO's

hypothetical SARR significantly exceed the revenues that would be available to it. Whether the Board focuses on the deficiencies in AEPCO's SAC theory or on an analysis of SAC costs and revenues, the result should be the rejection of AEPCO's complaint.

II. AEPCO'S REVENUE ASSUMPTIONS ARE VASTLY OVERSTATED

AEPCO vastly overstates stand-alone revenues by assigning its SARR a disproportionate share of revenues from cross-over traffic. It also overstates revenues by including in its SARR's traffic group certain cross-over coal traffic that the SARR purports to handle differently than in the real world, without any attempt to demonstrate that the shipper would accept a different level of service.

A. AEPCO's Heavy Reliance On Cross-Over Traffic Produced Meaningless Results.

Before addressing the details of proper revenue allocation, the Board should understand that AEPCO's approach to cross-over traffic has produced results that reveal nothing about the rates charged for the issue traffic. The overwhelming majority of ACE's total revenue – about 98 percent – is from cross-over traffic.⁷ Remarkably, AEPCO calculates that the SARR's share of revenues from just the intermodal and automotive cross-over traffic it handles – *i.e.*, without any contribution from other traffic – substantially exceeds the full stand-alone costs of the SARR. BNSF/UP Supp. Reply Exh. III.A-1. Because AEPCO's SAC case includes so much cross-over traffic, its results are driven entirely by the manner in which the complainant has allocated the revenues from cross-over traffic between the SARR and the incumbents. Close scrutiny of those allocations thus becomes especially vital to meaningful SAC results in such circumstances.

⁷ AEPCO Reb. electronic workpaper "ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls" and Op. electronic workpaper "ACE Coal Traffic and Revenue Forecast.xls."

In this case, moreover, it is apparent that AEPCO's allocations of cross-over revenues was not reasonable. The fact that ACE's share of those revenues just for its intermodal and automotive traffic exceeds total SAC costs confirms that AEPCO has not properly allocated revenues from this cross-over traffic. Intermodal and automotive traffic are exempt from rate regulation because they are subject to intense competition. Indeed, AEPCO's own analysis of sample ACE movements shows that the average R/VC ratios for automotive and intermodal traffic calculated on an origin-to-destination basis are well below the Board's jurisdictional threshold. AEPCO Reb. at III-A-44, Table III-A-11. Yet AEPCO's analysis, by suggesting that SAC revenues from this traffic alone exceed SAC costs for the entire SARR, implies that defendants are charging monopolistic rates for this traffic. This outcome is nonsensical and confirms that AEPCO has not conducted a valid SAC analysis.

AEPCO claims that its conclusions are plausible because "intermodal traffic is quite profitable," and it cites reports describing the growing importance of intermodal traffic for railroads. AEPCO Supp. Reb. Nar. at III-A-14. But the fact that traffic earns *some* positive contribution does not remotely suggest that it is charging "monopolistic" rates, in the sense that a SAC analysis would deem them unreasonably high.

Nor can AEPCO resuscitate its SAC analysis by asserting that "exempt traffic becomes especially profitable when it moves across segments with high operating densities, which is certainly the case with the segments . . . that are replaced by AEPCO's SARR." AEPCO Supp. Reb. Nar. at III-A-15. In other words, AEPCO accepts that exempt traffic may not generate excessive revenues for the entire through movement, but contends that it generates large profits over the efficient, low-cost portions of defendants' networks replicated by the SARR. It is manifestly inappropriate to divide through movements into segments that, because of an artificial allocation of revenues, appear to be extraordinarily profitable and segments that appear to be

generating no contribution to fixed costs.⁸ Such divisions are illusory because they merely reflect an arbitrary and inaccurate allocation of revenues and costs over the entire through movement. The Board sought to prevent such inaccurate allocations when it adopted a cost-based approach to revenue allocation in *Duke/NS* and *CP&L*. AEPCO's counter-intuitive conclusion that intermodal and automotive revenues are excessive – but only on high-density segments such as those ACE replicates – underscores both the need for a careful cost-based analysis and the conclusion that AEPCO's SAC results in this case hinge on a misapplication of the SAC test.

B. Defendants Provided The Best Evidence Of Record Regarding Allocations Of Cross-Over Revenues.

AEPCO's revenue allocations do not adequately address relative on-SARR and off-SARR costs. AEPCO merely applied the MSP methodology without any effort to assess whether its assignment of arbitrary 100-mile blocks for all originating and terminating traffic reflects a reasonable measure of the costs associated with this activity for cross-over traffic of the type that ACE handles. AEPCO not only failed to submit any evidence addressing cost-based revenue allocations (apart from bare reliance on MSP), it resisted the Board's holdings in *Duke/NS* and *CP&L* by arguing that a cost-based approach is inconsistent with SAC theory. AEPCO Supp. Reb. Nar. at III-A-15 to 17. Especially in a case such as this, where SAC results are so driven by cross-over revenue allocations, and so implausible as those produced by AEPCO, bare reliance on MSP is not adequate to comport with the explicit cost-based approach adopted in *Duke/NS* and *CP&L*.

Unlike AEPCO, defendants submitted evidence that directly addresses the relative on-SARR and off-SARR costs of originating, terminating, and otherwise handling ACE's cross-over

⁸ *Bottleneck I*, 1 S.T.B. at 1072-74.

traffic. BNSF/UP Supp. Reply Nar. at III.A-14 to 37. AEPCO is in no position to criticize defendants' evidence, because it came forward with no evidence of its own. A complainant that wants to take cross-over revenues bears the burden of demonstrating that its proposed revenue allocations properly reflect the relative costs of the SARR and residual segments, and that the residual incumbent is left with sufficient revenues to cover off-SARR costs.⁹ AEPCO's evidence in this case – one witness's assertion that an MSP-based allocation is appropriate for purposes of *market-based* divisions (AEPCO Op. Nar. at III-A-31 to 32) – is insufficient to meet AEPCO's burden, particularly in light of the detailed evidence defendants have submitted.

Non-Intermodal Cross-Over Revenues. With respect to non-intermodal cross-over traffic, AEPCO offers no specific criticisms of defendants' approach. AEPCO asserts that using URCS costs to calculate relative on-SARR and off-SARR costs "has an inherent tendency to devolve into an 'apples to oranges' comparison," but AEPCO does not identify any concrete reason to question defendants' use of URCS costs for non-intermodal traffic. AEPCO Supp. Reb. Nar. at III-A-55. AEPCO also complains that defendants did not consider the particular characteristics of each and every individual cross-over movement, but instead relied on an aggregate approach. *Id.* at III-A-55 to 57. However, this is not a basis for preferring AEPCO's evidence, since defendants' analysis is much more closely focused on the traffic at issue than AEPCO's simple mileage prorated and 100-mile blocks. Moreover, defendants' analysis uses a sample of movements that AEPCO itself presented as "representative" of ACE's non-intermodal cross-over traffic. BNSF/UP Supp. Reply Nar. at III.A-32 to 36.

⁹ See *OPPD*, 3 I.C.C.2d at 858 ("[W]e found a sufficient basis on the record to conclude that there would be a satisfactory recovery of off-line costs under OPPD's hypothetical SAC system.").

Intermodal Cross-Over Revenues. With respect to intermodal cross-over traffic, AEPCO reverses course and criticizes defendants for departing from URCS. AEPCO Supp. Reb. Nar. at III-A-24 to 26. However, as the Board and AEPCO's own witness have acknowledged, URCS does not produce satisfactory estimates of the costs associated with intermodal transportation.¹⁰ To develop superior evidence, defendants retained a highly qualified expert, William K. Berry,¹¹ and asked him to estimate, based on the best available evidence of modern intermodal activities, the costs associated with intermodal terminal, interchange, and handling activities. Defendants compared these costs with a measure of intermodal line-haul costs based on what railroads actually incur in the real world – TTX Company's "Basic Mileage Rate" (the "BMR"). BNSF/UP Supp. Reply Nar. at III.A-14 to 32.

AEPCO's assertion that defendants erroneously compared full terminal costs with variable line-haul costs is not well founded. AEPCO Supp. Reb. Nar. at III-A-29 to 30. As defendants showed in their Clarification, AEPCO's criticism can be addressed by removing the non-variable portion of terminal costs without discarding the totality of defendants' far-superior methodology. See Defendants' Clarification (filed May 7, 2004).

AEPCO's argument that TTX may have set the BMR "at a relatively low level" is also unjustified. AEPCO Supp. Reb. Nar. at III-A-31 to 32. The BMR is a cost-based rate that is used in the marketplace, and none of TTX's participating railroads has any incentive to recover less than the actual costs it incurs when it moves TTX-owned intermodal equipment at TTX's

¹⁰ *Review of the General Purpose Costing System*, 2 S.T.B. 659, 662-63 (1997). AEPCO criticizes defendants for not attempting to fix URCS. AEPCO Supp. Reb. Nar. at III-A-26. But there is no simple fix. In fact, the Board abandoned its efforts to investigate and correct the certain issues it had identified because it lacked the resources to undertake such a project. *Review of the General Purpose Costing System*, 2 S.T.B. at 662.

¹¹ Mr. Berry has been Vice President-Intermodal for Canadian National Railway; Senior Vice President, Intermodal for Burlington Northern Railroad; and Vice President-Intermodal/Automotive Operations for Southern Pacific Lines. BNSF/UP Supp. Reply Nar. at IV-7.

request. AEPCO also asserts that defendants ignore the fact that some intermodal traffic is handled in non-TTX equipment. AEPCO Supp. Reb. Nar. at III-A-31 to 32. Yet AEPCO points to no reason for believing that the typical line-haul costs that railroads incur when intermodal equipment is moved vary meaningfully based on the identity of the car owner. Moreover, AEPCO's criticism does not begin to alter the fact that defendants' allocations are far more accurate and more precise than AEPCO's.¹²

AEPCO also argues that defendants erred in converting the BMR – which railroads pay on a per-car basis – into a per-platform measure of line-haul costs. AEPCO Supp. Reb. Nar. at III-A-32 to 35. AEPCO's criticism is misplaced. Defendants' approach was very straightforward: defendants used TTX's average of 4.9 platforms per car to convert the per-car BMR into a per-platform charge that reflects the railroads' per-platform line-haul operating cost, and then applied that unit cost to ACE's line-haul movements. BNSF/UP Supp. Reply Nar. at III.A-22 to 23. Contrary to AEPCO's claim, defendants' conversion did not assume any particular ratio of loaded-to-empty platforms on ACE.¹³

In the end, defendants' 15.8-cent per unit-mile cost estimate of intermodal line-haul costs is both the best evidence of record and demonstrably reasonable, as reflected by its consistency with the cost estimate used in the DOT-sponsored FIRE Study. AEPCO questions whether the

¹² AEPCO suggests developing line-haul costs based on URCS rather than the BMR. AEPCO Supp. Reb. Nar. at III-A-49 to 51. That suggestion ignores the problems with using URCS for intermodal traffic that AEPCO's own witnesses recognized. Also, such an approach would result in a mixing of apples and oranges by using URCS-based line-haul costs and non-URCS-based terminal costs for the same movements. Defendants' Clarification at 4-5.

¹³ AEPCO is also wrong in asserting that defendants' use of TTX's 4.9 platform-per-car figure to calculate one component of line-haul costs was inconsistent with calculating a separate component – car rental costs – based on rental rates for a 5-unit doublestack car. AEPCO Supp. Reb. Nar. at III-A-32 to 35. Quite simply, there are no 4.9-platform cars, so defendants reasonably selected (and converted to a per-platform basis) the rate for the TTX car type that accounts for the highest percentage of TTX's intermodal platforms.

FIRE Study's costs are representative of UP and BNSF costs. But any adjustments would favor defendants by further reducing line-haul costs in relation to terminal costs, thus producing larger origination and termination credits. The FIRE Study modeled operations in the East, where line-haul costs are, if anything, *higher* than on the western routes at issue in this case. BNSF/UP Supp. Reply Nar. at III.A-23 n.54.

Defendants also presented the best evidence of record with respect to intermodal terminal and interchange costs. AEPCO argues that defendants overstated some of these costs and did not present movement-by-movement evidence that addresses all possible variations in handling. AEPCO Supp. Reb. Nar. at III-A-36 to 43.¹⁴ The Board should not consider evidence on these points that AEPCO offered for the first time on rebuttal.¹⁵ By declining the Board's invitation to file new evidence on cost-based divisions following the decisions in *Duke/NS* and *CP&L*, AEPCO left it to defendants to present such evidence. In these circumstances, AEPCO should be foreclosed from quarrelling with the specific evidence that defendants proffered. The Board should not allow AEPCO to take advantage of the unusual posture of this case to shift the burden of proof to defendants.

If the Board does consider AEPCO's supplemental rebuttal evidence, it should accord that evidence little weight. Defendants presented evidence obtained from neutral third parties and developed cost estimates that are consistent with real-world railroad charges and the DOT-

¹⁴ Significantly, AEPCO does not dispute that it failed to address costs associated with interchanging intermodal traffic. AEPCO Supp. Reb. Nar. at III-A-24 to 31.

¹⁵ AEPCO makes several inaccurate assertions about terminal costs that defendants would have addressed if given the opportunity to reply. This includes AEPCO's unsupported assertions that defendants do not incur terminal or lift charges at private facilities and that terminals handling the cross-over traffic use only one-full time switch engine. AEPCO Supp. Reb. Nar. at III-A-36 to 37, *id.* at III-A-38 to 39.

sponsored FIRE Study. BNSF/UP Supp. Reply Nar. at III.A-18 to 22 & nn.35-49.¹⁶ AEPCO's evidence, by contrast, is nothing more than witnesses' opinions.

Defendants' evidence on cost-based revenue allocations is the best evidence in the record. It more faithfully adheres to the Board's directives that cross-over revenues are to be allocated according to relative on-SARR and off-SARR costs, and it avoids the absurd results advocated by AEPCO.

C. The SARR's Traffic Group Should Not Include Coal Moving To Rillito.

The Board should exclude York Canyon-Rillito coal traffic from the SARR's traffic group because AEPCO failed to demonstrate that the service its SARR would provide would be acceptable to the shipper. AEPCO asserts that its operating plan, which spreads { } cars of that traffic over { } trains, or an average of { } cars per train, is based on BNSF traffic data. AEPCO Supp. Reb. Nar. at III-A-6. However, BNSF traffic data show that those cars were actually waybilled on { } different dates (indicating { } trains).¹⁷ AEPCO's effort to move the traffic in many fewer, larger, and less frequent deliveries than this shipper receives in the real world violates the rule that "the proponent of a SARR may not assume a changed level of service

¹⁶ For example, AEPCO claims that Mr. Berry offered no support for a cost of \$30 per lift and that its witnesses presented a "bottom-up analysis." AEPCO Supp. Reb. Nar. at III-A-37. But AEPCO provides no source of data for its "bottom-up analysis." By contrast, Mr. Berry based his figure not only on his extensive experience, but also on the FIRE Study, which used \$125 per lift, and discussions with the study's authors regarding the costs included in that figure. BNSF/UP.SUPPRP.WP.III.A-0075, 0113. As another example, AEPCO claims that Mr. Berry's calculation for other terminal costs, including container and drayage costs, lacks documentation. AEPCO Supp. Reb. Nar. at III-A-40. But Mr. Berry based those costs on information obtained from neutral third parties. BNSF/UP.SUPPRP.WP.III.A-0069-74.

¹⁷ A comparison of the parties' data reveals the source of the discrepancy: AEPCO excluded from its train count trains that handled fewer than 50 York Canyon-Rillito cars and assumed that cars from those trains would be added to trains with 50 or more cars. AEPCO Op. electronic workpaper "sumbnodgrossrev01.qpr."

to suit its proposed configuration and operating plan, unless it also presents evidence showing that the affected shippers, connecting carriers, and receivers would not object.”¹⁸

III. AEPCO’S CONFIGURATION OF THE SARR IS FUNDAMENTALLY FLAWED DUE TO ITS TREATMENT OF THE VAUGHN-EL PASO LINE SEGMENT

AEPCO continues to rely improperly on a SARR configuration that uses trackage rights for nearly one-third of its route miles – the segment from Vaughn to El Paso. AEPCO’s effort to avoid building hundreds of miles of mainline resulted in ACE’s relying on a significantly longer route than the issue traffic actually traverses,¹⁹ and it meant that AEPCO submitted no evidence on construction costs, traffic (other than the issue traffic and a few rerouted coal trains), or the costs of operating the resulting traffic mix for one-third of the route-miles that must exist in order to serve the issue traffic. Even after the Board confirmed that the proponent of a SARR may not rely on trackage rights over joint defendants and gave AEPCO the opportunity to submit new evidence, AEPCO declined. In these circumstances, the Board is precluded from determining defendants’ rates to be unreasonable.²⁰

AEPCO may not continue to rely on the extant trackage rights fee after defendants demonstrated that the posited usage fee is inadequate for the purposes of a SAC analysis. AEPCO argues that the Board’s November 19 Decision did not require it to submit new evidence but instead placed the burden on defendants to establish an appropriate “usage fee.” AEPCO

¹⁸ *CP&L* at 23.

¹⁹ Defendants demonstrated that, as a result of this circuitous new routing – which among other things required AEPCO’s loaded coal trains to travel hundreds of miles farther and traverse two significant additional grades – would unreasonably degrade service and fail to meet shippers’ needs. *BNSF/UP Supp. Reply Nar.* at III.C-16 to 26. Accordingly this rerouting is not permissible under SAC principles. *TMPA* at 21 (rerouting is allowed only “so long as the new route is reasonable and would meet the shipper’s transportation needs”).

²⁰ Defendants filed a motion to dismiss addressing this issue on January 26, 2004. The Board has not ruled on that motion.

Supp. Reb. Nar. at III-B-2. With respect, that is a misreading of the Board's decision. The Board did not, and could not properly, shift that burden to the defendants. The Board did not require AEPCO to file new SAC evidence because it thought that AEPCO might have misunderstood the Board's August 2002 Decision regarding the acceptable contours of a SAC analysis. November 19 Decision at 5. However, given that any analysis of the costs that must be recovered by ACE for the El Paso-Vaughn segment must take account of traffic selection, construction costs and other SAC factors, any requirement that defendants establish the correct "fee" would constitute a wholly unprecedented and improper shifting of the burden of proof. The complainant in a SAC case must select the route, the traffic group, and the facilities for the SARR.²¹ Defendants cannot make those choices.

In fact, the Board's November 19 Decision states that, if AEPCO elected not to prepare new evidence, defendants were entitled "to demonstrate the inadequacy (for purposes of the SAC analysis)" of the 3.2 mills usage fee upon which AEPCO relied and "to show the level at which a usage fee would need to be set to satisfy the objectives of the SAC test." Defendants showed that the usage fee was plainly inadequate and that an adequate fee could not be calculated without full SAC evidence. BNSF/UP Supp. Reply Nar. at III.B-4 to 11. AEPCO failed to rebut defendants' showing.

First, AEPCO did not rebut defendants' evidence that the usage fee posited by AEPCO was plainly inadequate because it would cover the annual investment costs associated with only about 12 miles of single-track mainline. BNSF/UP Supp. Reply Nar. at III.B-6. AEPCO instead argues that the analysis "ignores all of the other traffic that moves over the segment." AEPCO Supp. Reb. Nar. at III-B-5. However, in accordance with established principles, defendants used

²¹ *McCarty Farms I*, 4 I.C.C.2d at 271.

the traffic selected by AEPCO.²² Any other approach would have been inconsistent with the principle that complainants' selections govern the SAC analysis and would in any event be subject to endless second-guessing – not only of all the traffic selection, but of the construction and operating decisions that flow from the traffic selection. BNSF/UP Supp. Reply Nar. at III.B-10 n.6.

Second, AEPCO did not rebut defendants' evidence that a 3.2 mills fee could not be justified on the grounds that similar fees have been reached through commercial negotiations. BNSF/UP Supp. Reply Nar. at III.B-9. AEPCO argued that 3.2 mills was the same fee originally negotiated between SP and BNSF for use of the Vaughn-El Paso line and nearly identical to the trackage rights fees approved in the *UP/SP* proceeding. AEPCO Supp. Reb. Nar. at III-B-3 to 5. However, as noted above, the only way to determine whether traffic carried in exchange for a particular fee is bearing its appropriate share of joint and common costs is to perform a SAC test. Moreover, there are many reasons why the specific trackage rates fees relied upon by AEPCO are not informative for SAC purposes. Those fees were part of agreements that covered numerous commercial arrangements, and there were many factors that affected the agreements' terms. In addition, because trackage rights traffic is incremental to a landlord's existing traffic, a landlord (such as SP) might be willing to carry it as long as it makes *any* contribution, no matter how small, to joint and common costs. BNSF/UP Supp. Reply Nar. at III.B-9. And, perhaps most telling, because the fee is substantially below that yielded by application of a replacement-cost-new-less-depreciation methodology, it is certain that the fee is insufficient to cover the forward looking fully allocated costs of the line segment.

²² *McCarty Farms I*, 4 I.C.C.2d at 271.

Third, AEPCO did not rebut defendants' evidence that the methods used to justify negotiated trackage rights rates in connection with the UP/SP merger cannot satisfy the objectives of a SAC analysis. BNSF/UP Supp. Reply Nar. at III.B-6 to 7. Those methods yielded system-wide usage fees of 8.32 and 9.05 mills in the UP/SP merger proceeding. AEPCO Supp. Reb. Nar. at III-B-5-8. But neither calculation purports to replicate the range of forward-looking costs considered as part of the SAC test.²³ The 9.05 mills figure was calculated using the replacement-cost-new-less-depreciation method, which, as its name suggests, excludes depreciation costs. The 8.32 mills figure includes a measure of depreciation, but it excludes operating and maintenance costs, as AEPCO acknowledges. AEPCO Supp. Reb. Nar. at III-B-6 to 7.²⁴

Neither evidence of negotiated trackage rights fees nor simplified efforts to calculate surrogates for forward-looking costs "satisfy the objectives of the SAC test" for an additional important reason: Usage fees based on such methods would, at most, estimate the fee level at which the issue traffic would bear a *proportionate share* of the costs of constructing and operating a line. In other words, neither approach purports to consider appropriate rate levels for the issue traffic under differential pricing principles. Those principles recognize that less elastic traffic – like AEPCO's – may reasonably be asked to bear a disproportionate share of joint and common costs. The Board and its predecessor have decisively rejected efforts to treat issue and

²³ Furthermore, even if either figure would theoretically satisfy the objectives of the SAC test, neither would be applicable in this case, because they were based on the costs of lines other than the Vaughn-El Paso segment.

²⁴ In their Supplemental Reply, defendants said that their SAC presentation adopted the 9.05 mills figure solely for purposes of completing a DCF analysis of the improperly configured SARR. BNSF/UP Supp. Reply Nar. at III.B-10 to 11. AEPCO correctly notes that defendants instead used the 3.2 mill figure in their analysis. AEPCO Supp. Reb. Nar. at III-B-8. This was an inadvertent error, but one that can readily be corrected were the Board to conclude that a DCF analysis was appropriate notwithstanding the fundamentally defective SAC network proposed by AEPCO.

non-issue traffic identically on a per-ton-mile basis as inconsistent with Ramsey pricing principles because such efforts assume that all traffic will make the same contribution to fixed costs.²⁵ The only way to determine whether a particular rate is “excessive” is to conduct an analysis of costs and revenues pursuant to a full SAC analysis.

IV. AEPCO UNDERSTATED THE SARR’S OPERATING COSTS

While accepting many of AEPCO’s basic operating parameters for ACE, defendants identified numerous errors in AEPCO’s operating statistics and unit costs. The most significant are summarized below.

T&E Crews and Compensation: The primary difference in T&E costs stems from disagreement over the compensation that ACE’s personnel would demand. As defendants demonstrated in their Supplemental Reply, AEPCO improperly excluded constructive allowances, manipulated the inflation indexes to produce artificially low salaries, and failed to recognize that ACE crews – who would work far more shifts than typical real-world crews – would earn above-average wages. BNSF/UP Supp. Reply Nar. at III.D-24 to 30. On each of these issues, the Board in recent decisions has rejected the approach AEPCO took in favor of defendants’ approach.²⁶

Locomotives: The parties differ as to both the number of locomotives ACE would require and the cost of those locomotives. Defendants’ locomotive count is based on the number

²⁵ *Coal Rate Guidelines*, 1 I.C.C.2d at 523; *see also, e.g., Xcel* at 37 (rejecting proposed “ton-mile” approach for distributing SARR revenue requirements among traffic in the stand-alone group because it would not “allow for demand-based differential pricing”); *CP&L* at 33 (same).

²⁶ *See Xcel* at 69-70; *Duke/NS* at 75 (exclusion of constructive allowance); *Xcel* at 75 (adopting defendants’ indexing approach as “mathematically sound”); *Xcel* at 68 (“employees working more hours would command more compensation”). AEPCO objects that defendants did not submit evidence on real-world UP wages. AEPCO Supp. Reb. Nar. at III-D-50 to 51. But AEPCO chose to rely exclusively on BNSF wage data for T&E employees, and defendants therefore did likewise.

of locomotives on the real-world trains in AEPCO's traffic group and the real-world transit times of those trains. AEPCO's locomotive count, by contrast, is based on the output of a string program analysis. Defendants have described the numerous defects in AEPCO's string program analysis. BNSF/UP Supp. Reply Nar. at III.C-6 to 13. Moreover, the Board concluded in *Xcel* that the string program used by complainants in recent cases is inherently unreliable, noting that in every case "the defendant railroad has demonstrated that the results produced by the string program were flawed."²⁷ AEPCO's string program analysis, which is in all essential respects the same as that used by complainants in recent cases, should be rejected here as well.

The parties agree on annual lease costs for SD70 and SD40-2 locomotives but are far apart on annual lease costs for C44-9 locomotives. Defendants have explained that AEPCO's lease cost for C44-9 locomotives was improperly based on two unrepresentative (low) lease payments from the early years of a long-term lease. BNSF/UP Supp. Reply Nar. at III.D-1 to 2. The distortions produced by this approach are obvious. AEPCO's proposed lease cost for modern C44-9s is *less* than the agreed lease cost for aged and less-powerful SD40-2s.

Fuel: The principal difference between the parties on ACE fuel costs results from AEPCO's failure to consider the cost of delivering fuel to its proposed Vaughn Yard, where AEPCO assumes that ACE will dispense fuel for all BNSF transcontinental trains traversing ACE's northern line. BNSF currently dispenses fuel for those trains at Belen, New Mexico. No fueling is carried out at Vaughn today, and there is no source of fuel at Vaughn. BNSF/UP Supp. Reply Nar. at III.D-5 to 7. As defendants have explained, the SAC analysis must include the costs associated with AEPCO's decision to relocate BNSF's massive Belen fueling activities to Vaughn, where fuel is not currently available.

²⁷ *Xcel* at 26-27.

AEPCO makes a half-hearted argument that the costs of delivering fuel to Vaughn are an entry barrier. AEPCO Supp. Reb. Nar. at III-D-14 to 16. The Board defines entry barriers as costs that the incumbent never incurred.²⁸ But both UP and BNSF incur costs associated with obtaining fuel at every location where fueling is performed, and it is therefore not an entry barrier to require the complainant to incur such costs.

AEPCO's fall-back argument is that it need not account for the costs of obtaining fuel and moving it to Vaughn because it should be entitled to assume that some unidentified third party would build a pipeline to Vaughn in order to supply ACE with fuel there. AEPCO Supp. Reb. Nar. at III-B-21 to 30. The Board may not rely on this evidence, which was improperly submitted for the first time on rebuttal. In any event, AEPCO's discussion of a hypothetical fuel supply arrangement – one which AEPCO merely assumes will spring into existence as soon as the SARR is constructed – is highly speculative and completely unverifiable.²⁹ There is no reliable evidence that a new pipeline would even be built, much less evidence relating to its capacity or transportation rates.

A second difference between the parties relates to the fuel consumption rates on ACE trains. Defendants used UP's Train Performance Simulator ("TPS") to show that ACE trains would consume fuel at higher rates than average BNSF or UP trains. BNSF/UP Supp. Reply Nar. at III.D-8 to 9. AEPCO incorrectly objects that the TPS has not been calibrated to real-world train performance. AEPCO Supp. Reb. Nar. at III-D-24 to 25. However, BNSF and UP use the same train simulator to allocate responsibility for fuel consumption in connection with

²⁸ See *WTU*, 1 S.T.B. at 670; *APS*, 2 S.T.B. at 385.

²⁹ Cf. *Duke/NS* at 112 ("It is inappropriate to assume a construction component that is not actually currently available would nevertheless be available to the SARR.").

interline movements of AEPCO's coal. BNSF/UP Supp. Reply Nar. at III.D-13. Use of the TPS simulator for real-world commercial decisions validates its use in the SAC context.

Maintenance of Way: AEPCO's MOW plan is virtually indistinguishable from the MOW plans that the Board has previously rejected. Like those in prior cases, AEPCO's MOW calculations assume that unspecified outside contractors will carry out a large percentage of ACE's daily maintenance, as well as its program maintenance, for a fee that bears no reasonable relationship to the amount of work to be done or its real-world costs. On that speculative premise, AEPCO posits a skeletal (and wholly inadequate) in-house work force for ACE. AEPCO goes on to assume that the meager in-house force will be cross-trained, thereby achieving efficiencies that have never been realized by existing Class I railroads. The Board has rejected such assumptions in other cases because they would not meet the daily MOW needs of a heavy haul, high-tonnage Class I railroad.³⁰

Defendants' MOW evidence is based on a detailed evaluation of actual MOW needs of the incumbents' rail lines that ACE would replicate. AEPCO criticizes defendants' reference to BNSF's maintenance practices, claiming that the resulting costs involve "rampant inefficiencies, grossly overstated personnel requirements, and inflated equipment costs." AEPCO Supp. Reb. Nar. at I-25. AEPCO's criticisms are not well founded. Defendants showed that BNSF's MOW practices are recognized to be among the most efficient in the world.³¹ Moreover, the incumbent's MOW practices are clearly relevant in a SAC analysis. A complainant must posit a SARR that provides at least the same level of service as the incumbent, and the level of service

³⁰ *Xcel* at 79; *Duke/CSX* at 67; *Duke/NS* at 82; *CP&L* at 69. Indeed, the MOW workforce posited by AEPCO (57 MOW employees – see AEPCO Errata Op. electronic workpaper "SpotMaint.xls," worksheet "MOW Personnel") is even *smaller* than the MOW workforce that the Board rejected in *Xcel* (64 MOW employees – see *Xcel* at 80), even though the ACE is significantly larger than the SARR posited by Xcel.

³¹ BNSF Supp. Reply Exhibit III.D.4-2 at 13-14.

that can be provided on a rail line is dictated by the quality of maintenance on that line. AEPCO has not identified any specific BNSF inefficiency or presented any plausible basis for assuming that ACE could provide the same level of service as the incumbents over the replicated lines with vastly reduced MOW expenditures relative to the incumbents.

Moreover, AEPCO's attempted comparison of BNSF and UP maintenance forces does not support its position. AEPCO claims that UP currently employs far fewer employees per route mile on the UP segment replicated by ACE than BNSF employs on the replicated northern segment of ACE. But AEPCO's comparison ignores the facts that BNSF's line carries nearly twice the traffic of UP's line and BNSF's line is double-tracked while UP's is single-tracked. Given the different characteristics of the lines at issue, one would expect a higher MOW employee count on the BNSF line.³²

Responsibility for Off-Line Costs: AEPCO's operating plan would impose significant new costs on the residual incumbents as a result of changes in their operations required to accommodate the introduction of a new overhead carrier into what is today an efficient single-line operation.³³ The Board has made it clear that such additional costs are the responsibility of the SARR and must be included in the SAC analysis.³⁴ AEPCO argues that it should not be responsible for the additional costs because the changes imposed by ACE operations supposedly would improve incumbents' efficiency and reduce their costs. AEPCO Supp. Reb. Nar. at III-C-18 to 24, 29. AEPCO's assertion that the residual incumbent would save costs when a single-

³² For the same reasons, defendants assumed that significantly more MOW employees would work on ACE's northern line than on its southern line. See BNSF Reply electronic workpaper "III F 7 Facilities.xls."

³³ Defendants showed that the residual BNSF would need to add local operations and new car-holding facilities to carry out the interchange of cars at the new locations specified in AEPCO's operating plan. BNSF/UP Supp. Reply Nar. at III.C-1 to 5, III.B-12 to 20.

³⁴ See *TMPA* at 22.

line operation is broken into a series of interchanges between independent railroads does not merit serious consideration. It is directly contradicted by evidence showing that BNSF consolidated its crew districts on the lines at issue here precisely to achieve more efficient operations. BNSF Supp. Reply Nar. at III.C-14 to 19.

V. AEPCO UNDERSTATED THE SARR'S CONSTRUCTION COSTS

The parties disagree on numerous construction cost issues, and it is not possible to address most of them in this Brief. However, one consideration cuts across all of these issues: namely, that the Board should give teeth to the governing legal standard that the complainant in a SAC case bears the burden of proof. Complainant's burden requires it to prove that a railroad meeting all of the SARR's needs could in fact feasibly be built for the construction cost estimate it posits. AEPCO may not rely on the fact that the Board may in the past have accepted unrealistically low construction cost estimates – estimates of the sort that could not begin to support construction of comparable rail lines in the real world (with or without entry barriers). Rather, because AEPCO's estimates are so far out of line with real-world rail construction costs, it is especially vital that AEPCO provide substantial evidence to show that its assumptions are feasible and realistic. Defendants believe that AEPCO has failed to carry this burden on several critical cost items, the most significant of which are addressed below.

Track Labor: AEPCO's opening track labor costs were flawed in two fundamental respects: (1) AEPCO's unit costs covered installation of steel ties, which all parties now agree are infeasible; and (2) AEPCO's track labor quote failed to consider the actual specifications of ACE, *i.e.*, the size of the roadbeds and track centers and the weight of rails and turnouts. On rebuttal, AEPCO acknowledged the flaws in its opening track labor evidence, but it presented new evidence without showing that defendants' evidence was infeasible, contrary to the *Duke/NS*

rule.³⁵ Indeed, AEPCO claimed to *accept* the defendants' methodology for the calculation of track labor based on the use of wood ties, but then posited different calculations based on numerous modifications to defendants' methodology.³⁶ Moreover, AEPCO accepted defendants' modifications to the track labor quote to make it correspond to the ACE's 50-foot roadbed, but it rejected similar adjustments for other incorrectly quoted items, largely on the basis of a new, implausible, and unverifiable statement from the contractor that "the costs would not change significantly, if at all."³⁷ The Board should reject altogether AEPCO's track labor costs and apply defendants' unit costs as the best evidence.

Roadbed Preparation: AEPCO failed to carry its burden of demonstrating the feasibility of the earthwork equipment it assumed for the preparation of the ACE roadbed. The failures are too numerous to catalog comprehensively here. One example of AEPCO's flawed approach is its assumption that ACE could use an inexpensive scraper without a bulldozer for the construction of the entire SARR based on an article asserting that "*in some cases*" the scraper can work alone without a dozer. AEPCO Supp. Reb. Nar. at III-F-37 to 38; BNSF/UP Supp. Reply Nar. at III-F-37 to 40. AEPCO also ignored important roadbed construction activities, such as the removal of boulders produced by the initial blasting of solid rock. Because of their size, these boulders require additional blasting or larger earthmoving equipment for their removal. AEPCO has provided for neither. Similarly, AEPCO ignored undercutting altogether – *i.e.*, removing unsuitable earthwork and replacing it with suitable materials to ensure stability of

³⁵ See *Duke/NS* at 14-15.

³⁶ AEPCO failed to include certain installation and surfacing costs, and introduced a new and unsupported methodology for allocating its track labor quote into the various track labor components. Moreover, through an apparent oversight, AEPCO included in its final cost calculations the cost for *steel* tie installation. AEPCO Supp. Reb. Nar. at III-F-90 to 94 and electronic workpaper "TRACK QTY.xls," worksheet "Construction\$."

³⁷ AEPCO Supp. Reb. Workpaper 00689.

the foundation – based on a totally unsupported claim that if any undercutting had been done at the time the railroad was originally constructed, those quantities would be included in the ICC Engineering Report earthwork quantities. In contrast to AEPCO’s unverifiable evidence, defendants’ roadbed preparation evidence is based on real-world practices and is confirmed by contractors and equipment suppliers in the area where ACE would be constructed. BNSF/UP Supp. Reply Nar. at III.F-35.

Another significant difference between the parties on roadbed preparation relates to the construction of ACE yards. AEPCO significantly underestimates the costs of the grading needed to build its new yards at Vaughn and El Paso, in large part because it underestimates the size of the yards needed to support ACE operations. ACE’s Vaughn Yard is assumed to support most of the yard functions that are now carried out by BNSF at Belen, including the fueling of all transcontinental trains moving over BNSF’s southern corridor. The size of the Vaughn Yard as posited by AEPCO is totally inadequate to perform those functions, principally as a result of AEPCO’s failure to account for the facilities needed to support the massive fueling operations that would be placed at Vaughn. *Id.* at III.B-13 to 17. Similarly, AEPCO configured ACE’s El Paso Yard in a manner that could not reliably meet ACE’s needs for switching, fueling, inspection and car repair without crippling the performance of ACE’s service-sensitive intermodal and other interline traffic. *Id.* at III.B-21 to 26.

In addition, AEPCO’s methodology for calculating earthwork quantities in the yards is flawed. On opening, AEPCO computed the earthwork quantities for Vaughn and El Paso Yards based on an assumption of one-foot of fill under all yard tracks. On reply, defendants explained that the undulating terrain at the locations posited for the Vaughn and El Paso Yards made the one-foot of fill assumption untenable and they computed earthwork quantities for those yards using USGS Topographical maps and the existing railroad subgrade profile. On rebuttal,

AEPCO agreed that the excavation requirements for these yards should be based upon an analysis of the actual terrain rather than an arbitrary one-foot of fill assumption. But instead of accepting defendants' earthwork calculations, or even defendants' methodology, which used standard and easily verifiable USGS maps, AEPCO performed a new set of calculations using a new Eagle Point software model. AEPCO Supp. Reb. Nar. at III-F-24 to 31.

Under *Duke/NS*, AEPCO's new calculations should be rejected as improper rebuttal. Having acknowledged that its opening calculations were flawed, AEPCO was required to accept defendants' calculations or show that they were infeasible.³⁸ Far from making such a showing, however, AEPCO presented new rebuttal calculations for Vaughn earthwork quantities that are so confused and insufficiently supported that it is virtually impossible to determine what AEPCO did.³⁹ The Board cannot accept these new calculations presented for the first time on rebuttal.

Bridges: AEPCO's opening bridge evidence was riddled with calculation errors, inventory miscounts, design inadequacies and omissions, and improper or absent unit costs. Therefore, defendants presented on reply a complete reassessment of bridge investment required for ACE. On rebuttal, AEPCO acknowledged virtually every criticism leveled by defendants. However, to offset the resulting increase in bridge costs, AEPCO reduced several unit cost assumptions without even attempting to demonstrate that defendants' cost assumptions were infeasible, contrary to the *Duke/NS* rule concerning proper rebuttal. For example, despite

³⁸ See *Duke/NS* at 14-15.

³⁹ It appears that AEPCO's Vaughn Yard quantities are understated because AEPCO used the wrong existing subgrade elevation as the starting point for its analysis. AEPCO asserts that the profiles it used were based on information provided by BNSF in discovery (without citation to a source), but the elevations used by AEPCO could not be matched with any of the materials produced in discovery. See AEPCO Supp. Reb. Workpaper 00555. Defendants, by contrast, used accurate elevations taken from its track charts. AEPCO also improperly introduced on rebuttal the computer program it used to calculate excavation requirements based on terrain, but it did not provide adequate support showing how it applied that program to produce its earthworks estimates.

acknowledging that it had failed to provide on opening for necessary structural excavation costs, AEPCO rejected defendants' excavation costs without any showing that defendants' costs were infeasible and substituted a new, lower unit cost.⁴⁰ Similarly, AEPCO apparently accepted defendants' argument that it was inappropriate to use a single, cherry-picked unit cost for all concrete items, but on rebuttal it rejected defendants' costs and substituted even *lower* unit costs on all but two reinforced concrete items.⁴¹ In addition to violating the Board's rules governing rebuttal, AEPCO's new bridge evidence is clearly flawed. For example, AEPCO unreasonably selected the lowest unit cost it could find from any bridge-related construction project found in defendants' discovery, regardless of location or other characteristics, without any evidence that it would be available anywhere along ACE's route. AEPCO Supp. Reb. Nar. at III-F-111.

Communications: AEPCO based its communications costs for the ACE on the Intelligent Transportation System ("ITS") used by state DOTs for highway systems. Defendants accepted that ITS could be used, but adjusted the costs of the ITS components to meet the higher safety and compatibility standards for railroads. On rebuttal, AEPCO rejected these adjustments, pointing to articles suggesting that the technologies used in the ITS system will likely become available for railroads after further research and development. But AEPCO's argument misses the point. Defendants agree that the technology is likely to become available in the future, but it will have to be adapted to railroad operations, which will result in somewhat more expensive components than those used today in the highway systems. *See* BNSF/UP Supp. Reply Nar. at III.F-159 to 176.

⁴⁰ AEPCO Supp. Reb. Nar. at III-F-113 and electronic workpaper "Bridge Inventory and Costing type.xls," worksheet "UNIT COSTS."

⁴¹ AEPCO Supp. Reb. Nar. at III-F-111 to 112 and electronic workpaper "Bridge Inventory and Costing type.xls," worksheet "UNIT COSTS."

Signals: On reply, defendants demonstrated that AEPCO had omitted key components of a railroad signal system and presented their own signal evidence based on a quote prepared by a company that specializes in the design and installation of railroad signal systems. On rebuttal, AEPCO made numerous adjustments to the components of its signal system in response to defendants' criticisms, and accepted the materials costs for those components. However, it rejected defendants' design costs, arguing that the SARR could save costs by cutting corners on this critical safety issue.⁴² The Board should not allow the complainants to reduce SAC costs by assuming construction standards that would jeopardize the safety of rail operations.

Engineering: The arguments that AEPCO advanced in its Opening Evidence for a 6.8% engineering additive based on 5% for basic design and 1.8% for inspection were soundly rejected by the Board in *Xcel* as being insufficient to cover all of the reasonable engineering services.⁴³

Mobilization: Whereas defendants' evidence includes all relevant mobilization costs, AEPCO's evidence on mobilization excludes costs for demobilization and performance bonds. BNSF/UP Supp. Reply Nar. at III.F-210 to 211. The Board consistently has held that these are valid costs.⁴⁴

⁴² For example, AEPCO argued that no additional design work would be required beyond the minimal design work included in the engineering additive. AEPCO Supp. Reb. Nar. at III-F-118. AEPCO also acknowledged on rebuttal that it had neglected to provide power to the signals. But rather than accept defendants' costs for pole lines and power drops connecting the railroad to the nearest utilities, AEPCO proposed – for the first time on rebuttal – to use solar power at supposedly lower costs. AEPCO Supp. Reb. Nar. at III-F-125 to 127. The Board should reject this evidence as improper rebuttal. In any event, AEPCO failed to show that solar power is sufficiently reliable to use for this critical safety function, or that a high-density, high-speed railroad such as ACE could operate efficiently and reliably with signal outages caused by unreliable power.

⁴³ *Xcel* at 117-18.

⁴⁴ *Duke/NS* at 123; *Duke/CSX* at 106; *CP&L* at 107.

Contingency: AEPCO's arguments for an 8% contingency have been rejected in prior cases and are equally unpersuasive here.⁴⁵

VI. AEPCO's PROPOSED MODIFICATIONS TO THE BOARD'S STANDARD DCF METHODOLOGY SHOULD BE REJECTED

The Board should reject AEPCO's proposal to depart from the Board's established DCF methodology in two respects.

AEPCO first asks the Board to abandon the approach it has consistently used to assess the cost of capital for the SARR in future years for which actual cost of capital data are not available. The established approach is to apply to future years the average cost of capital from a recent historical period, generally starting with the year in which construction of the SARR began and extending to the most recent Board cost of capital determination. AEPCO applies this approach in its so-called "base case" set out in its Opening Exhibit III-H-6. However, on rebuttal it urges the Board to abandon this methodology and to adopt instead an approach in which the costs of debt and equity are held constant from 2003 through 2020 at the level of the railroad industry's 2002 costs of debt and equity, and the SARR is assumed to reweigh its debt/equity ratio in 2002 to correspond with the railroad industry's 2002 debt/equity ratio. The results of this alternative approach are set out in AEPCO's Supplemental Rebuttal Exhibit III-H-7.

The Board should disregard AEPCO's "alternate case" because it was presented for the first time on rebuttal. On reply, defendants accepted AEPCO's "base case" approach, the only one it sponsored on opening. AEPCO is therefore not permitted to advance a different methodology on rebuttal.⁴⁶

⁴⁵ *Duke/NS* at 126; *Duke/CSX* at 108-9; *CP&L* at 109; *TMPA* at 158.

⁴⁶ See *Duke/NS* at 14 n.18; *Xcel* at 61; *Duke/CSX* at 49, 73, 77; *CP&L* at 79-80; *FMC* at 103. In any event, the Board has soundly rejected the alternative approach proposed by AEPCO. In *WTU* the Board held that "averages, rather than a single year data, are generally used to

(footnote continued ...)

The Board also should reject AEPCO's effort to abandon the Board's well-established use of the RCAF-U index to project future operating cost inflation. AEPCO urges the Board to apply a projection of the RCAF-A, a position that the Board has repeatedly and recently rejected.⁴⁷ Projections of the RCAF-A anticipate inflation adjusted to account for productivity improvements expected to be realized by real-world railroads. The Board has correctly recognized that use of an estimate of future productivity applicable to such railroads would substantially overstate any conceivable productivity gains that could be achieved by a SARR, which enters with an optimally designed network, entirely new assets, and the newest state-of-the-art technology.⁴⁸

AEPCO argues that ACE would experience the same productivity improvements as real-world railroads because ACE is merely a carve-out of the existing BNSF and UP networks. AEPCO Supp. Reb. Nar. at III-G-12 to 13. In fact, the SARR is quite different from the incumbents. For example, the SARR locomotive fleet is dominated by the most efficient, modern locomotives, unlike the incumbents' system-wide locomotive fleet that has numerous aging locomotives.⁴⁹ Moreover, the SARR handles the incumbents' traffic for only a small

(... footnote continued from previous page)

predict the future." *WTU*, 1 S.T.B at 712. Use of averages recognizes the impact of the business cycle on the railroads' cost of capital. As to the assumption that a SARR might refinance its debt to take advantage of low debt rates, AEPCO did not even try to show that a refinancing of the magnitude required for the SARR could be accomplished, the interest rates that may apply to such a refinancing, or the fees that would have to be paid. Since AEPCO did not present *any* evidence on these matters, there is no basis on which to assume a refinancing of ACE's debt or a reweighing of the components of the SARR's cost of capital in 2002.

⁴⁷ See *TPMA* at 161; *CP&L* at 27-8; *Duke/NS* at 37; *Duke/CSX* at 30; *Xcel* at 34.

⁴⁸ See *Xcel* at 33; *CP&L* at 27-28.

⁴⁹ As the Board found in *Xcel*, "the railroads may enjoy productivity improvements, captured in RCAF-A, as they replace aging locomotive fleets with modern power. But the [SARR] would start off with that modern equipment, in effect gaining all the productivity improvements in the initial year rather than spread out over time." *Xcel* at 33.

overhead movement and provides virtually no local operations. The operations of the SARR and the incumbents are so different that there is no reason to attribute to the SARR the same productivity gains that the incumbents might hope someday to achieve.

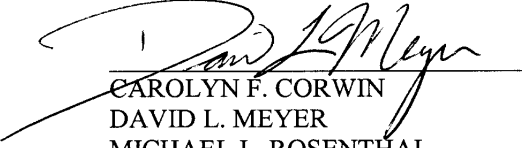
VII. CONCLUSION

For the reasons stated above, the Board should dismiss AEPCO's complaint.

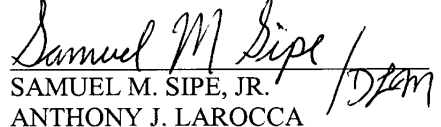
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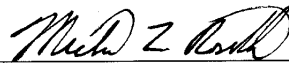
September 16, 2004

CERTIFICATE OF SERVICE

I hereby certify that on September 16, 2004, I caused copies of the foregoing "Joint Brief of The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company" to be served by hand upon the following counsel:

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