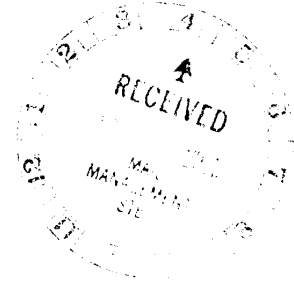


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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Docket No. 42058



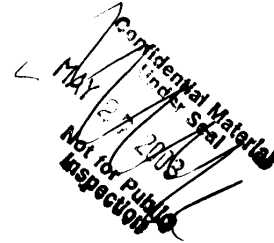
ARIZONA ELECTRIC POWER COOPERATIVE, INC.

v.

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

**Reply Evidence of
Union Pacific Railroad Company
Concerning Stand-Alone Costs**

NARRATIVE AND EXHIBITS



**ENTERED
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Public Record**

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May 27, 2003

[Contains Color Images]

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

I. COUNSEL’S ARGUMENT AND SUMMARY OF EVIDENCE

Defendant Union Pacific Railroad Company (“UP”) submits this reply evidence and argument in the rate reasonableness proceeding *Arizona Electric Power Cooperative, Inc. v. The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company*, STB Docket No. 42058. This submission addresses stand-alone cost (“SAC”) evidence submitted by complainant Arizona Electric Power Cooperative, Inc. (“AEPCO”). UP is filing a reply to AEPCO’s variable cost evidence jointly with defendant The Burlington Northern and Santa Fe Railway Company (“BNSF”). To the extent feasible, the format of this submission complies with that prescribed in *General Procedures for Presenting Evidence in Stand-Alone Rate Cases*, STB Ex Parte No. 347 (Sub-No. 3) (STB served Mar. 12, 2001).¹

A. Introduction

The background of this proceeding is described in the Opening Evidence filed by UP and BNSF on February 7, 2003, and in UP’s Petition to Require Submission of New Opening Evidence or, Alternatively, to Dismiss, filed April 18, 2003 (“April 18 Petition”). In its opening SAC evidence, AEPCO purported to show that rates for movements of coal from New Mexico mines to its facility at Cochise, Arizona produced

¹ The unusual circumstances of this case have led UP to file reply SAC evidence that does not fit neatly into the Board’s standard format. This is due largely to the fact that AEPCO’s opening evidence was so flawed that defendants are not in a position to develop alternative SAC evidence. In addition, as described below, UP had expected to file a joint reply with BNSF addressing the fundamental deficiencies of AEPCO’s SAC evidence. UP concluded last week that it could not join all aspects of BNSF’s submission, and so is submitting this separate reply. UP nevertheless relies on BNSF’s reply evidence for many points.

To the extent necessary, UP hereby requests that the Board waive its rules to permit any departure from the prescribed format.

revenues that significantly exceeded the revenue requirement of its hypothetical stand-alone railroad ("SARR").² In its April 18 Petition, UP argued that the Board should require AEPCO to submit new opening evidence. UP explained that, for several reasons, it had concluded that defendants could not present a meaningful reply to AEPCO's opening SAC evidence and that the Board would be unable to use the record to determine a maximum reasonable rate for AEPCO's coal shipments under the SAC methodology. UP cited fatal deficiencies in AEPCO's evidence of traffic and revenue for the SARR and its evidence regarding the routing of the SARR. UP explained that requiring submission of new opening evidence was preferable to dismissal because it would avoid wasted effort by the Board and the parties.

AEPCO's reply to the April 18 Petition failed to rebut UP's arguments. AEPCO nevertheless asserted in that reply that it had no intention of altering its SARR configuration or submitting proper evidence concerning the SARR traffic group. *See* Reply in Opposition to Union Pacific Railroad Company's Petition to Require Submission of New Opening Evidence or, Alternatively, to Dismiss, filed May 7, 2003 ("AEPCO Reply"), p. 3. If AEPCO persists in its refusal to submit proper SAC evidence, UP believes that the Board has no choice but to dismiss the complaint.

The April 18 Petition continues to present an appropriate basis for the Board to dispose of this case. Because there has not yet been a ruling on the petition, however, UP had intended to join with BNSF in a limited reply submission, addressed to both AEPCO's variable cost evidence and the fundamental deficiencies in its SAC evidence (beyond those discussed in the April 18 Petition). UP recently concluded that it

² AEPCO named its SARR the Apache, Cochise & Eastern Railroad ("ACE").

is unable to join in all of BNSF's arguments.³ Thus, while UP joins BNSF in a reply submission regarding variable costs, it is filing this separate reply addressed to AEPCO's SAC evidence. In addition to the evidence presented with this reply, we incorporate the arguments and evidence presented in the April 18 Petition,⁴ and, to the extent set forth below, the evidence submitted with BNSF's reply.

Before turning to particular aspects of AEPCO's opening evidence, we note the fundamental absurdity of the results produced by its SAC analysis. As BNSF explains in its SAC reply filing, the great majority of the traffic AEPCO has selected for its SARR is intermodal, automotive, boxcar, and other traffic that is exempt from Board regulation. *See* the reply SAC evidence submitted by BNSF on May 27, 2003 ("BNSF Reply"), p. III.A-40. It is common knowledge that railroads earn low margins on such traffic.⁵ As BNSF explains, this traffic is exempt because the Board has concluded that market forces restrain rates for the traffic. *Id.* at III.A-39 to 40. AEPCO nevertheless concludes that the revenues the SARR would receive far exceed the total costs of building and operating the SARR. Indeed, even if all non-exempt traffic were removed from AEPCO's SARR – without any reduction in its costs of construction or operation – revenues from the remaining (exempt) traffic would still exceed total SARR costs by over 70 percent. *See id.* at I-27 to 28, III.A-40 to 41.

³ In particular, in view of its obligations under a settlement agreement it entered into with AEPCO in February 2003, UP cannot join in certain statements BNSF makes about the effect of that settlement.

⁴ A copy of the April 18 Petition is attached hereto as Exhibit I-1.

⁵ *See, e.g.,* Scott Flower, "Container volume is growing, but railroads' intermodal profit margins are marginal at best," in *Progressive Railroading.com*, May 6, 2003, at 3 ("intermodal historically has garnered railroads a much lower profit margin"), included as UP Reply electronic workpaper "Intermodal Margins Article.pdf."

The notion that a railroad that carries only low-margin exempt traffic would earn revenues that exceed its costs by more than 70 percent is simply not consistent with reality. This result alone confirms that AEPCO's SAC evidence is fatally flawed.

B. AEPCO's Opening Evidence Regarding Traffic Selection for the SARR Is Fatally Flawed.

In the April 18 Petition, UP explained that defendants were unable to decode or replicate AEPCO's traffic selection for its SARR and therefore could not present alternative SAC calculations on reply. UP provided the verified statement of John C. Klick and Julie A. Murphy of FTI Consulting, Inc., which explained that AEPCO's presentation was so inconsistent and incomplete that, despite hundreds of hours of effort, FTI had been unable to determine what traffic AEPCO meant to select. *See* Verified Statement of John C. Klick and Julie A. Murphy, attached to the April 18 Petition (Exhibit I-1 to this filing) ("Klick/Murphy VS"), pp. 2-7, 12. Mr. Klick and Ms. Murphy reported that AEPCO had made a series of unexplained adjustments to the UP and BNSF traffic data, generating impossible amounts of revenue for its SARR. *Id.* at 3, 11.

In its reply to the April 18 Petition, AEPCO asserted that it intended to select 100 percent of the overhead traffic moving across the UP and BNSF east-west mainlines that AEPCO replicated. AEPCO Reply, p. 6. This assertion is disingenuous. As UP explained in the April 18 Petition, after hundreds of hours of detailed analysis of AEPCO's opening evidence and workpapers, FTI concluded that AEPCO did not select traffic that matched all of UP or BNSF's overhead traffic on the lines in question.

Klick/Murphy VS, pp. 2-7, 12. AEPCO's traffic selections remain impossible to understand.

Were AEPCO prepared to resubmit its opening evidence in a manner that made proper traffic selections – potentially including application of the selection criteria it alluded to in its reply to the April 18 Petition – UP would continue to urge that the best procedural course would be to allow AEPCO to resubmit its opening SAC evidence.⁶ However, AEPCO has signaled that it is unwilling to do so. AEPCO Reply, p. 3. As a result, for the reasons stated in the April 18 Petition, dismissal of the complaint is warranted.

Moreover, even with the confusion about AEPCO's traffic selection, it is possible to conclude that AEPCO has significantly overstated traffic and revenues for the SARR. As BNSF discusses in its reply submission, AEPCO's adjustment to the BNSF traffic data created a huge volume of fictitious revenue and tonnages that resulted in nonsensical conclusions. For example, BNSF notes that AEPCO claims a figure for intermodal revenues for the BNSF portion of the SARR that exceeded the total amount of intermodal revenues BNSF claims for its entire system. BNSF Reply, p. I-10, III.C-15 to 17.

AEPCO also made upward adjustments to UP traffic data, as part of a misguided effort to link the traffic data with an operations data base, the train movement data. This resulted in significant overstatements of UP traffic and revenues. For the year 2001, AEPCO adjusted tons and revenues it selected from the UP traffic files by 26.5 percent and 25.4 percent, respectively. For the first six months of 2002, AEPCO adjusted

⁶ AEPCO would also have to correct the other flaws identified in the April 18 Petition.

tons by 31.7 percent and revenue by 29.1 percent. *See* Section III.A.1, *infra*. Mr. Klick and Ms. Murphy concluded that the volume of UP traffic AEPCO purported to select for the SARR significantly exceeded the total volume of overhead traffic that actually moved across the replicated UP segment. Klick/Murphy VS, p. 3.⁷

AEPCO's adjustments to the UP and BNSF traffic data were both unnecessary and wholly inappropriate. AEPCO did not provide any cogent explanation for the adjustments in its opening evidence.⁸ In its reply to the April 18 Petition, however, AEPCO claimed that it had no choice but to adjust the traffic data, because these data did not show revenue-producing cars that AEPCO thought UP's and BNSF's train movement files contained. *See* AEPCO Reply, pp. 12-13. Rather than considering that the train movement data might not be comparable to traffic data or that it had used erroneous assumptions or techniques in comparing the different data bases, AEPCO claimed that "[t]he far more plausible explanation is that there is some sort of defect in the traffic tapes designed by the Railroads and provided to AEPCO." *Id.* at 13. Presumably AEPCO will repeat this argument in its rebuttal.⁹

⁷ AEPCO accuses UP of knowing, but refusing to reveal, the correct volume of UP overhead traffic on the replicated segment. AEPCO Reply, p. 17. AEPCO's attempt to shift its responsibility to identify the traffic base is unavailing. UP identified the maximum revenue and traffic available for AEPCO's SARR. But it cannot state how much of that available traffic AEPCO has selected, due to AEPCO's refusal to clarify what its selection criteria were. For example, as noted in Section III.A.1, *infra*, it is still unclear how AEPCO intended to treat UP traffic originating or terminating in the Pacific Northwest or Utah. Defendants are not required to guess whether a shipper means what its lawyers say or what its consultants do. Here the two point in opposite directions.

⁸ AEPCO referred to these adjustments in a cryptic one-sentence footnote. *See* Complainant Arizona Electric Power Cooperative's Opening Evidence, filed Feb. 7, 2003 ("AEPCO Op."), p. III-A-34 n.26.

⁹ AEPCO's suggestion (Reply at 16) that UP's consultants acknowledged the need to make a "conversion" between UP's traffic and train movement data bases to determine the number of trailer and container movements is equally erroneous. As explained in

AEPCO's suggestion that the traffic tapes were defective and that adjustments therefore were needed is simply wrong. BNSF shows in its reply submission that AEPCO's adjustments to the BNSF traffic data were inappropriate. The same is true for the adjustments to the UP traffic data, for essentially the same reasons. As shown in Section III.A.1 below, AEPCO should have used the traffic tape data UP produced to make its traffic selections.

UP's traffic tapes are the authoritative source within UP for traffic volumes and commodity revenue data. They are the source used by UP's finance and marketing departments for reporting revenue data to UP shareholders, the Securities and Exchange Commission ("SEC"), and the Board, and for billing customers and performing marketing analyses. UP's traffic tapes are the source that other complainants have used for their traffic selection in past SAC cases involving UP, including cases that involved large volumes of non-coal traffic.

In response to AEPCO's discovery requests, UP did the programming necessary to select from the traffic tapes the tonnage and revenue information for all of the movements that AEPCO requested and provided this information in the traffic data produced to AEPCO.¹⁰ The traffic data UP provided contained information AEPCO could have used to make its traffic selections. This included the origin, destination, and

Section III.A.1 below, no conversion would have been necessary had AEPCO used UP's traffic data. That data contained complete information on actual revenue trailer and container movements over the El Paso-Cochise segment.

¹⁰ Due to advances in its data processing capabilities, UP was able to provide AEPCO with a refined set of data, more carefully tailored to AEPCO's data requests than shippers in prior SAC cases received.

interchange locations, information that allowed AEPCO to remove any traffic that it did not wish to include in its SARR network.¹¹

The train movement data that AEPCO attempted to use for its initial traffic selection are not useful for identifying revenue carload or intermodal unit movements. Rather, this is an operations data base that is used for purposes very different from the traffic data. The train movement data do not include net tons or revenue information. Key definitions used for operations data bases are different from those used for the traffic data. Thus, train movement data cannot be “linked” to the UP traffic data in the manner AEPCO describes.¹²

AEPCO’s complaint that UP failed to produce an integrated data base containing traffic, train movement, and car movement data is baseless. *See* AEPCO Reply, p. 10. AEPCO requested the different categories of data in separate discovery requests, and UP does not keep the different categories of data in an integrated format.¹³ Moreover, the massive operations data bases are far more voluminous than the revenue data. Even assuming that these distinct data bases could or should have been integrated,

¹¹ The traffic data AEPCO received were in Microsoft Access, a format that could be easily manipulated by any third party.

¹² UP provided the train movement data in response to AEPCO’s separate discovery requests that addressed operations information, not its request for revenue data. *See* UP Reply electronic workpapers “December 4 Transmittal Letter.pdf” (citing AEPCO Request for Production (“RFP”) nos. 4, 18, 46 and 53 in producing train movement data) and “December 5 Transmittal Letter.pdf” (citing AEPCO RFP no. 4 in producing train movement data). Train movement data and other operations data are used for various purposes in SAC and variable cost analyses, *e.g.*, to compute cycle times or to make allocations of certain variable cost categories.

¹³ UP fulfilled its discovery obligation by producing data as they were kept in the ordinary course of business. *See* Fed. R. Civ. P. 34(b); *see also PPL Montana, LLC v. Burlington Northern & Santa Fe Ry.*, STB Docket No. 42054 (STB served Nov. 9, 2000), p. 3 (Board’s rules “require parties to furnish information in their possession, not to prepare special studies”).

the corresponding increase in the volume and complexity of the data for each revenue movement would surely have fueled more complaints from AEPCO about “user-unfriendly” data.

In short, AEPCO received all of the UP traffic tape data it sought in discovery, including information sufficient to allow it to remove the traffic it did not wish to include in its SARR traffic group. AEPCO should have relied on these data for its traffic selection, as shippers in previous rate cases involving UP have done. AEPCO’s unnecessary attempt to link different data bases produced a significant overstatement of UP traffic volume and revenues, which the Board should reject.

C. AEPCO Has Failed To Establish That the Residual Incumbents Would Retain Enough Revenue To Cover Their Attributable Costs of Transporting the Cross-Over Traffic AEPCO Selected.

UP explained in the April 18 Petition that AEPCO had proposed a traffic base consisting almost entirely of “cross-over traffic,”¹⁴ but that, contrary to Board

¹⁴ “Cross-over traffic” is traffic that is currently handled in its entirety by the incumbent railroad or railroads and that the complainant assumes would move in interline service between the stand-alone railroad and the incumbent railroad or railroads. See *PPL Montana, LLC v. Burlington Northern & Santa Fe Ry.*, STB Docket No. 42054 (STB served Aug. 20, 2002) (“*PPL Montana I*”), p. 7 n.13.

In its reply, BNSF expresses serious concerns about complainants’ use of cross-over traffic (particularly exempt cross-over traffic) in SAC cases. See BNSF Reply, pp. I-23 to 29, III.A-20 to 42. UP shares those concerns. As BNSF explains in its reply evidence, when complainants include large amounts of cross-over traffic in their selection of traffic for a SARR, there is great potential for manipulation of the allocation of revenue between the SARR and the residual incumbent so as to assign excessive amounts of revenue to the SARR. Such misallocations make it appear that revenues for the SARR far exceed SAC costs, requiring a large reduction in the rate for the complaint traffic.

As BNSF explains, the potential for manipulation is heightened where, as in this case, cross-over traffic comprises a high percentage of the SARR’s traffic base; the SARR builds only a very small portion of the network needed to handle the cross-over traffic from origin to destination; and most of the cross-over traffic is low-margin exempt traffic. AEPCO’s proposed SARR thus represents an extreme illustration of the pitfalls of reliance on cross-over traffic. The unrealistic results of AEPCO’s SAC analysis (in

precedent, it had failed to submit evidence demonstrating that the revenues it left for the incumbent railroads would cover the costs of handling this traffic when it was not on the SARR. April 18 Petition, pp. 13-16. This failure to address the adequacy of the residual revenue provides a separate basis for rejecting AEPCO's evidence.

As explained in the April 18 Petition, Board precedent requires a complainant to make a threshold showing that cross-over traffic "earns sufficient revenues to cover off-line, as well as on-line costs."¹⁵ AEPCO may claim (as it did at pages 28-29 of its reply to the April 18 Petition) that the *PPL Montana I* decision rejects that requirement. In fact, *PPL Montana I* reaffirms the need for this threshold showing. In the portion of the decision AEPCO quotes, the Board addressed the proper content of the necessary showing; it did not suggest that a party could avoid making any showing on this issue. While the Board concluded that a complainant need not show that residual revenues were "sufficient to cover the residual [defendant's] *stand-alone costs*," it still required a showing that the revenue division assigned to the residual carrier would "allow it to cover its *attributable costs associated with handling the traffic*."¹⁶

which revenue the SARR supposedly would earn from a traffic group consisting primarily of low-margin traffic would allegedly far exceed total SAC costs) make it plain that AEPCO has improperly manipulated revenues for cross-over traffic.

¹⁵ *Arkansas Power & Light Co. v. Burlington Northern R.R.*, 3 I.C.C.2d 757, 774 (1987) ("*Arkansas Power*").

¹⁶ *PPL Montana I*, p. 10 n.20 (emphasis added). If such a showing were not required, a complaining shipper, through the arbitrary allocation of revenue, could force a residual carrier to handle traffic that falls below the standards of what constitutes efficient pricing. See 49 U.S.C. § 10701(d)(2). As the Board recently concluded, such a result would allow a coal customer to claim an unreasonable share of revenue from non-complaint traffic, without regard to whether the residual revenue is sufficient to cover the residual carrier's long run marginal costs for non-issue traffic for the life of the SARR. *PPL Montana, LLC v. Burlington Northern & Santa Fe Ry.*, STB Docket No. 42054

AEPCO presumably will argue that it met any obligation to address the adequacy of residual revenues by using the modified mileage prorate block method (“MMP”) to calculate divisions. AEPCO claimed in its reply to the April 18 Petition that Board precedent permits complainants to rely on a presumption that MMP-based revenue divisions allow residual incumbents to cover their costs in cases where carriers have withheld information as to their actual divisions. *See* AEPCO Reply, pp. 29-32. BNSF has thoroughly refuted AEPCO’s claim that it was entitled to rely on its rote application of the MMP formula to satisfy its burden of demonstrating that the residual incumbents would cover their costs. *See* BNSF Reply, pp. I-24 to 26, III.A-46 to 49.

Even if AEPCO were correct that the Board routinely applies a presumption in favor of using MMP when parties fail to supply information on market-based divisions, that presumption could not be relied on in this case, because both BNSF and UP did in fact produce divisions information.¹⁷ AEPCO’s assertion that “UP did not produce any divisions information” (AEPCO Reply, p. 32 n.33) is flatly wrong. UP initially objected to producing information about divisions. However, it ultimately produced traffic data that AEPCO could have used to determine UP’s divisions for all traffic interchanged with BNSF (other than the issue traffic).¹⁸ These data revealed both

(STB served Mar. 24, 2003) (“*PPL Montana II*”), p. 6; *cf. Coal Rate Guidelines, Nationwide*, 1 I.C.C. 2d 520, 537 (1985).

¹⁷ AEPCO has acknowledged that BNSF produced some divisions data. *See* AEPCO Reply, p. 32 n.33.

Like BNSF, UP believes that any reliance on divisions information for actual interline movements to determine a proper allocation of cross-over traffic revenues in a SAC case would be arbitrary and improper. *See* BNSF Reply, p. I-26, III.A-48 to 49.

¹⁸ *See* UP Reply electronic workpaper “December 5 Transmittal Letter.pdf.” The UP-BNSF divisions information was the data most pertinent to the SARR, since UP and

(a) the total amount charged to the customer for interline movements with BNSF, and (b) the UP-only net revenue for those interline movements (other than the issue movements). In response to subsequent questions from AEPCO's counsel, UP explained the data it had provided.¹⁹ AEPCO thus was aware that it had information from which it could estimate divisions. Accordingly, even if AEPCO could rely on "simplifying assumptions regarding off-system revenues and costs" when "defendants withhold divisions information" (AEPCO Reply, p. 26), it was not entitled to rely on those assumptions in this case.

Moreover, AEPCO's interpretation of Board precedent is incorrect. The Board recently emphasized that it has "not adopted a single, preferred procedure for developing revenue divisions on cross-over traffic."²⁰ Thus, prior use of MMP is insufficient to support its use in this case. In fact, this case differs significantly from past cases in which the Board has relied on MMP. As AEPCO itself has noted (*see* AEPCO

BNSF are the only line haul carriers in the vicinity of the SARR. Moreover, UP-BNSF movements are the only ones for which the defendants could provide both revenue and mileage for the relevant segments. Without offline miles, it is impossible to test the relationship between actual revenue divisions and an MMP-based allocation.

Neither BNSF nor UP produced divisions information regarding the issue traffic. In response to a motion to compel filed by AEPCO, the Board held that the carriers were not required to produce such information. *See* Decision served Dec. 31, 2001, p. 7.

¹⁹ UP Reply electronic workpaper "December 11 Divisions Letter.pdf" (letter from Robert D. Rosenberg to Carolyn F. Corwin, dated Dec. 11, 2002, requesting a detailed explanation of the "Total Freight Amount" and "Union Pacific Revenue" fields in UP's traffic tapes) and UP Reply electronic workpaper "December 16 Divisions Letter.pdf" (letter from Carolyn F. Corwin to Robert D. Rosenberg, dated Dec. 16, 2002, noting that "UP supplemented its production by providing both the total amount charged to the customer and UP-only revenue for interline moves (other than moves of the complaint traffic)").

²⁰ *Texas Municipal Power Agency v. Burlington Northern & Santa Fe Ry.*, STB Docket No. 42056 (STB served Mar. 24, 2003) ("*TMPA*"), p. 31 n.74.

Reply, p. 27), the Board has accepted MMP in cases where cross-over traffic moved long distances over the proposed SARR to and from short off-SARR gathering and distribution lines.²¹ In this case, by contrast, the cross-over traffic AEPCO selected moves across a very short SARR that performs very little work, but makes extensive use of very substantial portions of the UP and BNSF systems where it incurs substantial off-SARR gathering and distribution costs. See Maps, Tab 1 (UP Network) and Tab 2 (BNSF Network) (showing the extensive portions of the UP and BNSF networks that flow traffic to ACE under AEPCO's SARR traffic assumptions). Thus, AEPCO's reliance on the use of MMP to develop revenue divisions is inappropriate without an adequate showing that this methodology in fact produces an allocation of revenue that will cover offline costs.

The conclusory statement of AEPCO's witness Toren – that MMP “produces a reasonable result for the non-coal overhead traffic”²² – is insufficient to carry its burden on this point. Mr. Toren's further comments are also unhelpful. He addresses only intermodal traffic, despite the fact that much of the SARR's cross-over traffic

²¹ See, e.g., *Arkansas Power*, 3 I.C.C.2d at 775 (observing that “the origin feeder systems are not extensive” and other “known system characteristics” provide “sufficient assurance that the assumption regarding the profitability of non-issue traffic is reasonable”); *Omaha Public Power District v. Burlington Northern R.R.*, 3 I.C.C.2d 123, 144 (1986) (“this is not a situation where the gathering and distribution systems are extensive when compared to the core lines, or where there is otherwise any reason to suspect that auxiliary investment is incapable of full profit ability [sic]”).

So far as we are aware, there is no case where in which an MMP presumption has been accepted for a short bridge segment inserted in the midst of an incumbent's transcontinental haul where the residual carrier provides all terminal services at origin and destination and at gateways and the SARR increases the residual carrier's costs.

²² AEPCO Op. at. III-A-31.

consists of automotive and carload merchandise traffic.²³ He acknowledges that there are few divisions for intermodal movements, because they generally move under single-line rates.²⁴ He simply asserts that origin and destination terminal costs are a small portion of the total cost of service when the line haul is long.²⁵ He never attempts to quantify these costs. Nor does he acknowledge that UP and BNSF incur the vast majority of the transportation costs for those long hauls.

In fact, intermodal terminal costs are quite substantial. In recent years, UP has spent hundreds of millions of dollars on intermodal facilities.²⁶ Mr. Toren's speculation about the relative level of origin and destination costs for intermodal movements and his fragmentary information about sharing of some intermodal terminal costs is wholly insufficient to show that MMP would provide an allocation of revenue sufficient to cover offline costs of all the cross-over traffic AEPCO has chosen.

Moreover, AEPCO has ignored significant cost increases that would be imposed on the residual UP and BNSF as a result of the SARR configuration and operating plan AEPCO has chosen. As BNSF explains in its reply filing, AEPCO's choices would have the effect of significantly altering the location and nature of operations that today are conducted at BNSF's Belen Yard, introducing major

²³ See *id.* at III-A-31 to 32; Klick/Murphy VS, p. 13.

²⁴ AEPCO Op. at III-A-31.

²⁵ *Id.*

²⁶ See, e.g., UP Reply electronic workpaper "Intermodal Facilities Spending.pdf" (2002 press release describing construction of UP's new \$181 million intermodal facility in the Chicago region). The map at Maps, Tab 1 shows more than 50 UP intermodal and automotive facilities adjacent to the lines from which ACE would draw cross-over traffic.

Such investment is recorded in several different property accounts (including land, grading, and track) besides account 25 in UP's Annual R-1 Report, Schedule 330.

inefficiencies into the operation of the residual BNSF.²⁷ BNSF also shows that insertion of the SARR as a bridge carrier in the middle of BNSF's main line would require BNSF to relocate crew districts and to add an extra crew district, imposing further costs on the residual BNSF.²⁸ As described in Section III.C below, insertion of the SARR into UP's main line creates a similar situation for the residual UP. As a result of the SARR, the residual UP would have to alter its crew districts, thereby increasing its costs. Any decision about revenue allocation for the cross-over traffic would have to take account of these cost increases for the residual UP and BNSF, but there is no indication that AEPCO and its witnesses have considered this issue.

The results of AEPCO's SAC analysis confirm that MMP is inappropriate for this case. By AEPCO's own computation, its use of MMP allocates to the SARR revenues that vastly exceed its share of the investment and work necessary to transport the cross-over traffic. Yet the total revenue for these moves is generally recognized as providing only a slight margin above costs.²⁹ The SARR cannot be expected to achieve any dramatic reductions in costs as compared to the incumbent, since the SARR will operate as a bridge carrier that will interchange with UP and BNSF the same number and size of cross-over trains that UP and BNSF handle today in through service. The only rational conclusion is that the SARR achieves its extraordinary financial performance by leaving costs with the incumbents while grabbing a disproportionate share of the revenue.

AEPCO may argue that defendants are capable of calculating the proper revenue allocation for the cross-over traffic it has chosen. Defendants are not in a

²⁷ See BNSF Reply, pp. III.C-7 to 14.

²⁸ See *id.* at III.C-15 to 20.

²⁹ See UP Reply electronic workpaper "Intermodal Margins Article.pdf."

position to perform such an allocation, for several reasons. First, since AEPCO's traffic selections remain a mystery notwithstanding its asserted "criteria," defendants do not have an adequate starting point. Second, as explained further below, AEPCO chose an inappropriate configuration for its SARR. As a result, defendants do not know what lines would be included in a properly configured SARR, and attributable offline costs for the residual incumbents cannot be calculated. Finally, since AEPCO did not fully analyze what revenue would be needed to cover offline costs, it is unclear how much of the cross-over traffic AEPCO might choose to drop from its SARR when it realizes what a small share of revenues the SARR would be entitled to.

In short, in view of the deficiencies of AEPCO's opening evidence, defendants are in no position even to attempt an appropriate revenue allocation. The complaint should be dismissed on that ground.

D. AEPCO's Inefficient Stand-Alone Route Cannot Be Used to Test the Reasonableness of the Challenged Rates.

For the reasons set forth in the April 18 Petition (at 17-25) and in BNSF's Reply (at I-13 to 21), AEPCO's opening evidence does not propose a proper route for its stand-alone railroad. In place of the existing route for the complaint traffic (via Belen and Deming), AEPCO proposed a much longer route via Vaughn and El Paso, using BNSF trackage rights over UP's Tucumcari line. *See* Maps, Tab 3 (AEPCO Reroute).³⁰

³⁰ So far as UP's counsel has been able to determine, BNSF is not using these trackage rights for movements over the segment between Vaughn and El Paso. BNSF is currently conducting temporary operations over the Vaughn to El Paso segment, as part of a maintenance of way detour between Vaughn and Colton Yard in California. These operations are not conducted under the trackage rights cited by AEPCO, but under a separate maintenance of way detour arrangement between UP and BNSF. Under this arrangement, the detouring road does not pay a fee. BNSF's detour train-miles are accumulated and applied against the detour train-miles UP has incurred on BNSF.

As UP explained, any rerouting via Vaughn and El Paso would be defective because of its gross inefficiencies relative to the existing route via Belen and Deming. April 18 Petition, pp. 18-22. In addition, under Board precedent, AEPCO must construct a north-south segment at some location. It cannot simply rely on trackage rights over a defendant's line. *Id.* at 22-25.

UP and BNSF do not know – and should not have to guess – what stand-alone network AEPCO would propose to build or what traffic it would select to populate its network if it abandoned its improper effort to rely on trackage rights between Vaughn and El Paso. Accordingly, defendants cannot prepare reply SAC evidence addressing construction costs of a proper route or operating costs for the new configuration.

In its Reply to UP's April 18 Petition, AEPCO suggests that its reliance on BNSF trackage rights over UP is appropriate because AEPCO is "replicating BNSF service" rather than "UP's service between Vaughn and El Paso." AEPCO Reply, p. 36; *see also id.* at 38. This assertion is wrong-headed, for two reasons. First, and most fundamentally, it misses the point. AEPCO is challenging a joint rate and may do so only on an origin-to-destination basis.³¹ AEPCO is thus necessarily replicating the *defendants'* service between the mines and Cochise. The defendants must bear the investment costs for *some* north-south segment that connects their east-west mainlines in order to transport coal to Cochise, and thus the reasonableness of their rates cannot be assessed by reference to a SARR that avoids building any comparable line. April 18 Petition, pp. 22-25; BNSF Reply, pp. I-17 to 18, III.B-1 to 3.

³¹ *Central Power & Light Co v. Southern Pac. Transp. Co.*, 1 S.T.B. 1059, 1072-74 (1996) (shipper required to challenge entire rate over a through route, and may not challenge based on a discrete segment), *aff'd sub nom. Mid-American Energy Co. v. STB*, 169 F.3d 1099 (8th Cir. 1999).

Second, even if AEPCO were permitted to “slice and dice” the joint route at issue in this case into “BNSF” and “UP” portions, AEPCO’s proposed route does not replicate BNSF service. The agreement that grants BNSF trackage rights over UP’s Vaughn-El Paso segment does not give BNSF the right to create interline routes or specify new points of interchange without UP’s consent.³² As UP has explained,³³ it would not agree to shift AEPCO’s coal traffic to a much more circuitous and less efficient routing via El Paso given the availability of an efficient route via Deming, which BNSF can reach only via its Belen-Deming line.³⁴ Because the SARR can step into BNSF’s shoes only under “the terms and conditions of the presently applicable UP/BNSF joint facility agreement” (AEPCO Reply, p. 38), and because BNSF does not have the right to countermand UP’s choice of Deming as the point of interchange for the joint-line coal traffic that AEPCO proposes to reroute, AEPCO may not rely on BNSF’s Vaughn-El Paso trackage rights.³⁵

³² See AEPCO Op., Workpapers, Vol. 9, at AEP 04218 - AEP 04234; *see also* *Central Power & Light Co. v. Southern Pac. Transp. Co.*, 2 S.T.B. 235, 243 (1997) (choice of interchange for required two-carrier service cannot be dictated unilaterally), *affd. sub nom. Mid-American Energy Co., v. STB*, 169 F.3d 1099 (8th Cir. 1999).

³³ See April 18 Petition, p. 20.

³⁴ Because UP’s designation of Deming as the point of interchange is reasonable, neither BNSF nor any other party could force UP to accept interchange at El Paso or elsewhere. *See Norfolk Southern Ry. – Petition for Declaratory Order – Interchange with Reading Blue Mountain & Northern R.R.*, STB Docket No 42078 (STB served Apr. 29, 2003), p. 5 (burden is on party opposing carrier’s selection of interchange point to show that such a point is an “unreasonable choice”). Of course, BNSF has not proposed a routing via Vaughn and El Paso, because such a route would be so inefficient and disruptive.

³⁵ The suggestion in the Board’s decision of August 20, 2002 in this case (“August 2002 Decision”) that UP and BNSF could have chosen to interchange traffic at a point other than Deming at existing rate levels relied on unsupported representations that AEPCO made in its reply. Under the Board’s rules, UP and BNSF did not have an opportunity to respond to that speculation. *See also* April 18 Petition, p. 17 n.18. So that

The Board has emphasized that AEPCO was not “free to hypothesize additional (non-existent) shared-use arrangements.” August 2002 Decision, p. 7. Because a defendant may not create such arrangements unilaterally, its rates may not be judged as if these arrangements were available to it. *Id.* Yet that is precisely what AEPCO has proposed.

AEPCO is also incorrect in suggesting that its assumed use of BNSF’s Vaughn-El Paso trackage rights was “expressly approved” by the Board in the August 2002 Decision. *See* AEPCO Reply, p. 37. AEPCO never presented to the Board a configuration involving the use of BNSF trackage rights between Vaughn and El Paso for New Mexico coal shipments. AEPCO concedes that the Board’s decision “did not expressly address the use of trackage rights between Vaughn and El Paso as opposed to new SARR construction.” *Id.*

AEPCO’s suggestion that it nevertheless implemented the “*exact* principle” accepted by the Board (*id.* (emphasis added)) turns the Board’s reasoning upside down. AEPCO argues that the Board endorsed “AEPCO’s use of BNSF trackage rights over a UP-constructed segment (Bond-Denver) for challenging a UP single-line movement.” *Id.* But the Board did no such thing. Instead, in discussing the configuration of a SARR designed to test UP’s single-line Colorado rate (which is no longer at issue), it allowed AEPCO only to claim as SARR revenue the trackage rights fees BNSF pays to UP “that help[] defray UP’s costs for that segment.” August 2002

the record is clear, in the unlikely event a route via Vaughn and El Paso were ever contemplated, the corresponding rate would be higher. UP would incur substantially higher costs and would therefore increase its revenue requirements in the joint rate. Since BNSF’s costs would also be higher, it is unlikely that it would reduce its factor.

Decision, p. 7. The Board did not permit AEPCO to avoid *building* UP's Bond-Denver segment. *See* April 18 Petition, p. 24 n.24. If applicable at all to AEPCO's challenge of the joint-line New Mexico rate, the Board's reasoning at most would have allowed AEPCO to propose building the Vaughn-El Paso line and then use trackage rights fees paid by BNSF for movements over that segment of UP's line (of which there currently appear to be none) to help "defray" its costs.

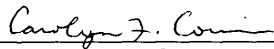
AEPCO also errs when it attempts to rely on the Board's "guiding principles – that a SARR may replicate the existing cost-sharing arrangements but may not hypothesize non-existent revenue or cost-sharing arrangements." August 2002 Decision, p. 7 (misquoted at AEPCO Reply, p. 37). Those principles do not support AEPCO's proposed routing; rather, they rule it out. Using the trackage rights of one defendant over the line of another, instead of building that line, merely avoids the defendants' costs. It certainly does not replicate "existing cost-sharing arrangements."

E. Conclusion

AEPCO's opening SAC evidence is fundamentally flawed, for the reasons described above. UP originally believed that the most efficient approach would be for the Board to order AEPCO to correct these flaws and refile its opening evidence. If AEPCO persists in declining to do so, the complaint should be dismissed.

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May 27, 2003

CERTIFICATE OF SERVICE

I hereby certify that on May 27, 2003, I caused copies of the foregoing public version of the "Reply Evidence of Union Pacific Railroad Company Concerning Stand-Alone Costs" to be served by hand or overnight mail upon the following counsel:

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III. Stand-Alone Cost

III. STAND-ALONE COSTS

A. STAND-ALONE TRAFFIC GROUP³⁶

1. Stand-Alone Railroad Traffic

In the April 18 Petition, UP explained that defendants were unable to decode or replicate AEPCO's traffic selection for its SARR and therefore could not present alternative SAC calculations on reply. UP provided the verified statement of John C. Klick and Julie A. Murphy of FTI Consulting, Inc., explaining that AEPCO's presentation was so inconsistent and incomplete that FTI had been unable to determine what traffic AEPCO meant to select. Mr. Klick and Ms. Murphy reported that AEPCO had made a series of unexplained adjustments to the UP and BNSF traffic data, generating impossible amounts of traffic for its SARR. Klick/Murphy VS, pp. 3, 11.

In its reply to the April 18 Petition, AEPCO asserted that it intended to select 100 percent of "all overhead trainload revenue freight traffic that moved over BNSF's line between Defiance and Vaughn, NM in 2001, and all overhead trainload revenue freight traffic that moved over UP's line between El Paso, TX and Cochise, AZ in 2001." AEPCO Reply, p. 6. But as Mr. Klick and Ms. Murphy explained, this is not what AEPCO did. Instead, it invented large amounts of phantom traffic and revenues. Klick/Murphy VS, pp. 3-12. Moreover, it is impossible to understand what AEPCO did with respect to various categories of traffic. For example, AEPCO's opening evidence

³⁶ Evidence in this section is based in part on the verified statement of John C. Klick and Julie A. Murphy of FTI Consulting Inc., submitted with the April 18 Petition. Evidence relating to UP's traffic and operations data, UP's production of data in this proceeding, and traffic selection in prior UP rate cases is sponsored by Bradley Stock, UP's Senior Project Manager, Planning and Analysis, and Louise A. Rinn, UP's Associate General Counsel. Mr. Stock is the individual who performed the programming and prepared the traffic tape data that UP produced in response to AEPCO's RFP 42. Ms. Rinn has handled UP rate cases for over 20 years.

was entirely unclear regarding its intentions with respect to traffic that originates or terminates in the Pacific Northwest and Utah. *See id.* at 7. AEPCO's "explanation" of this point in its reply to the April 18 Petition leaves the situation as murky as before. *See* AEPCO Reply, p. 21 & n.23. The fact remains that AEPCO excluded cars that moved between Cochise and El Paso if they originated or terminated in the Pacific Northwest or Utah for one calculation, but included them for another. UP continues to believe that it is not possible to understand AEPCO's traffic selection, for the reasons stated in the April 18 Petition.

However, based on the extensive investigation FTI has conducted, it is at least possible to conclude that AEPCO has significantly overstated traffic and revenues for the SARR. As BNSF discusses in its reply submission, AEPCO's adjustments to the BNSF traffic data created a huge amount of fictitious revenue and tonnages that resulted in nonsensical conclusions. For example, BNSF notes that AEPCO claims [REDACTED] in adjusted intermodal revenues for the BNSF portion of its SARR, a number that exceeds the total amount of intermodal revenues BNSF claims for its entire system. *See* BNSF Reply, p. III.A-15 to 17. BNSF shows in its reply submission that AEPCO's adjustments to the BNSF traffic data were inappropriate. *See id.* at III.A-1 to 18.

Mr. Klick and Ms. Murphy concluded that the volume of UP traffic AEPCO purported to select for the SARR significantly exceeded the total volume of overhead traffic that actually moved across the replicated UP segment. Klick/Murphy VS, p. 3. The following table shows the upward adjustments AEPCO made to UP non-coal tons and revenues for 2001 and the first six months of 2002.

Table UP III.A-1
Comparison of “Unadjusted” Non-Coal Volumes and Revenues AEPCO Selected
From UP Traffic Data and “Adjusted” Non-Coal Volumes and Revenues
Employed by AEPCO in its SAC Analysis³⁷

	AEPCO “Unadjusted” Selected From UP Traffic Files	AEPCO “Adjusted” Used in SAC Analysis	Percentage Increase
UP 2001			
ACE Revenue	[REDACTED]	[REDACTED]	25.4%
Tons	[REDACTED]	[REDACTED]	26.5%
UP 2002 (First 6 mos.)			
ACE Revenue	[REDACTED]	[REDACTED]	29.1%
Tons	[REDACTED]	[REDACTED]	31.7%

AEPCO’s adjustments were both unnecessary and wholly inappropriate. AEPCO provided no meaningful explanation for the adjustment in its opening evidence. In its reply to the April 18 Petition, however, AEPCO claimed that it had no choice but to adjust UP’s and BNSF’s traffic data because those data did not “link” to all of the cars in the railroads’ train movement files that AEPCO thought were revenue-producing. *See* AEPCO Reply, pp. 12-13. AEPCO concluded that there must have been “some sort of defect in the traffic tapes” it received. *Id.* at 13. This argument, which it presumably will offer in its rebuttal evidence, is incorrect.³⁸

³⁷ The data underlying this table are reported in AEPCO electronic workpaper “ACE Non-Coal Traffic and Revenue Forecast.xls,” at worksheets “ACE Non-Coal Traffic and Revenue Forecast.xls” and “ACE UP ’01 Traf. and Rev.” “Adjusted” volumes and revenues for 2001 are taken from UP non-coal traffic information on AEPCO Op. Exh. III-A-5.

³⁸ AEPCO also claims that Mr. Klick and Ms. Murphy “acknowledge that ‘a relevant conversion’ is needed” in order to correct certain intermodal counts in the revenue data. AEPCO Reply, p. 17 (emphasis in original). AEPCO is mistaken. As Mr. Klick and Ms. Murphy explained, no conversion would have been needed had AEPCO used UP’s traffic data for its traffic selections. *See* Klick/Murphy VS, p. 8. As discussed below, that data contained correct information on the actual traffic, including revenue trailer and container units, that moved across the El Paso-Cochise segment. When AEPCO chose to attempt a comparison between UP’s traffic data and its train movement

UP's traffic data included revenues for all of the movements AEPCO requested. In Request for Production No. 42 of its Amended and Supplemented Interrogatories and Requests for Production of Documents, AEPCO requested data bases that include tonnage and freight revenues "for each movement you handled as originating, terminating, overhead or single-line carrier that traveled in the SARR States."³⁹ UP agreed to produce responsive information.⁴⁰ On March 28, 2002, it produced a compact disc containing 2000 and 2001 traffic data.⁴¹ On December 5, 2002, UP supplemented its production of traffic data for 2000 and 2001 and updated its production with information for the first nine months of 2002, by producing three compact discs.⁴² The compact discs of traffic tape data UP produced included information for each movement UP handled that traveled on the segments requested by AEPCO.

The traffic data UP produced to AEPCO were derived from the authoritative source of revenue information for UP. These data are the source used by UP's finance and marketing departments for reporting commodity revenue data to UP shareholders, the SEC, and the Board, and for billing customers and conducting marketing analyses. Customers provide bills of lading, which provide the data used to

data, it performed the comparison incorrectly, for reasons that Mr. Klick and Ms. Murphy explain.

³⁹ UP Reply electronic workpaper "AEPCO's Amended Requests.pdf." For UP, AEPCO defined "SARR States" to mean seven UP lines with end points at various locations in Colorado, Texas, New Mexico, and Arizona. *See* UP Reply electronic workpaper "AEPCO's Third Supplemental Requests.pdf," at 2-3.

⁴⁰ UP Reply electronic workpaper "UP Responses to Amended Requests.pdf."

⁴¹ UP Reply electronic workpaper "March 28 Transmittal Letter.pdf."

⁴² UP Reply electronic workpaper "December 5 Transmittal Letter.pdf."

create revenue waybills. The revenue waybill is used to bill the customer and track revenue and is the source of the UP traffic data. The only movements included in these data are "revenue loads," *i.e.*, a car, trailer, or container that contains freight that UP is paid to carry between two points.

The traffic data included origin and destination Freight Station Accounting Codes ("FSACs"), as well as junction locations for traffic that was interchanged. These fields, which were provided to AEPCO, could be used to de-select whatever traffic AEPCO did not wish to run over its SARR. Because UP produced traffic data for *all* revenue movements over the El Paso-Cochise line segment (as well as the other lines AEPCO specified in its discovery requests), AEPCO merely had to exclude those movements that would not move on the ACE network. There was no need for it to add movements.⁴³

So far as UP and its counsel are aware, UP's traffic tape data are the only source complainants have used for their traffic selection in past SAC cases involving UP. This includes cases that relied on substantial volumes of non-coal commodities.⁴⁴ *See, e.g., Bituminous Coal-Hiawatha, Utah, to Moapa, Nevada*, 10 I.C.C.2d 259, 268 (1994)

⁴³ Mr. Stock has confirmed that the three compact discs of traffic tape data UP produced in December 2002, and the single disc UP produced in March 2002, were in Microsoft Access format, which can be easily read and manipulated without any special expertise or computer program. The compact discs also contained spreadsheets with decoder tables that could be easily accessed.

If AEPCO had any question about whether movements it wished to remove from the traffic data it had requested in discovery in fact moved over the El Paso-Cochise segment (rather than another routing), it could have consulted the UP car movement data, which it received in discovery.

⁴⁴ AEPCO did not adjust tonnage or revenues for coal movements moving on the SARR. It has justified its unprecedented adjustments to non-coal tonnage and revenues on the ground that these shipments often move with just one car per waybill. AEPCO Reply, p. 12.

(“*Nevada Power*”) (historical volumes and associated revenues based on actual traffic waybill data produced by railroads); *FMC Wyoming Corp. v. Union Pacific R.R.*, STB Docket No. 42022 (STB served May 12, 2000) (“*FMC*”), p. 26 n.60; UP Reply electronic workpaper “Peterson VS in *FMC*.pdf.” Due to improvements in its data processing capabilities in recent years, UP was able to provide AEPCO with traffic tape data that were more tailored to its requests than UP had provided to past complainants.⁴⁵ In short, UP had already performed the analysis to identify all revenue carloads that moved over any portion of the lines specified by AEPCO.

Thus, AEPCO had the traffic data it had requested, and, like previous complainants it could have used these data for its traffic selection. However, AEPCO apparently attempted to make its initial selection of traffic using a different UP data base, containing train movement data. In its reply to the April 18 Petition, AEPCO states that it chose traffic from the train movement data, then attempted to “link” that traffic with the traffic tape data, in some cases using a third UP data base containing car movement data to make the link. AEPCO Reply, pp. 12, 15. In its reply to the April 18 Petition, AEPCO asserts that it had to consult other data bases because the traffic tape data contain no information on the route of each movement. *Id.* at 13.⁴⁶ AEPCO complains that it had

⁴⁵ In the *FMC* case, UP produced from its waybill data base all traffic that originated, terminated or was interchanged in 14 western states, despite the fact that FMC requested all data for movements over any UP line in only 10 states. At that time, UP was not able to identify the actual revenue moves over specific lines, and the broader scope was necessary to ensure that no relevant overhead movements were overlooked. Nevertheless, FMC, relying *only* on the traffic tapes, identified the traffic and associated revenue for its SARR. Like AEPCO’s SARR, FMC’s SARR involved multiple commodities and significant levels of overhead traffic. Similar search parameters were used for traffic data produced in the *Nevada Power* case.

⁴⁶ AEPCO’s RFP 42 does not request internal routing information beyond the origin, destination, and interchange junctions (if any). See UP Reply electronic workpaper

difficulty linking the train movement data and the traffic tape data, and states that it decided to “adjust” the traffic tape data in an effort to make the two sets of data match. *Id.* at 12.

In fact, there was no need to link the traffic data to any other data. As noted above, the traffic data included all the movements AEPCO had requested. It included origin/destination information fields and other information that provided a basis for AEPCO to remove traffic it did not wish to select for the SARR. There was certainly no need to add any movements.

In any event, it makes no sense to attempt to select traffic from the train movement data. These data do not include net tonnage and revenue information. The train movement data are contained in an operations data base, created by and used by the operating department. The purposes of this operations data base are quite different from the purposes of the traffic data base.⁴⁷ Likewise, the car movement data support the operating departments’ need to track the location of cars, loaded and empty, at any given time. UP’s accounting department uses these data to pay car owners.

“AEPCO’s Amended Requests.pdf” (RFP No. 42, subparts b, c, e, h, i, m, n, and o). UP supplied the requested information. This is the same type of information that both shippers and railroads have used in the past to identify traffic selected for a SARR from UP traffic tapes.

⁴⁷ UP personnel in the operating department focus primarily on transportation information, rather than revenue data. UP provided the train movement data in response to AEPCO’s separate discovery requests that addressed operations information, not its request for revenue data. *See* UP Reply electronic workpapers “AEPCO’s Amended Requests.pdf” (RFP nos. 4, 18, 46, 53) (requesting operations data); “December 4 Transmittal Letter.pdf” (transmitting information on train movement data, with reference to RFP nos. 4, 18 e & f, 46, and 53); “December 5 Transmittal Letter.pdf” (transmitting train movement data with reference to RFP no. 4).

In SAC cases train movement data and other operations data can be used, *e.g.*, to compute cycle times or make allocations of certain variable cost categories.

Moreover, key definitions used for operations data are different from those used for traffic data. Among other differences, operating personnel need to track cars, trailers, and containers loaded with company material (*e.g.*, ballast, ties, shop material) and flat cars loaded with trailers or containers being repositioned. Such cars count as loads for operating purposes, such as identifying train size and weight for dispatchers and engineers or tracking accumulated gross ton-miles for engineering to plan maintenance of way activities. But they generate no revenue and are not included in the waybill data contained in the traffic tapes. As Mr. Klick and Ms. Murphy discuss in their verified statement attached to UP's April 18 Petition, this crucial disconnect between the two data bases apparently contributed to AEPCO's erroneous conclusion that there were revenue movements contained in the train movement data that did not appear in the traffic tape data.⁴⁸

AEPCO has complained that the data UP produced were delivered in a "user-unfriendly" format. *See* AEPCO Reply, p. 9 (emphasis in original). It asserts in particular that UP chose to "present its data response to AEPCO through three separate data sources, and leave it to AEPCO to find the proper data linkages among them." *Id.* at p. 10. The assertion is bogus. There is no reason to fault UP for providing separate collections of data in response to AEPCO's separate discovery requests.⁴⁹ Moreover, AEPCO's criticism is premised on the faulty assumption that UP in fact has a single,

⁴⁸ *See* Klick/Murphy VS, p. 9. AEPCO's error was particularly significant for intermodal traffic. UP has significant "balancing" difficulties with intermodal equipment. It sends far more revenue-producing freight from west to east than vice-versa, and therefore sends significant numbers of empty containers from east to west.

⁴⁹ *See* UP Reply electronic workpaper "AEPCO's Amended Requests.pdf" (RFP no. 42) (requesting revenue data); *id.* (RFP nos. 4, 46-47, 49-50, 53) (requesting various operations data, including car and train movement data).

integrated data base that combines the traffic, train movement, and car movement data. In fact, UP maintains these data in separate computer systems, and it has no business or reporting need to integrate these data bases.

AEPCO also complains in its opening evidence that UP produced a massive amount of data in difficult-to-read format. AEPCO is presumably talking about UP's train movement and car movement data bases, both of which contain massive amounts of operating data.⁵⁰ However, AEPCO requested these data, which are relevant to other aspects of AEPCO's SAC or variable cost analysis. UP certainly cannot be blamed for producing them.

In addition to relying on the evidence discussed in this subsection and in the April 18 Petition, UP adopts the evidence BNSF presents in Section III.A.1 of its reply submission.

⁵⁰ UP's train movement data base includes detailed information about all train movements occurring on UP's system. The car movement data base includes, *inter alia*, the type, current location, and movement history of every car on the UP system. As discussed above, the traffic tape data UP produced, which contain all the data needed for AEPCO's traffic selection, consisted of only a few compact disks in Microsoft Access format.

3. Revenues (Historical and Projected)

c. Divisions - Cross-Over Traffic

AEPCO's evidence regarding traffic and revenues is defective for another reason. UP explained in the April 18 Petition that AEPCO had proposed a traffic base consisting almost entirely of "cross-over traffic,"⁵¹ but that, contrary to Board precedent, it had failed to submit evidence demonstrating that the revenues it left for the incumbent railroads would cover the costs of handling this traffic when it was not on the SARR. This failure to address the adequacy of the residual revenue provides a separate basis for rejecting AEPCO's evidence. As explained in the April 18 Petition, Board precedent requires a complainant to make a threshold showing that cross-over traffic "earns sufficient revenues to cover off-line, as well as on-line costs."⁵²

⁵¹ "Cross-over traffic" is traffic that is currently handled in its entirety by the incumbent railroad or railroads and that the complainant assumes would move in interline service between the stand-alone railroad and the incumbent railroad or railroads. *See PPL Montana I*, p. 7 n.13.

In its reply, BNSF expresses serious concerns about complainants' use of cross-over traffic (particularly exempt cross-over traffic) in SAC cases. *See* BNSF Reply, pp. I-23 to 29, III.A-20 to 42. UP shares those concerns. As BNSF explains in its reply evidence, when complainants include large amounts of cross-over traffic in their selection of traffic for a SARR, there is great potential for manipulation of the allocation of revenue between the SARR and the residual incumbent so as to assign excessive amounts of revenue to the SARR. Such misallocations make it appear that revenues for the SARR far exceed SAC costs, requiring a large reduction in the rate for the complaint traffic.

As BNSF explains, the potential for manipulation is heightened where, as in this case, cross-over traffic comprises a high percentage of the SARR's traffic base; the SARR builds only a very small portion of the network needed to handle the cross-over traffic from origin to destination; and most of the cross-over traffic is low-margin exempt traffic. AEPCO's proposed SARR thus represents an extreme illustration of the pitfalls of reliance on cross-over traffic. The unrealistic results of AEPCO's SAC analysis (in which revenue the SARR supposedly would earn from a traffic group consisting primarily of low-margin traffic would allegedly far exceed total SAC costs) make it plain that AEPCO has improperly manipulated revenues for cross-over traffic.

⁵² *Arkansas Power*, 3 I.C.C.2d at 774.

AEPCO presumably will argue that it met any obligation to address the adequacy of residual revenues by using the modified mileage prorate block method (“MMP”) to calculate divisions. AEPCO claimed in its reply to the April 18 Petition that Board precedent permits complainants to rely on a presumption that MMP-based revenue divisions allow residual incumbents to cover their costs in cases where carriers have withheld information as to their actual divisions. *See* AEPCO Reply, pp. 29-32. BNSF has thoroughly refuted AEPCO’S claim that it was entitled to rely on its rote application of the MMP formula to satisfy its burden of demonstrating that the residual incumbents would cover their costs. *See* BNSF Reply, pp. I-24 to 26, III.A-46 to 49.

Even if AEPCO were correct that the Board routinely applies a presumption in favor of using MMP when parties fail to supply information on market-based divisions, that presumption could not be relied on in this case, because both BNSF and UP did in fact produce divisions information.⁵³ AEPCO’s assertion that “UP did not produce any divisions information” (*id.* at 32) is flatly wrong. UP initially objected to producing information about divisions. However, it ultimately produced traffic data that AEPCO could have used to determine UP’s divisions for all traffic interchanged with BNSF (other than the issue traffic).⁵⁴ These data revealed both (a) the total amount

⁵³ AEPCO has acknowledged that BNSF produced some divisions data. *See* AEPCO Reply, p. 32 n.33.

Like BNSF, UP believes that any reliance on divisions information for actual interline movements to determine a proper allocation of cross-over traffic revenues in a SAC case would be arbitrary and improper. *See* BNSF Reply, p. I-26, III.A-48 to 49.

⁵⁴ UP Reply electronic workpaper “December 5 Transmittal Letter.pdf.” The UP-BNSF divisions information was the data most pertinent to the SARR, since UP and BNSF are the only line haul carriers in the vicinity of the SARR. Moreover, UP-BNSF movements are the only ones for which the defendants could provide both revenue and mileage for the relevant segments. Without offline miles, it is impossible to test the relationship between actual revenue divisions and an MMP-based allocation.

charged to the customer for interline movements with BNSF, and (b) the UP-only net revenue for those interline movements (other than the issue movements). In response to subsequent questions from AEPCO's counsel, UP explained the data it had provided.⁵⁵ AEPCO thus was aware that it had information from which it could estimate divisions. Accordingly, even if AEPCO could rely on "simplifying assumptions regarding off-system revenues and costs" when "defendants withhold divisions information" (AEPCO Reply, p. 26), it was not entitled to rely on those assumptions in this case.

Moreover, AEPCO's interpretation of Board precedent is incorrect. The Board recently emphasized that it has "not adopted a single, preferred procedure for developing revenue divisions on cross-over traffic."⁵⁶ Thus, prior use of MMP is insufficient to support its use in this case. In fact, this case differs significantly from past cases in which the Board has relied on MMP. As AEPCO itself has noted (*see* AEPCO Reply, p. 27), the Board has accepted MMP in cases where cross-over traffic moved long distances over the proposed SARR to and from short off-SARR gathering and distribution lines. In this case, by contrast, the cross-over traffic AEPCO selected moves across a very short SARR that performs very little work, but makes extensive use of very

Neither BNSF nor UP produced divisions information regarding the issue traffic. In response to a motion to compel filed by AEPCO, the Board held that the carriers were not required to produce such information. *See* Decision served Dec. 31, 2001, p. 7.

⁵⁵ UP Reply electronic workpaper "December 11 Divisions Letter.pdf" (letter from Robert D. Rosenberg to Carolyn F. Corwin, dated Dec. 11, 2002, requesting a detailed explanation of the "Total Freight Amount" and "Union Pacific Revenue" fields in UP's traffic tapes) and UP Reply electronic workpaper "December 16 Divisions Letter.pdf" (letter from Carolyn F. Corwin to Robert D. Rosenberg, dated Dec. 16, 2002, noting that "UP supplemented its production by providing both the total amount charged to the customer and UP-only revenue for interline moves (other than moves of the complaint traffic)").

⁵⁶ *TMPA*, p. 31 n.74.

substantial portions of the UP and BNSF systems where it incurs substantial off-SARR gathering and distribution costs. *See* Maps, Tab 1 (UP Network) and Tab 2 (BNSF Network) (showing the extensive portions of the UP and BNSF networks that flow traffic to ACE under AEPCO's SARR traffic assumptions). Thus, AEPCO's reliance on the use of MMP to develop revenue divisions is inappropriate without an adequate showing that this methodology in fact produces an allocation of revenue that will cover offline costs.

The conclusory statement of AEPCO's witness Toren – that MMP “produces a reasonable result for the non-coal overhead traffic”⁵⁷ – is insufficient to carry its burden on this point. Mr. Toren's further comments are also unhelpful. He addresses only intermodal traffic, despite the fact that much of the SARR's cross-over traffic consists of automotive and carload merchandise traffic.⁵⁸ He acknowledges that there are few divisions for intermodal movements, because they generally move under single-line rates, and he simply asserts that origin and destination terminal costs are a small portion of the total cost of service when the line haul is long.⁵⁹ He never attempts to quantify these costs. Nor does he acknowledge that UP and BNSF incur the vast majority of the transportation costs for those long hauls.

In fact, intermodal terminal costs are quite substantial. In recent years, UP has spent hundreds of millions of dollars on intermodal facilities.⁶⁰ Mr. Toren's

⁵⁷ AEPCO Op. at III-A-31.

⁵⁸ *See id.* at III-A-31 to 32; Klick/Murphy VS, p. 13

⁵⁹ AEPCO Op. at III-A-31.

⁶⁰ *See, e.g.*, UP Reply electronic workpaper “Intermodal Facilities Spending.pdf” (2002 press release describing construction of UP's new \$181 million intermodal facility in the Chicago region). The map at Maps, Tab 1 shows more than 50 UP intermodal and automotive facilities adjacent to the lines from which ACE would draw cross-over traffic.

speculation about the relative level of origin and destination costs for intermodal movements and his fragmentary information about sharing of some intermodal terminal costs is wholly insufficient to show that MMP would provide an allocation of revenue sufficient to cover offline costs of all the cross-over traffic AEPCO has chosen.

Moreover, AEPCO has ignored significant cost increases that would be imposed on the residual UP and BNSF as a result of the SARR configuration and operating plan AEPCO has chosen. As BNSF explains in its reply filing, AEPCO's choices would have the effect of significantly altering the location and nature of operations that today are conducted at BNSF's Belen Yard, introducing major inefficiencies into the operation of the residual BNSF.⁶¹ BNSF also shows that insertion of the SARR as a bridge carrier in the middle of BNSF's main line would require BNSF to relocate crew districts and to add an extra crew district, imposing further costs on the residual BNSF.⁶² As described in Section III.C below, insertion of the SARR into UP's main line creates a similar situation for the residual UP. As a result of the SARR, the residual UP would have to alter its crew districts, thereby increasing its costs. Any decision about revenue allocation for the cross-over traffic would have to take account of these cost increases for the residual UP and BNSF, but there is no indication that AEPCO and its witnesses have considered this issue.

The results of AEPCO's SAC analysis confirm that MMP is almost certainly inappropriate for this case. By AEPCO's own computation, its use of MMP

Such investment is recorded in several different property accounts (including land, grading, and track) besides account 25 in UP's Annual R-1 Report, Schedule 330.

⁶¹ See BNSF Reply, pp. III.C-7 to 14.

⁶² See *id.* at III.C-15 to 20.

allocates to the SARR revenues that vastly exceed its share of the investment and work necessary to transport the cross-over traffic. Yet the total revenue for these moves is generally recognized as providing only a slight margin above costs.⁶³ The SARR cannot be expected to achieve any dramatic reductions in costs as compared to the incumbent, since the SARR will operate as a bridge carrier that will interchange with UP and BNSF the same number and size of cross-over trains that UP and BNSF handle today in through service. The only rational conclusion is that the SARR achieves its extraordinary financial performance by leaving costs with the incumbents while grabbing a disproportionate share of the revenue.

AEPCO may argue that defendants are capable of calculating the proper revenue allocation for the cross-over traffic it has chosen. Defendants are not in a position to perform such an allocation, for several reasons. First, since AEPCO's traffic selections remain a mystery notwithstanding its asserted "criteria," defendants do not have an adequate starting point. Second, as explained further below, AEPCO chose an inappropriate configuration for its SARR. As a result, defendants do not know what lines would be included in a properly configured SARR, and attributable offline costs for the residual incumbents cannot be calculated. Finally, since AEPCO did not fully analyze what revenue would be needed to cover offline costs, it is unclear how much of the cross-over traffic AEPCO might choose to drop from its SARR when it realizes what a small share of revenues the SARR would be entitled to.

⁶³ See UP Reply electronic workpaper "Intermodal Margins Article.pdf."

In short, in view of the deficiencies of AEPCO's opening evidence, defendants are in no position even to attempt an appropriate revenue allocation. The complaint should be dismissed on that ground.

In addition to relying on the evidence discussed in this subsection and in the April 18 Petition, UP adopts the evidence BNSF presents in Section III.A.3.c of its reply submission.

B. STAND-ALONE RAILROAD SYSTEM

Without adequate identification of the cross-over traffic AEPCO selected for its SARR, defendants are not in a position to present reply evidence of an appropriate stand-alone railroad system.

In addition, the April 18 Petition (including the attached Verified Statement of Dale W. Salzman) explains why AEPCO's inefficient route cannot be used to test the reasonableness of the challenged rates. As shown in that evidence (which we have incorporated in this reply), the route AEPCO has chosen would increase route miles by 43% and increase fuel consumption by at least 57%.⁶⁴ *See also* Maps, Tab 3 (AEPCO Reroute). It would increase cycle times and crew costs, impose additional car costs on shippers using the new route, and create the risk that slow moving coal trains would interfere with the residual incumbents' time-sensitive intermodal and automotive trains moving over lines that are already heavily traveled. The April 18 Petition also shows that AEPCO erred in relying on BNSF's trackage rights over UP's line between Vaughn and El Paso. Because UP would not have agreed to permit an interline move over such an inefficient route, there were no BNSF shoes for AEPCO to step into in connection with these trackage rights. In its reply submission, BNSF agrees that there is no trackage rights arrangement in place today that could be used for the issue traffic. *See* BNSF Reply, p. I-20.

As UP explained in the April 18 Petition, the complainant has the right and the responsibility to specify an appropriate configuration. Defendant railroads can point out errors, but they cannot substitute their judgment to designate an alternative

⁶⁴ UP Reply electronic workpaper "TPS Runs.pdf."

when the complainant's network is fatally flawed. By stating its intention not to alter its configuration, AEPCO implicitly concedes that the railroads could not offer a substitute. Therefore, defendants are unable to propose an appropriate stand-alone railroad system as part of a reply, due to the defects in AEPCO's evidence regarding its traffic selection and configuration for the SARR.

In addition to relying on the evidence discussed in this section and in the April 18 Petition, UP adopts the evidence BNSF presents in Section III.B of its reply submission.

C. OPERATING PLAN

Without adequate identification of the cross-over traffic AEPCO selected for its SARR or designation of an appropriate configuration, defendants are not in a position to present reply evidence regarding an appropriate operating plan for the SARR.

BNSF's reply explains that AEPCO has failed to consider additional costs that its operating plan would impose on the residual BNSF. AEPCO has also failed to consider the additional costs that the crew change points in its operating plan would impose on the residual UP.⁶⁵

UP has a single crew district that stretches approximately 310 miles from El Paso to Tucson, Arizona. *See* Maps, Tab 4 (UP Crew Districts). Crews typically operate in straightaway service within this district, which means that a crew boards a train at Tucson (its home terminal) and travels to El Paso, and, after resting in El Paso, returns from El Paso to Tucson on a different train.

AEPCO proposes to insert the SARR on UP's lines between El Paso and Cochise. For traffic interchanged with the SARR, UP would have to create a new crew change point at Cochise. UP could do this either by moving its crew base from Tucson to Cochise or by operating between Tucson and Cochise in turnaround service. Both options would impose significant costs on UP that AEPCO fails to address.

The first option would be both costly and impractical. UP would have to incur a significant one-time cost to relocate its facilities and crews from Tucson to Cochise. Once the new crew change point was operational, UP would face higher crew costs than those it incurs when it changes crews in Tucson. Most UP crews operating

⁶⁵ UP's evidence on this issue is sponsored by Dale W. Salzman, UP's Director-Transportation Research.

west of Tucson run to Yuma, Arizona, a distance of approximately 251 miles. Adding the approximately 74 miles from Cochise to Tucson to this run would result in a crew district of about 325 miles on a mostly single-track railroad. The long distance and limited capacity, plus the amount of on-line work required at intermediate locations, especially Tucson, would mean that many crews would be unable to make the run within their Hours of Service. The need to use extra crews when the first crews run out of time would significantly increase UP's costs.

The second option, which UP would more likely implement, would also be costly and inefficient for UP. A Tucson-based crew would take an eastbound train from Tucson to Cochise and then bring a westbound train back to Tucson. This option would be inefficient because there would not always be a westbound train immediately available for movement back to Tucson. In that case, the crew would either have to deadhead back to Tucson or, if a westbound train were due within a reasonable amount of time, the crew would have to wait for its arrival. In addition, directional imbalances in daily train volumes and imbalances created by train schedules designed to meet customer needs would result in a continual need to deadhead crews from Tucson to Cochise in order to move trains from Cochise to Tucson, and from Cochise to Tucson in order to move trains from Tucson to Cochise.⁶⁶ All of this deadhead time, plus the waiting time at Cochise, would be non-productive time when the crews were not actually involved in moving trains. UP would also have to develop new facilities at Cochise where the crews

⁶⁶ This imbalance is not a problem with UP's current crew district because, in moving between El Paso and Tucson, crews will have performed a full day's work and are obligated to rest. They can then be called when needed for the return trip. For the Cochise-Tucson segment, by contrast, they must be matched with a return train quickly; otherwise, they will exceed their federally mandated hours of service.

could wait for westbound trains, as well as get the necessary paperwork for moving those trains back to Tucson.

In addition to relying on the evidence discussed in this section and in the April 18 Petition, UP adopts the evidence BNSF presents in Section III.C of its reply submission.

D. OPERATING EXPENSES

As discussed in the April 18 Petition and in Section III.B above, the configuration AEPCO has chosen for its SARR is far less efficient than the current routing of the issue traffic and other coal traffic AEPCO has chosen. Thus, operating costs of the SARR are likely to be higher than the current UP and BNSF costs for moving the coal traffic.

As explained above, AEPCO has not presented adequate evidence concerning traffic selection or the SARR configuration. Moreover, in lieu of constructing a north-south segment, AEPCO uses trackage rights in an impermissible manner. As a result of all of these flaws, UP is unable to offer any evidence concerning operating expenses of the SARR.

E. NON-ROAD PROPERTY INVESTMENT

As explained above, AEPCO has not presented adequate evidence concerning traffic selection. In addition, it has chosen an inappropriate SARR configuration. As a result of these flaws, UP is unable to offer any evidence concerning non-road property investment of the SARR.

F. ROAD PROPERTY INVESTMENT

As explained above, AEPCO has not presented adequate evidence concerning traffic selection. In addition, it has chosen an inappropriate SARR configuration. As a result of these flaws, UP is unable to offer any evidence concerning road property investment of the SARR.

G. DISCOUNTED CASH FLOW ANALYSIS

For the reasons stated above, UP has not submitted an affirmative SAC case and therefore has not conducted a discounted cash flow analysis in its reply evidence.

H. RESULTS OF SAC ANALYSIS

The results produced by AEPCO's SAC analysis are absurd on their face. As BNSF explains in its SAC reply filing, the great majority of the traffic AEPCO has selected for its SARR is intermodal, automotive, boxcar, and other traffic that is exempt from Board regulation. It is common knowledge that railroads earn low margins on such traffic.⁶⁷ As BNSF explains, this traffic is exempt because the Board has concluded that market forces restrain rates for the traffic. AEPCO nevertheless concludes that the revenues the SARR would receive far exceed the total costs of building and operating the SARR. Indeed, even if all non-exempt traffic were removed from AEPCO's SARR – without any reduction in its costs of construction or operation – revenues from the remaining (exempt) traffic would still exceed total SARR costs by over 70 percent. *See* BNSF Reply, pp. I-27 to 28, III.A-40 to 41.

The notion that a railroad that carries only low-margin exempt traffic would earn revenues that exceed its costs by more than 70 percent is simply not consistent with reality. This result alone confirms that AEPCO's SAC evidence is fatally flawed.

For the reasons stated in the sections above, UP has not submitted affirmative SAC evidence in its reply evidence. UP and BNSF have demonstrated that AEPCO's SAC analysis is fatally flawed due to its failure to explain its traffic selection adequately, its reliance on improper manipulation of traffic data, its failure to justify its

⁶⁷ *See, e.g.*, Scott Flower, "Container volume is growing, but railroads' intermodal profit margins are marginal at best," in *Progressive Railroading.com*, May 6, 2003, at 3 ("intermodal historically has garnered railroads a much lower profit margin"), included as UP Reply electronic workpaper "Intermodal Margins Article.pdf."

allocation of revenue for cross-over traffic, its choice of an inefficient routing, its improper use of trackage rights, and its use of a flawed operating plan.

In the April 18 Petition, UP asked the Board to require AEPCO to refile its opening evidence. In its reply to the April 18 Petition, AEPCO stated that it did not intend to change its traffic selection or its network configuration. If AEPCO adheres to this position, the Board should dismiss the complaint based on the flaws described above.

IV. Witness Qualifications and Verifications

IV. WITNESS QUALIFICATIONS AND VERIFICATIONS

1. Bradley K. Stock

Bradley K. Stock is Senior Project Manager, Planning & Analysis for Union Pacific Railroad Company ("UP"). He has been employed by UP since June 1998. His responsibilities include special projects and system development work in support of UP's profitability strategy. Mr. Stock prepared the traffic tapes that UP produced in discovery to Arizona Electric Power Cooperative, Inc.

Mr. Stock is sponsoring evidence relating to the traffic tape data, train movement data, and car movement data that UP produced in discovery in the present case. His evidence is incorporated in section III.A. of UP's Reply. A copy of Mr. Stock's verification is attached hereto.

2. Louise A. Rinn

Louise A. Rinn is Associate General Counsel of the Union Pacific Railroad Company ("UP"). She has been employed by UP since 1981. She has responsibility for various aspects of UP's legal and regulatory affairs and was the UP lawyer with primary responsibility for *FMC Corp. v. Union Pacific R.R.*, Docket No. 42022, and *Bitumonous Coal – Hiawatha, Utah, To Moapa, Nevada*, No. 37038, on reopening. In all, Ms. Rinn has handled UP rate cases for over 20 years.

Ms. Rinn is sponsoring evidence relating to the traffic and revenue data that UP has produced to shippers in other rate cases involving UP. Her evidence is incorporated in section III.A. of UP's Reply. A copy of Ms. Rinn's verification is attached hereto.

3. Dale W. Salzman

Dale W. Salzman is Director-Transportation Research for Union Pacific Railroad Company ("UP"). As UP's Director-Transportation Research, he is responsible for conducting studies of rail operations for various railroad departments. Mr. Salzman began his career in 1965 with Missouri Pacific. Since 1974, he has been employed at UP in a variety of transportation management positions. He assumed his current position in 1996.

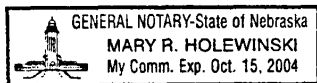
Mr. Salzman has been involved in many rail consolidation cases and has submitted testimony to the Interstate Commerce Commission and the Surface Transportation Board on a number of occasions, including the Union Pacific/Southern Pacific merger proceeding and the *FMC Wyoming Corp. v. Union Pacific Railroad Co.* and *Wisconsin Power & Light Co. v. Union Pacific Railroad Co.* rate reasonableness proceedings. More recently, he submitted testimony to the Surface Transportation Board in Docket No. 42059, *Northern States Power Company Minnesota v. Union Pacific Railroad Co.* In that testimony, he described how UP moved the shipper's coal trains between the Powder River Basin in Wyoming and the Twin Cities area in Minnesota.

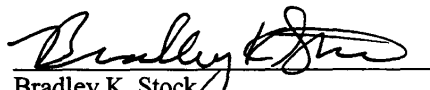
On opening, Mr. Salzman sponsored evidence relating to the operation of UP unit coal train service between Deming, New Mexico, and Apache Station in Cochise, Arizona. He sponsors similar evidence in the joint reply with respect to variable costs. In this submission, he is sponsoring evidence relating to the additional costs that AEPCO's operating plan would impose on the residual UP. A copy of Mr. Salzman's verification is attached hereto.

STATE OF NEBRASKA)
) ss
COUNTY OF DOUGLAS)

VERIFICATION

Bradley K. Stock, being duly sworn, deposes and says that he has read the Reply Evidence that he has sponsored, as described in his foregoing Statement of Qualifications, and that the contents thereof are true and correct to the best of his knowledge and belief.




Bradley K. Stock

Subscribed and sworn to before me on this 22 day of May, 2003.

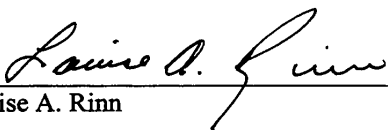

Notary Public

My Commission expires: October 15, 2004

STATE OF NEBRASKA)
) ss
COUNTY OF DOUGLAS)

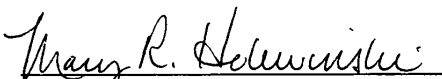
VERIFICATION

Louise A. Rinn, being duly sworn, deposes and says that she has read the Reply Evidence that she has sponsored, as described in her foregoing Statement of Qualifications, and that the contents thereof are true and correct to the best of her knowledge and belief.

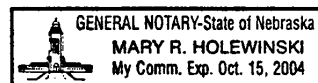


Louise A. Rinn

Subscribed and sworn to before me on this 22nd day of May, 2003.



Notary Public

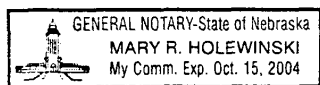


My Commission expires: October 15, 2004

STATE OF NEBRASKA)
) ss
COUNTY OF DOUGLAS)

VERIFICATION

Dale W. Salzman, being duly sworn, deposes and says that he has read the Reply Evidence that he has sponsored, as described in his foregoing Statement of Qualifications, and that the contents thereof are true and correct to the best of his knowledge and belief.



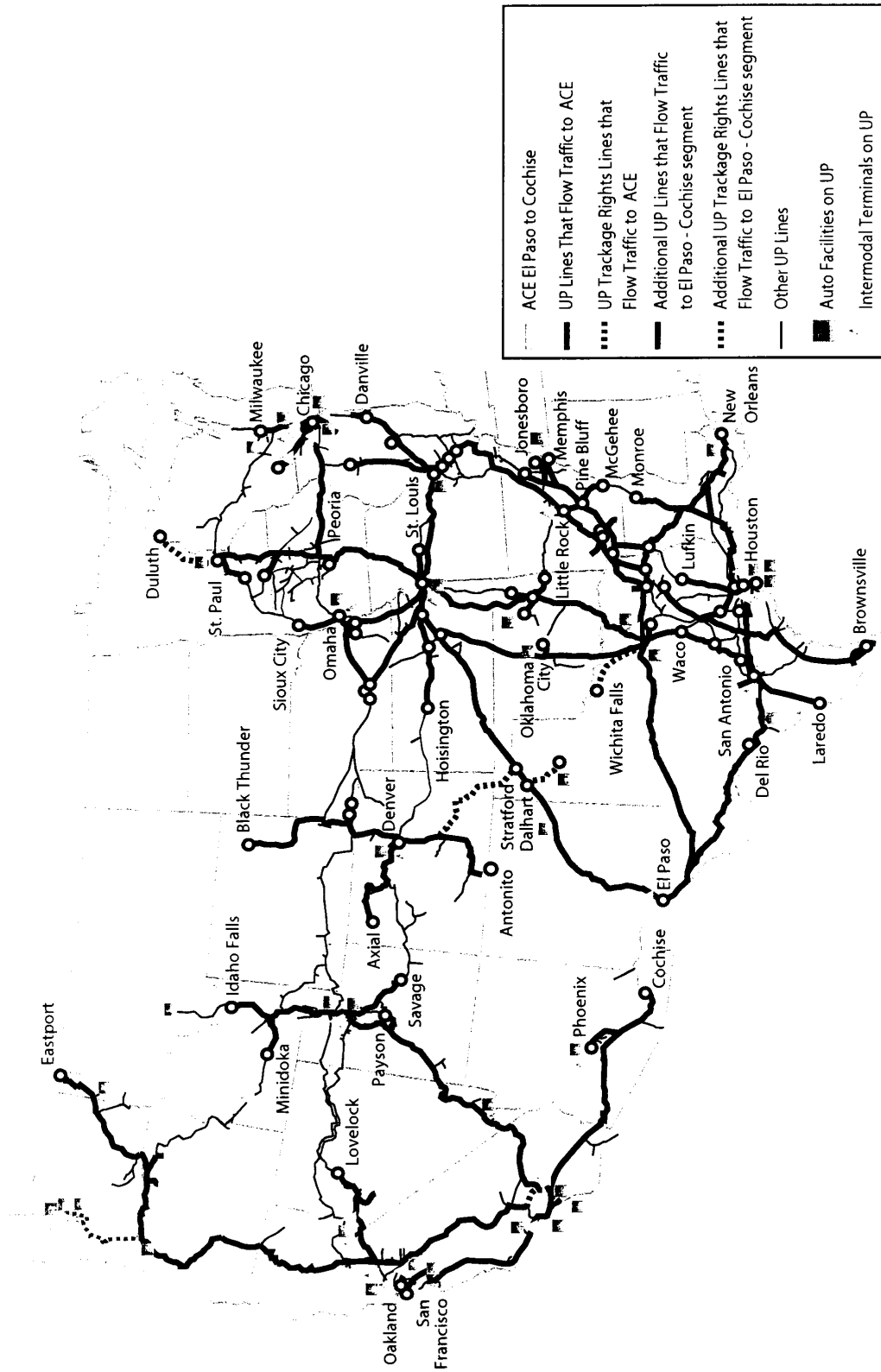
Dale W. Salzman
Dale W. Salzman

Subscribed and sworn to before me on this 22 day of May, 2003.

Mary R. Holewinski
Notary Public

My Commission expires: October 15, 2004

2001 AEPCO Traffic Depends on UP Network

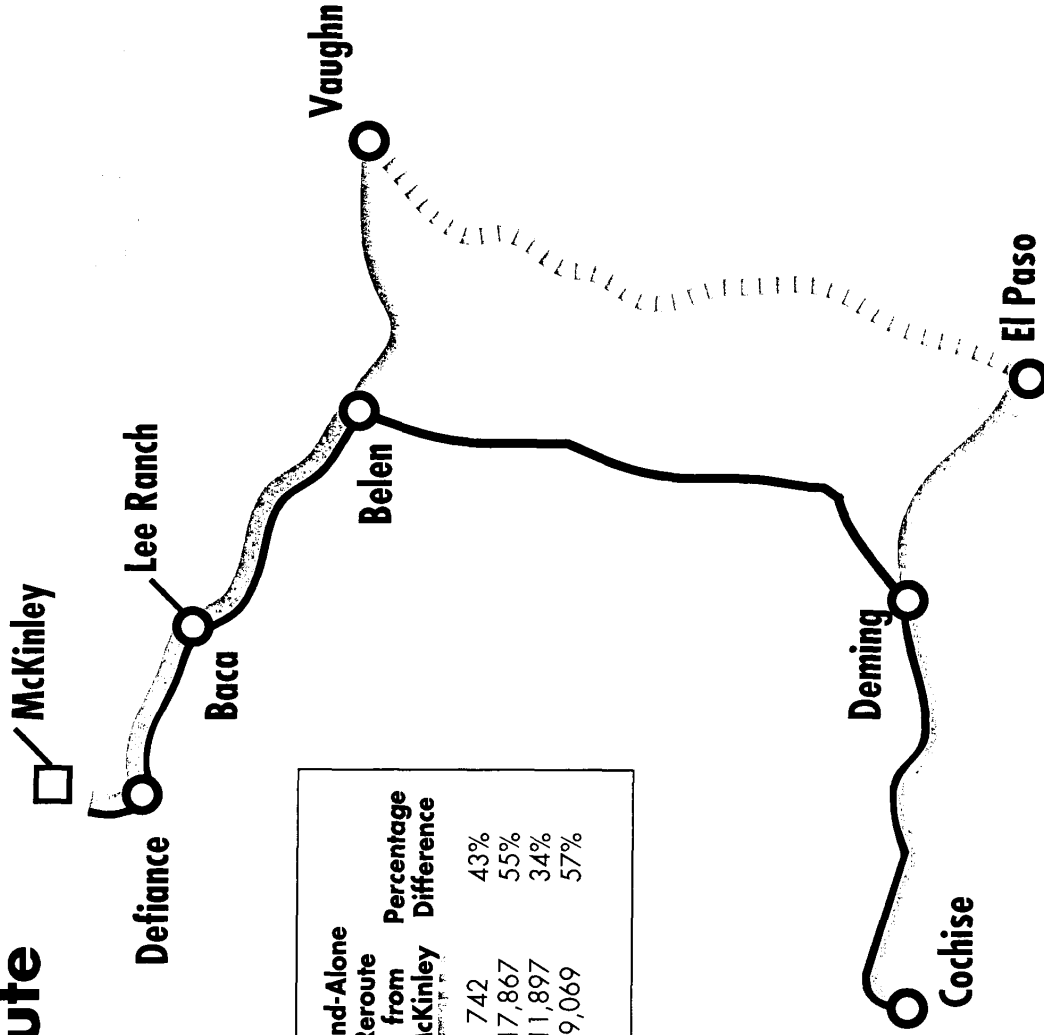


2001 AEPCO Traffic Depends on BNSF Network

REDACTED

	ACE Vaughn to Defiance
	BNSF Lines That Flow Traffic to ACE
	BNSF Trackage Rights Lines that Flow Traffic to ACE
	Other BNSF Lines
	Auto Facilities on BNSF
	Intermodal Terminals on BNSF

AEPCO Reroute

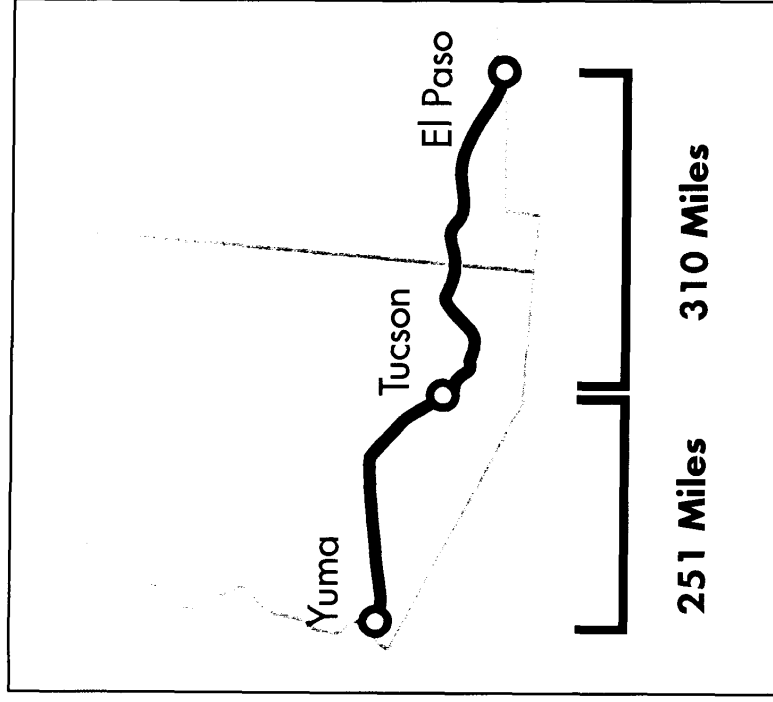


	Actual Route from McKinley	Stand-Alone Reroute from McKinley	Percentage Difference
Miles	520	742	43%
Rise and Fall (feet)	11,538	17,867	55%
Curvature (degrees)	8,893	11,897	34%
Fuel (gallons)	5,762	9,069	57%

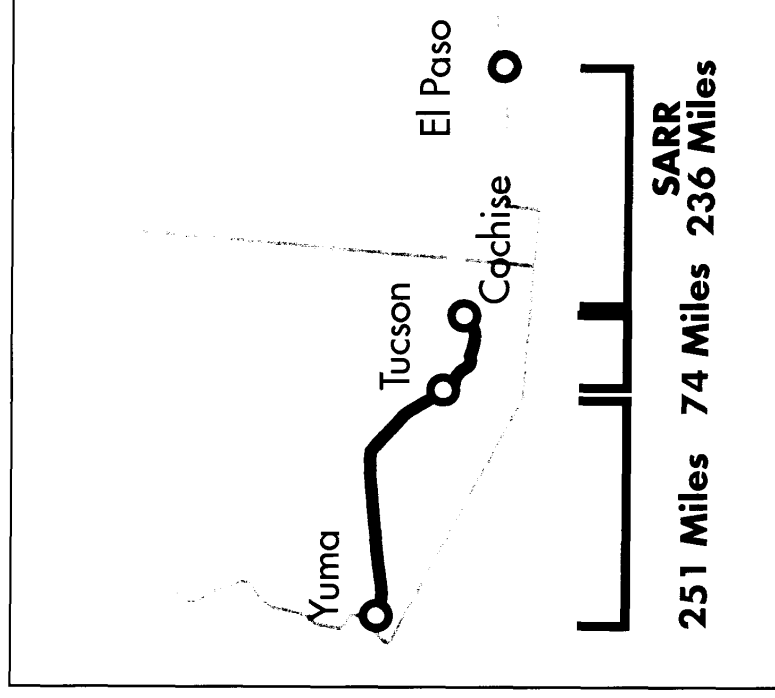
(Loaded Direction)

—	Actual Route
- - -	Stand-Alone Reroute:
- - -	Lines Built
- - -	Trackage Rights on UP

UP Crew Districts



UP Crew Districts Today



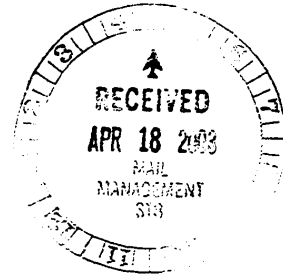
**UP Crew Districts After
Insertion of AEPCO as
Bridge Carrier**

Exhibits

*Redacted
Public Record Version*

EXPEDITED CONSIDERATION REQUESTED

**BEFORE THE
SURFACE TRANSPORTATION BOARD**



ARIZONA ELECTRIC POWER
COOPERATIVE, INC.

Complainant,

v.

THE BURLINGTON NORTHERN AND
SANTA FE RAILWAY COMPANY and
UNION PACIFIC RAILROAD COMPANY

Defendants.

Docket No. 42058

**UNION PACIFIC RAILROAD COMPANY'S PETITION TO
REQUIRE SUBMISSION OF NEW OPENING EVIDENCE
OR, ALTERNATIVELY, TO DISMISS**

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April 18, 2003

Contains Color Images

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EXPEDITED CONSIDERATION REQUESTED

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

**ARIZONA ELECTRIC POWER
COOPERATIVE, INC.,**

Complainant,

v.

**THE BURLINGTON NORTHERN
AND SANTA FE RAILWAY
COMPANY and**

**UNION PACIFIC RAILROAD
COMPANY,**

Defendants.

Docket No. 42058

**UNION PACIFIC RAILROAD COMPANY'S PETITION TO
REQUIRE SUBMISSION OF NEW OPENING EVIDENCE
OR, ALTERNATIVELY, TO DISMISS**

Union Pacific Railroad Company ("UP") submits this petition with reluctance.

We take this step because we believe that promptly requiring Arizona Electric Power

Cooperative, Inc. ("AEPCO") to submit new opening evidence is the only way to avoid wasted

efforts by the Board and the parties and is the most expeditious way to resolve the complaint.¹

Alternatively, this case should be dismissed.

UP seeks this unusual relief because we have concluded that defendants cannot present a meaningful reply to AEPCO's opening stand-alone cost ("SAC") evidence and that the Board will be unable to use the record to determine a maximum reasonable rate for AEPCO's coal shipments under the SAC methodology.² There are three reasons for our conclusion:

- First, defendants are unable to decode or replicate AEPCO's traffic selection for its stand-alone railroad. On the portions of the BNSF and UP Southern Corridor main lines that AEPCO included in the stand-alone network, AEPCO's traffic selections somehow included much *more* traffic than either incumbent carries on these segments. This is impossible, and reflects major errors in AEPCO's evidence. Yet AEPCO's presentation is so inconsistent and incomplete that we cannot determine what AEPCO meant to do. AEPCO represented that it selected virtually all current traffic that moves on both main line segments. See AEPCO Narr. at III-B-8 n.5. However, its workpapers indicate that AEPCO eliminated some of that traffic and then invented other traffic of unknown provenance, generating impossible amounts of traffic for its stand-alone railroad. Despite follow-up requests to AEPCO and hundreds of hours of consulting time spent on this investigation, we are unable to unravel

¹ UP's co-defendant, The Burlington Northern & Santa Fe Railway ("BNSF"), has authorized UP to state that BNSF agrees that AEPCO's opening evidence is not adequate to support a claim for relief or to allow defendants to present alternative SAC calculations on reply. BNSF does not join in the petition because it believes that AEPCO is not entitled to correct its defective opening evidence. If the Board does not act favorably and promptly on this petition, we expect to join BNSF in filing reply evidence addressing variable cost issues and perhaps additional threshold defects in AEPCO's opening evidence.

² AEPCO seeks to demonstrate that joint rates of UP and BNSF for coal shipments between the McKinley and Lee Ranch Mines in northwestern New Mexico and AEPCO's Apache Generating Station near Cochise, Arizona, are unreasonable under the Board's SAC test.

these conflicting actions. Defendants therefore are unable to present alternative SAC calculations on reply.

- Second, under Board precedent, the complainant must submit evidence demonstrating that the revenues it leaves for the incumbent railroad would cover the costs of handling “cross-over traffic” when it is not on the stand-alone railroad. AEPCO does not assert that its traffic selections comply with this requirement, and it has presented no evidence to satisfy its burden.

- Third, AEPCO selected a new route for its coal traffic that is so inefficient and circuitous that it could not satisfy the standards the Board has established for SAC cases. This new route would be far longer than the current route, with more grades and more curves, much longer transit times, much higher fuel consumption, and far more interference with other traffic. *See* Map No. 1. The route fails to meet the transportation needs of the affected shippers. It is so inefficient that neither the shipper nor the Board could lawfully compel UP and BNSF to use it. It is evident that AEPCO selected this circuitous route in order to substitute use of trackage rights for construction of the crucial north-south portion of its stand-alone railroad. This attempt is improper. AEPCO must reproduce the service capability of the rail lines the defendant carriers use to serve its traffic, rather than rely on trackage rights that defendants do not currently use, would not use for AEPCO’s traffic, and could not be compelled to use for this purpose. In view of AEPCO’s selection of a demonstrably inefficient stand-alone route, we can

only conclude that its opening evidence is an exercise in gamesmanship, not a principled attempt to posit a competitive constraint on defendants' rates.³

The Board recently emphasized that complainants may not submit "incomplete or erroneous evidence on opening" and then seek to rely "on an opportunity to address deficiencies through later evidentiary submissions, to which the defendant has no opportunity to respond."⁴ Here AEPCO has not presented *prima facie* evidence of a stand-alone railroad that meets the Board's minimum standards. If the parties proceeded on the basis of the current record, BNSF and UP would be required to speculate about AEPCO's traffic selection. Defendants would also have to guess at which north-south route AEPCO would choose to construct,⁵ and how it would populate that route with potentially available cross-over traffic. AEPCO will surely reject our choices, putting in a corrected case on rebuttal. That, in turn, would require either dismissal or

³ This is not the first time AEPCO has sought to complicate this case. AEPCO initially transformed what should have been a straightforward analysis of the joint rates at issue here – which involve a movement of a modest amount of coal over a relatively short distance from two mines to a single power plant – by seeking to present a convoluted "three-tier" stand-alone railroad. That effort led the Board to hold that many of AEPCO's premises were not "grounded in, and bounded by, what is reasonable and appropriate to serve the purpose of the SAC test." *Arizona Electric Power Cooperative, Inc. v. The Burlington Northern & Santa Fe Ry. & Union Pacific R.R.*, STB Docket No. 42058 (STB served Aug. 20, 2002) ("*AEPCO II*") at 5. With their February 4 settlement, UP and AEPCO have now made peace on the rates for coal from origins outside New Mexico. AEPCO's consultants, however, chose to reject that opportunity to refocus the case on a simplified SAC presentation involving the actual route used by the remaining New Mexico coal, instead favoring the inefficient and invalid design in AEPCO's opening evidence.

⁴ *Public Service of Colorado d/b/a Xcel Energy v. The Burlington Northern & Santa Fe Ry.*, STB Docket No. 42057 (STB served Apr. 4, 2003) ("*Xcel Energy*") at 2; *see also Texas Municipal Power Agency v. The Burlington Northern & Santa Fe Ry.*, STB Docket No. 42056 (STB served Mar. 24, 2003) ("*TMPA*") at 13.

⁵ UP contends that the Vaughn-El Paso route is improper even if AEPCO were to include its construction costs. Until the Board rules, however, UP is not in a position to know what stand-alone configuration AEPCO would choose. This uncertainty explains why UP asks the Board to address these issues now.

an order permitting supplemental, responsive evidence from the defendants to complete the record. Presumably AEPCO would seek permission to file yet another round of evidence to obtain the last word.

In these circumstances, Board precedent calls for dismissal of the complaint. The defects in AEPCO's SAC presentation are both "so egregious" and "so large in magnitude" as to call for the dismissal of its complaint. *See Xcel Energy* at 3.⁶ However, UP believes that dismissal is not the most efficient approach. If the Board were to dismiss the case, AEPCO could re-file and start from scratch, requiring a new, burdensome, and unnecessary round of discovery.⁷ The better approach would be to authorize AEPCO to repair its opening evidence by resubmitting it with comprehensible traffic selections, a showing that off-line revenues would cover off-line costs for cross-over traffic, and a valid route. The case could then proceed promptly, with the filing of reply and rebuttal evidence, and with the parties relying on the body of discovery already amassed in this proceeding.

In considering how to proceed following its review of AEPCO's opening evidence, UP sought a solution that is consistent with both the guidance in recent decisions in rate cases and the Board's desire to move these cases more efficiently and expeditiously. In this case, UP believes that requiring AEPCO to submit new opening evidence would be the best

⁶ See also, e.g., *Duke Energy Corp. v. CSX Transportation, Inc.*, STB Docket No. 42070 (STB served Mar. 25, 2003) ("*Duke Energy*") at 4 (complainant may not "significantly revise its case-in-chief (its proposed SARR)" on rebuttal); *PPL Montana, LLC v. The Burlington Northern & Santa Fe Ry.*, STB Docket No. 42054 (STB served Mar. 24, 2003) ("*PPL II*") at 11 (rejecting "argument that PPL must be allowed to alter portions of its case-in-chief in light of our threshold cross-subsidy analysis").

⁷ *PPL II* at 11.

solution. If the Board nevertheless declines to take this approach, the proceeding should be dismissed.

UP urges the Board to act promptly on this petition. We request that AEPCO be required to respond to this petition within 14 days, by May 2, 2003.

I. AEPCO'S OPENING SAC EVIDENCE DOES NOT PERMIT A MEANINGFUL REPLY

In at least three respects, AEPCO's opening stand-alone cost evidence is so fundamentally defective that it does not permit the defendants (or the Board) to perform a meaningful SAC analysis.

A. AEPCO Has Not Adequately Identified The Cross-Over Traffic It Selected For Its Stand-Alone Railroad

AEPCO's traffic selections are indecipherable and produce an irrational result. The vast majority of the traffic AEPCO has selected for its stand-alone railroad is cross-over traffic, primarily the massive volumes of intermodal, automotive, and manifest traffic that move over UP's and BNSF's southern tier main lines.⁸ Since they received AEPCO's opening submission in February, defendants' consultants have been attempting to decipher the workpapers and to determine what traffic AEPCO intended to include. They have been unable to do so.

AEPCO's discussion of its traffic grouping provides no description of its selection criteria or methodology. *See* AEPCO Narr. at III-A-2 and III-A-5. As John Klick and Julie Murphy of FTI Consulting explain, they and their colleagues have spent hundreds of hours attempting to analyze AEPCO's opening evidence and supporting workpapers. Klick/Murphy

⁸ *See* AEPCO Narr. III-D-27 n.6 ("vast preponderance of the ACE's traffic is overhead traffic that it handles between Defiance and Vaughn or between Cochise and El Paso"); *see also* Verified Statement of John C. Klick and Julie A. Murphy ("Klick/Murphy V.S."), at 12-13.

V.S. at 2. Defendants submitted numerous workpaper requests to AEPCO in an effort to understand its traffic selection, and FTI personnel have studied AEPCO's responses to those requests. *Id.* The difficulties defendants have encountered in comprehending AEPCO's traffic selections are unprecedented in the experience of defendants and their consultants, which spans more than two dozen SAC cases since 1985. *See id.* at 1-2. Despite their extensive efforts, Mr. Klick, Ms. Murphy, and their colleagues have concluded that it is impossible to tell what traffic from the available universe AEPCO intended to select for its stand-alone railroad. *Id.* at 11-12.

This is not a matter of uncertainty regarding a few carloads here or there. The problem infects all of the non-coal cross-over traffic in the case, which AEPCO says accounts for over 95 percent of all revenue earned by the proposed stand-alone railroad. *Klick/Murphy V.S.* at 12. Defendants cannot determine what AEPCO intended with respect to that traffic as a result of AEPCO's confusing, inconsistent and inadequate narrative and workpapers. *Id.* at 11-12.

An initial review of AEPCO's opening submission did not disclose the degree to which the traffic selections are indecipherable. AEPCO's Narrative offers vague descriptions of the stand-alone railroad's traffic base suggesting that AEPCO intended to select all or a very high percentage of (a) BNSF's overhead freight traffic between Defiance and Vaughn, and (b) UP's overhead traffic between Cochise and El Paso.⁹ Initially it appeared that AEPCO excludes only local trains and Amtrak trains from the potential universe of traffic available to a stand-alone railroad that would build these two east-west main-line segments. *See Klick/Murphy V.S.* at 2-3.

⁹ AEPCO's proposed route is shown on Map No. 1, and the relationship of the route's two east-west segments to the UP and BNSF networks is shown on Map Nos. 2 and 3.

Upon closer study of AEPCO's submission and workpapers, however, it became clear that something is very wrong. AEPCO claims that its stand-alone railroad's base-year (2001) non-coal cross-over traffic volumes would exceed by a wide margin the volumes of overhead traffic that BNSF and UP move over the east-west segments replicated by AEPCO. *Id.* at 3. AEPCO reaches this result through a series of indecipherable steps, some that appear to delete certain categories of traffic and later add it back into the analysis and others that have no explanation. Despite extensive efforts, defendants' consultants have been unable to determine what AEPCO intended. *Id.* at 11-12. Defendants' attempts to obtain further clarification from AEPCO have not yielded any useful guidance. *Id.* at 6.

AEPCO applies a huge "adjustment" to increase the volumes of non-coal cross-over traffic its stand-alone railroad carries in the base year and the revenues it earns on that traffic. That adjustment only adds to the confusion. The magnitude of that adjustment is extraordinary: it boosts the stand-alone railroad's non-coal revenues by 54 to 64 percent for BNSF traffic and 25 to 29 percent for UP traffic. *Klick/Murphy V.S.* at 3.

AEPCO's only explanation for this adjustment is a single, cryptic footnote in its Narrative (at III-A-34 n.26), in which it asserts that it had to "estimate . . . missing railcar revenue data." In fact, no revenue data were missing. AEPCO's consultants apparently misunderstood the railroad databases produced to AEPCO in discovery. *Klick/Murphy V.S.* at 4. AEPCO's responses to defendants' workpaper requests fail to provide any explanation of the arbitrary upward adjustment to revenues. *Id.* at 6.¹⁰

¹⁰ FTI's attempt to audit AEPCO's base year traffic selections indicates that, after making an initial selection of non-coal traffic from the traffic data for each carrier, AEPCO's consultants took the novel step of comparing the selected traffic records to car movement and train movement data of the two carriers (very different databases used for operating purposes).

(continued ...)

The upward adjustment was egregiously in error. For example, the adjustment causes the stand-alone railroad to carry in 2001, on the one BNSF segment it replicates, intermodal traffic that accounts for as much intermodal revenue as BNSF earned throughout its entire system. *Klick/Murphy V.S.* at 11. Mr. Klick and Ms. Murphy describe other obvious errors, but the overriding problem is that the adjustment confuses further the question of what traffic AEPCO intended to include in its SAC analysis. *See id.* at 11-12.

Because defendants have been unable to understand AEPCO's selection of traffic, they have no coherent foundation for a response.¹¹ They cannot correct the obviously erroneous volume and revenue "adjustments" that inflated the revenue base of the stand-alone railroad. Nor can they provide meaningful evidence on the many other SAC issues – such as the nuts and

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AEPCO's consultants apparently "grossed up" the cars, tons, and revenues from the traffic tapes in an effort to match those allegedly shown in the train movement data.

It is entirely unclear why AEPCO believed it appropriate to refer to operating databases (the train movement data) and to use those databases to adjust the railroads' traffic records. (AEPCO's consultants did not perform any similar steps for coal traffic.) To the limited extent defendants have been able to decipher what was done, it appears that AEPCO's consultants made numerous errors in whatever they were attempting to do. *See Klick/Murphy V.S.* at 5-11.

¹¹ Under Board precedent, it is the shipper's prerogative to choose the traffic group for the stand-alone analysis. *See, e.g., Coal Rate Guidelines – Nationwide*, 1 I.C.C.2d 520, 544 (1985) ("The proponent of a particular stand-alone model must identify, and be prepared to defend, the assumptions and selections it has made."), *aff'd sub nom. Consolidated Rail Corp. v. United States*, 812 F.2d 1444 (3d Cir. 1987); *West Texas Utilities Co. v. Burlington Northern R.R.*, 1 S.T.B. 638, 657 (1996) ("*West Texas Utilities*") ("Because a SAC analysis is a means of eliminating existing inefficiencies and cross-subsidies between different traffic, the complaining shipper can select any subset of available traffic to determine the least cost at which that subset of traffic could be served independently of other traffic."), *aff'd sub nom. Burlington Northern R.R. v. STB*, 114 F.3d 206 (D.C. Cir. 1997). Although defendants are entitled to critique complainants' traffic selections – for example by demonstrating that the stand-alone railroad could not participate in certain traffic – they are not free to propose populating the stand-alone railroad with a different group of traffic that the complainant did not select.

bolts of the stand-alone railroad's investment needs and operating expenses – that flow directly from the amount and types of traffic the stand-alone railroad would handle.

B. AEPCO Failed To Show That The Residual Incumbents Would Retain Sufficient Revenues To Cover Costs Associated With Cross-Over Traffic

AEPCO's opening submission is also deficient because it fails to show that the residual incumbents could cover their costs after the stand-alone railroad extracts revenues for cross-over traffic. As explained above, the great majority of the stand-alone railroad's revenues would derive from cross-over traffic that moves a relatively short distance on the stand-alone railroad. AEPCO's stand-alone railroad would serve solely as a "bridge" carrier for these transcontinental movements, which would originate, and later continue, on UP and BNSF, the residual incumbents. However, ignoring settled Board precedent, AEPCO makes no *prima facie* showing that UP and BNSF would retain sufficient revenues to cover the "off-line" costs associated with this cross-over traffic.

The Board has explained repeatedly that a complainant must make a threshold showing that cross-over traffic "earns sufficient revenues to cover off-line, as well as on-line, costs."¹² In recent decisions, the Board confirmed that, at a minimum, a complainant must demonstrate that a residual carrier's revenue division "would allow it to cover its attributable costs associated with handling the traffic."¹³ The complainant thus has the burden of

¹² *Arkansas Power & Light Co. v. Burlington Northern R.R.*, 3 I.C.C.2d 757, 774 (1987) ("*Arkansas Power*"); see also, e.g., *McCarty Farms, Inc. v. Burlington Northern, Inc.*, 2 S.T.B. 460, 468 (1997); *Omaha Public Power Dist. v. Burlington Northern R.R.*, 3 I.C.C.2d 123, 138-44 (1986).

¹³ See *PPL Montana, LLC v. The Burlington Northern & Santa Fe Ry.*, STB Docket No. 42054 (STB served Aug. 20, 2002) ("*PPL I*") at 10 n.20; see also *TMPA*, at 22-23, 31 n.73.

demonstrating that the residual incumbent will retain sufficient revenues to cover its costs attributable to the cross-over traffic that it claims for its stand-alone railroad.

This burden has particular significance in this case. While there is great uncertainty surrounding AEPCO's traffic selections (*see* Part II.A, *supra*), it is clear that nearly all the revenues of the stand-alone railroad derive from cross-over traffic. *See* Klick/Murphy V.S. at 12; AEPCO Narr. at III-A-5, III-D-27 n.6 & Exs. III-A-5, III-A-6. Moreover, virtually all of that cross-over traffic consists of bridge traffic that AEPCO neither originates nor terminates. *See id.* at III-A-5 (ACE will handle this traffic "in solely overhead service;" it "will receive and deliver this traffic in intact trainloads, and will handle this traffic as a bridge carrier for either the residual BNSF or the residual UP"). As Dale W. Salzman, UP's Director-Transportation Research, explains, the stand-alone railroad will perform very little work in connection with this traffic because it will be a "hook and haul" operation, ferrying trains built by UP or BNSF across relatively short stand-alone segments.¹⁴ Thus, the incumbents (UP and BNSF) will continue to be responsible for almost all of the extensive costs associated with keeping this highly competitive traffic flowing -- including the extensive intermodal and automotive terminal costs at origin and destination and, for other traffic, traditional switching and gathering operations. Nor does the insertion of AEPCO's stand-alone railroad as a bridge carrier relieve BNSF or UP of any of the cost-intensive marketing and customer service functions that shippers demand.¹⁵ To the contrary, by converting single-line transcontinental

¹⁴ *See* Verified Statement of Dale W. Salzman ("Salzman V.S.") at 7-8; *see also* AEPCO Narr. at III-C-4.

¹⁵ AEPCO takes advantage of this fact by arguing that its stand-alone railroad needs few marketing forces: "Very little marketing interface between the ACE and its overhead customers is required under these circumstances." AEPCO Narr. at III-D-27 n.6.

movements into two-carrier interline movements, AEPCO's stand-alone railroad complicates those efforts and adds costs.

In its opening evidence, AEPCO claims that its stand-alone railroad would be entitled to substantial portions of the incumbents' total revenue on this traffic. For example, its stand-alone railroad claims more than one out of every seven dollars earned by UP on the non-coal traffic flows in which it would participate, and even higher shares (over 16 percent, on average) of UP's manifest traffic revenues. *Klick/Murphy V.S.* at 13. But AEPCO makes no effort to establish that UP or BNSF would retain sufficient revenue to cover their costs of handling the cross-over traffic. *Id.* at 14. AEPCO appears to be aware that the level of terminal costs is relevant to the level of revenue divisions an originating or terminating carrier would demand. *See* AEPCO Narr. at III-A-31. However, its opening evidence is silent on the question whether the incumbents' revenue divisions would be sufficient to cover their extensive off-line costs.

This is not a case where complainant may rest on any sort of presumption that the residual incumbents' revenues would cover their costs.¹⁶ First, as shown in Maps 2 and 3, the cross-over traffic AEPCO selected makes extensive use of very substantial portions of the UP and BNSF systems. *See also* *Klick/Murphy V.S.* at 13. This traffic incurs substantial "gathering and distribution costs," with all of the operating activity other than a few hundred miles of "hook and haul" running taking place on the incumbents. *See* *Salzman V.S.* at 7-8. Second, the vast

¹⁶ AEPCO certainly cannot rely on its purported application of a modified mileage prorate methodology to satisfy this burden. In the same recent cases in which the Board has reemphasized the requirement that the residual incumbent's revenues cover its off-line costs, the Board has been quite explicit about saying that it does not endorse any particular standard for allocating revenues, much less the particular method AEPCO applied here. *See TMPA* at 31 n.74; *PPL I* at 7 n.14.

majority of this traffic consists of competitive intermodal, automotive and merchandise traffic that makes relatively minor contributions to the railroads' extensive fixed costs.

See *Klick/Murphy V.S.* at 12-13. Thus, there is a real risk that diversion of any significant revenue to the stand-alone railroad would leave the incumbents with less than they need to cover their costs of moving this traffic. Third, by inserting itself in the middle of UP's and BNSF's transcontinental main lines, and also re-routing several movements of cross-over coal traffic onto those lines, AEPCO would impose additional costs on the residual incumbents. For example, AEPCO's design adds new interchange points between the incumbents and the stand-alone railroad, including several points where no interchange occurs today with any carrier (including Cochise and Defiance), and it adds new points where incumbents must add or remove their crews where there is no such activity today. See *Salzman V.S.* at 5-6, 8-9. AEPCO's evidence does not address costs associated with these changes in incumbent operations, much less demonstrate how they can be recovered from the revenue AEPCO allocates to the incumbents. See *TMPA* at 23.

Having chosen not to replicate the entire networks used by the incumbents to move the extensive cross-over traffic it selected for the stand-alone railroad, AEPCO accepted the burden of demonstrating that the residual incumbents could still cover their costs after the stand-alone railroad extracts a significant share of the revenues. See *Arkansas Power*, 3 I.C.C.2d at 774; *TMPA* at 23. AEPCO did not even try to meet that burden. And not knowing how AEPCO would have proposed to establish that off-line costs are covered, UP is not in a position to address this missing element in a reply.

C. AEPCO's Inefficient Stand-Alone Route Cannot Be Used To Test The Reasonableness Of The Challenged Rates

The stand-alone network AEPCO devised provides perhaps the clearest indication that its opening evidence is an exercise in gamesmanship. AEPCO proposes a manifestly inefficient route for its stand-alone railroad that is much longer and less efficient than the actual route used by AEPCO and several other coal shippers. AEPCO's goal in choosing an inefficient route is obviously to substitute BNSF's unused trackage rights on UP to avoid the costs of building and maintaining more than 200 miles of north-south rail lines.¹⁷ Because BNSF and UP cannot avoid the costs of owning and maintaining a north-south rail line to serve AEPCO, the Board must account for those costs in assessing the reasonableness of the rates at issue here. As the Board observed earlier in this proceeding, "there are limits on the creativity with which a complainant such as AEPCO may develop its SARR." *AEPCO II* at 7. In its opening evidence, AEPCO exceeds those limits.

AEPCO should not be permitted to game SAC methodology by using unrealistic, unreasonable routes in order to avoid costs that defendants must incur. AEPCO's route would not satisfy the shipping needs of other shippers. BNSF and UP would not use AEPCO's route, and the Board could not compel them to use such a circuitous route. AEPCO's attempt to use trackage rights of one defendant over another violates the fundamental principles that the stand-alone railroad must cover the costs of handling the traffic at issue.¹⁸

¹⁷ AEPCO makes much of the fact that it was able to take advantage of its proposed re-routing to "avoid[] the substantial road property investment cost of constructing the Belen-Rincon segment (as well as constructing the Vaughn-El Paso segment over which the ACE operates via trackage rights)." AEPCO Narr. at III-C-9 n.9.

¹⁸ See *AEPCO II* at 5-7. In its opening submission, AEPCO claims that the Board "approved" the proposed rerouting in *AEPCO II*. See AEPCO Narr. at III-B-1. AEPCO is

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1. The Defendants' Rates Should Not Be Tested Using A Route That Would Not Meet The Transportation Needs Of Rerouted Traffic

AEPCO's proposed routing of traffic via Vaughn and El Paso is highly inefficient and would not meet the needs of shippers whose traffic would be rerouted. These shippers, including AEPCO, would face significantly increased cycle times and car costs. AEPCO should not be allowed to use a route that cannot meet shippers' transportation needs.

The Board has held that the proponent of a stand-alone railroad may reroute a shipper's traffic only "so long as the new route is reasonable and would meet the shipper's transportation needs." *TMPA* at 21.¹⁹ Measured against that standard, AEPCO's proposed Vaughn-El Paso route is impermissible. The proposed route is much longer and more difficult to traverse than the current route, and – whether used by a stand-alone or real railroad – will necessarily result in longer cycle times and higher costs for affected shippers. Dale W. Salzman, UP's Director-Transportation Research, explains that, as compared with a loaded AEPCO train

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mistaken. In *AEPCO II*, the Board explained that stand-alone cost principles did not rule out rerouting the issue traffic via Vaughn, noting that the alternative route would be permissible *if* BNSF and UP could initiate such a rerouting. *See AEPCO II* at 6 ("But BNSF and UP are themselves free to alter or vary their routing of AEPCO's movements . . . without affecting the joint rate charged to (and challenged by) AEPCO."). However, as explained below, BNSF and UP are not free to initiate the proposed rerouting and would not implement such a routing at current rates.

Moreover, the Board did not contemplate, much less "approve," the use of BNSF's trackage rights in lieu of construction of the Vaughn-El Paso line. It contemplated instead that AEPCO might seek to step into UP's shoes and reproduce the route between Vaughn and El Paso, which under its proposed three-tier approach it would have to build in any event in order to replicate UP's single-line route serving AEPCO's Colorado origins. *See AEPCO II* at 6 (noting that AEPCO contemplated a "BNSF-Vaughn/UP-Cochise" route).

¹⁹ *See also Bituminous Coal – Hiawatha, Utah, To Moapa, Nevada*, 10 I.C.C.2d 259, 273 (1994) (explaining that proposed stand-alone railroad operations must "meet the needs" of the traffic included on the stand-alone railroad).

moving from McKinley Mine to Cochise via the existing current Belen-Deming route, a loaded train using a Vaughn-El Paso route would:

- Travel 222 additional miles, an increase of 43 percent;
- Incur 6,329 additional feet of rise and fall in elevation, an increase of 55 percent;
- Negotiate 3,004 additional degrees of curvature, an increase of 34 percent; and
- Consume 3,309 additional gallons of fuel, an increase of 57 percent.

See Salzman V.S. at 3. The round-trip transit time for these trains would increase by at least 27 percent relative to the existing route. See *id.*²⁰ The traffic of several other coal customers that AEPCO reroutes via Vaughn and El Paso would be subject to comparable inefficiencies. See *id.* at 4.

Instead of moving on BNSF's lower-grade, light-volume line from Belen to Deming, these coal trains would (a) fight for opportunities to move on BNSF's high-density, transcontinental main line that carries primarily high-speed intermodal and automotive traffic, (b) struggle up long mountain grades on BNSF east of Belen, (c) suffer and cause delays at BNSF's bottleneck, single-track line through Abo Canyon, near Mountainair, (d) wait at Vaughn to enter UP's capacity-constrained Tucumcari Line, (e) surmount another mountain grade on UP south of Corona, (f) suffer delays in UP's congested El Paso Terminal, and (g) again fight their way through high-speed intermodal and automotive trains on UP's Sunset Route between El Paso and Deming. AEPCO's route will guarantee major delays to coal shipments, including its

²⁰ An AEPCO train departing from the Lee Ranch Mine would encounter virtually the same inefficiencies. See *id.*

own. *See id.* The new route would not meet shippers' needs, and thus it cannot serve as a basis for evaluating the reasonableness of the defendants' rates.

2. The Defendants' Rates Should Not Be Tested By A Routing So Inefficient That It Would Not Be Used

The Vaughn-El Paso route is so inefficient that BNSF and UP would never agree to implement it and shippers would not accept it. A SAC presentation based on a non-viable route cannot provide a meaningful test of whether the defendants' rate will allow the carriers to recover all of their costs associated with providing the service at issue.

BNSF and UP would never agree to reroute AEPCO's traffic via Vaughn and El Paso at existing rate levels, because the proposed route would significantly increase their costs of handling the rerouted traffic. For BNSF and UP, the longer, more difficult route and longer cycle times discussed above would translate directly into much higher variable costs, as most categories of variable costs increase with increases in gross ton-miles, locomotive unit-miles, train miles or car miles.²¹ At present rate levels, the rerouting would reduce *both* railroads' contribution, and thus would not be undertaken. The only putative benefit AEPCO gains in the SAC world from rerouting traffic via Vaughn – avoiding the costs of constructing a north-south line – is not available to BNSF and UP. The defendants collectively already bear and cannot avoid the investment costs associated with whatever north-south route is used for this coal traffic.

²¹ In addition, BNSF and UP would have to improve their connection at Vaughn to support such a route. The railroads' main lines cross at a 40-foot grade separation, and the existing connecting track does not permit straight-on movements and would be particularly inadequate for heavy coal trains. *See Salzman V.S.* at 6-7 & Exs. 3 & 4. AEPCO proposes that its stand-alone railroad build a new 0.85-mile connecting track to overcome this problem. *See AEPCO Narr.* at III-B-11 & Ex. III-B-2. BNSF and UP presumably would have to incur similar costs to institute this less efficient routing in the real world.

Nor would any of the affected shippers allow the defendants to implement a Vaughn-El Paso routing. Any attempt by the defendants to implement such a route would likely be met with complaints about slower, less consistent service. In fact, although the carriers would incur higher costs for the longer route, shippers would likely demand lower rates to offset increases in their car costs as a result of increased cycle times and mileages.

Furthermore, none of the affected parties could force the others to accept a reroute via Vaughn. In the event of a dispute over routing or divisions, the Board would never prescribe such a circuitous, inefficient route in the face of a shorter, more efficient Belen-Deming alternative, even if a carrier or shipper sought such a route. *See* 49 U.S.C. § 10705; 49 C.F.R. § 1144.2; *see also Central Power & Light Co. v. Southern Pac. Transp. Co.*, 1 S.T.B. 1059, 1065, 1067-68 (1996) (bottleneck carrier discharges its routing obligation by accepting traffic at *reasonable* interchange for movement via *reasonable* route), *aff'd sub nom. MidAmerican Energy Co. v. STB*, 169 F.3d 1099 (8th Cir. 1999).

Because AEPCO's proposed rerouting could not be implemented in the real world, any SAC analysis based on that rerouting would not serve the practical purpose of judging the reasonableness of the defendants' rates. *See AEPCO II* at 6-7.²² Just as the Board does not permit complainants to include in their SAC analysis traffic and revenues "that do not or could not reasonably be expected to pay for the defendant carrier's costs" (*id.* at 7), it should not permit complainants to select for SAC purposes an otherwise unreasonable route whose alleged profitability relies on a benefit – avoidance of significant investment costs– that could not accrue

²² *See also id.* at 5 (a "SAC presentation must necessarily be grounded in, and bounded by, what is reasonable and appropriate to serve the purpose of the SAC test").

to defendants in the real world. *See id.* (railroads' "rates should not be judged as if these arrangements were available to [them]").

3. Even If AEPCO Could Select A Vaughn-El-Paso Route, AEPCO May Not Rely On BNSF's Trackage Rights Over UP

Even if AEPCO were permitted to test defendants' rates using a Vaughn-El Paso route that BNSF and UP would not actually implement, its SAC analysis could not include the use of BNSF's trackage rights over UP between Vaughn and El Paso. An analysis that relies upon one defendant's trackage rights over another defendant in a joint-line case would violate SAC principles, because it would not include the full costs associated with the investment necessary to handle the issue traffic.

A rate established using SAC analysis must allow defendants to recover their full costs of providing service for the issue traffic, including a reasonable return on investment. *See* 49 U.S.C. § 10704(a)(2). Thus, a SAC analysis must include the investments necessary to replicate, or at least reproduce the service capability of, the assets used to serve the issue traffic, so long as the defendants bore those costs. *See Coal Rate Guidelines – Nationwide*, ICC Ex Parte No. 347 (Sub-No. 1) (ICC served Feb. 24, 1983) ("1983 Guidelines") at 12 ("The stand-alone cost represents the cost of obtaining service from another source (i.e., reproducing the service capability).") In this case, BNSF and UP must own and maintain at least one north-south line for New Mexico coal to reach AEPCO's plant at Cochise. Because the defendants cannot handle the issue traffic without using a north-south line that was built by their predecessors and later purchased by the defendants, any analysis that purports to measure the full costs of serving AEPCO's traffic must include the costs associated with constructing a north-south line.

AEPCO's stand-alone railroad cannot rely on trackage rights payments to avoid investing in the assets actually required to handle the issue traffic, because the Board cannot

determine the reasonableness of defendants' joint-line rates without calculating the full costs of owning and operating the assets required to handle the issue traffic and the revenues available to pay for them. In this case, AEPCO is using trackage rights precisely to avoid making the showing that its stand-alone railroad's revenues would cover the costs of constructing a north-south line. Cf. *Potomac Electric Power Co. v. Consolidated Rail Corp.*, 367 I.C.C. 532, 522-23 (1983) (rejecting use of trackage rights fees rather than cost of constructing or purchasing line for stand alone purposes), *aff'd sub nom. Potomac Electric Power Co. v. ICC*, 744 F.2d 185 (D.C. Cir. 1984).

Under Board precedent, a stand-alone railroad may avoid constructing its own facilities where defendants have access to such facilities pursuant to existing arrangements with third parties. See, e.g., *AEPCO II* at 7. A stand-alone railroad may use trackage rights over third parties consistent with SAC theory because the "theory of contestability is based on the assumption that both the entrant and the incumbent can employ the same productive technique, incurring the same costs." *Bituminous Coal – Hiawatha, UT, to Moapa, NV*, 6 I.C.C.2d 1, 54 (1989) ("*Nevada Power I*"). In other words, when defendants use trackage rights over a third party, they might thereby avoid bearing the full costs associated with building a line. Because a stand-alone railroad cannot be forced to incur costs that the defendants did not bear – which the Board treats as "barriers to entry" – it is entitled to benefit from the same cost-avoiding trackage rights arrangements.

In this case, neither railroad relies on a third party to provide a portion of the route for the issue traffic, and thus requiring AEPCO to pay to construct a north-south line is not a barrier to entry. UP and BNSF together incur all of the costs associated with issue traffic moving over the entire route. It is these *total* costs that are necessary to "reproduc[e] the service

capability” that are the relevant ones for stand-alone purposes. See *1983 Guidelines* at 12.²³

Unless the full costs of building and operating a north-south line are taken into account in the SAC analysis, the Board cannot determine whether the rate is set at a level sufficient to allow UP and BNSF “to cover total operating expenses, including depreciation and obsolescence, plus a reasonable and economic profit or return (or both) on capital employed” in serving AEPCO.

49 U.S.C. § 10704(a)(2).²⁴

AEPCO’s use of an unreasonable reroute and its reliance on trackage rights rather than construction for a major portion of the route makes it impossible for the railroads to reply

²³ The requirement that the Board consider the defendants’ total costs is compelled by the well-settled principle that, in challenges to joint rates, the origin-to-destination route must be tested as a whole. See *Louisville & Nashville R.R. v. Sloss-Scheffield Steel & Iron Co.*, 269 U.S. 217, 234 (1925) (“The division of the joint rate among the participating carriers is a matter which in no way concerns the shipper. The shipper’s only interest is that the joint rate be reasonable as a whole.”); *Union Pacific R.R. v. STB*, 202 F.3d 337, 339 (D.C. Cir. 2000) (A “venerable principle” of railroad rate regulation is that “the reasonableness of a rate is to be assessed on a ‘through basis’ – that is to say, a shipper may challenge only the rate of the origin-to-destination route as a whole, rather than the reasonableness of rates charged for a particular segment of the route.”). The Board thus views joint defendants as a unit rather than as separate entities for the purposes of the SAC analysis. See, e.g., *Arizona Electric Power Cooperative, Inc. v. The Burlington Northern & Santa Fe Ry. & Union Pacific R.R.*, STB Docket No. 42058 (STB served Dec. 31, 2001) at 7-8 (denying discovery of BNSF-UP divisions). Accordingly, in joint rate cases, the Board focuses on the underlying costs of providing service, not internal allocations of those costs among the defendants. See, e.g., *Nevada Power I* at 26 (owning railroad’s actual car ownership costs rather than car ownership costs of non-owner should be used for the non-owner segments of the haul in a joint rate case).

²⁴ This principle does not preclude a complainant from designing a stand-alone railroad that takes advantage of “cost-sharing arrangements” among multiple defendants. Where, for example, the stand-alone carrier is replicating a line owned by one defendant it may (in appropriate circumstances) include trackage rights fees paid by another defendant on traffic not selected by the stand-alone railroad. The Board’s decision to allow AEPCO to claim trackage rights fees paid by BNSF to UP on the Bond-Denver segment of the stand-alone railroad AEPCO proposed to build to replicate UP’s single-line route for Colorado coal involved such a situation. *AEPCO II*, p. 7. But a stand-alone railroad may not use trackage rights to avoid incurring costs that the defendants collectively must bear for joint-line traffic that would be handled by the stand-alone railroad.

adequately to AEPCO's opening evidence. Defendants do not know what route AEPCO might propose to build in place of the one they have chosen, nor how it would choose the traffic that it would include for that new configuration.²⁵

II. THE BOARD SHOULD REQUIRE AEPCO TO RESUBMIT PROPER OPENING EVIDENCE OR DISMISS AEPCO'S COMPLAINT

In light of the profound defects in AEPCO's opening evidence, UP believes it is impossible to develop meaningful reply evidence. Defendants are not in a position to guess at which cross-over traffic among the potentially available movements AEPCO would select for its stand-alone railroad if it eliminated the errors. Defendants cannot know how AEPCO would attempt to demonstrate that the residual revenues earned by the incumbents for this unspecified group of cross-over traffic would cover their residual costs of handling that traffic. And defendants are not in a position to guess what route AEPCO might choose to build in lieu of its invalid use of trackage rights between Vaughn and El Paso, where on its redesigned system it would have placed yards and other facilities, or what traffic it would have selected to populate whatever additional line segments it decided to build. These basic choices are ones AEPCO was obligated to make in the first instance within the boundaries of the Board's SAC methodology.

²⁵ Even if the Board were to conclude that AEPCO could reroute traffic via Vaughn, the railroads could not simply present their own evidence of construction costs for a Vaughn-El Paso line. Because it used BNSF's trackage rights rather than reproduce the Vaughn-El Paso line, AEPCO's opening evidence does not purport to capture any revenue from UP's traffic on that line. Because it is uncertain what traffic AEPCO might choose if it were to construct the line, defendants cannot guess what type of facilities would be necessary or address the countless other capacity and operating issues that flow from whatever traffic selections AEPCO might make.

See *AEPCO II* at 5. And they are choices that AEPCO will not be permitted to make for the first time on rebuttal.²⁶

Because it will be impossible for defendants to join issue with AEPCO on SAC costs, any reply evidence would not provide the Board with useful alternative SAC evidence that would permit it to reach a decision quantifying stand-alone costs in this case. Waiting to act until after additional rounds of evidence are submitted would only waste the resources of the parties and the Board. The Board should reject AEPCO's SAC presentation now.

Deferring a decision until after the submission of reply and rebuttal stand-alone cost evidence would serve no purpose. This course would merely prolong the proceeding, requiring the parties to submit, and the Board to review and evaluate, more evidence without affecting the ultimate outcome.

If the Board denies this petition, the case will head toward a procedural dead end. The railroads will be unable to avoid this result.

- The railroads cannot file standard reply evidence that accepts AEPCO's configuration and traffic selection. AEPCO's traffic volumes and revenues exceed the actual traffic volumes and revenues on the relevant lines by a wide margin. The railroads cannot correct this evidence because, as described above, AEPCO has not documented how it derived its traffic and associated revenue. As a result, the railroads are not in a position to calculate the

²⁶ The magnitude of the flaws in AEPCO's case far exceeds the sort of "significant redesign" previously found by the Board to be inappropriate at the rebuttal stage. In *Duke Energy*, the complainants' proposed redesign involved moving a single yard and relocating a single tunnel. *Duke Energy* at 2-3. After those redesigns were barred, the complainant was still able to fall back on an otherwise complete (but higher cost) stand-alone railroad presented in its opening evidence. Here, by contrast, there is no complete case-in-chief to which UP can respond because AEPCO's system has an unknown traffic base and an invalid route that must be redesigned.

revenue available to the stand-alone railroad or to determine the actual volumes and associated operating statistics. However, submitting a reply that merely catalogued some of the errors in AEPCO's operating plan, construction costs and other aspects of its SAC presentation (to the extent they could be determined given the uncertainty about AEPCO's traffic selections and routing choices) – but which did not offer restated SAC calculations – would be a pointless exercise.

If AEPCO on rebuttal were to address the deficiencies of its opening evidence, the Board would face a choice between striking AEPCO's rebuttal or allowing the railroads a chance to respond.²⁷ Striking such a rebuttal would be amply justified. However, it would be far more efficient for the Board to act now, thereby avoiding unnecessary expenditure of resources by the parties and the Board.

Rather than striking AEPCO's evidence, the Board could allow the railroads to respond with a surrebuttal. This would mean more rounds of evidence for the parties to prepare and the Board to evaluate. Under those circumstances, a decision on the merits before 2005 would be unlikely.

- The railroads cannot correct the improper traffic selection or network design. AEPCO may argue that defendants should correct any errors in traffic selection and design in their reply submission. It is clear from the Board's stand-alone cost decisions, however, that the complaining shipper is the only party that can designate the network and select

²⁷ The Board has made it clear that it will not allow a complainant to submit its case on rebuttal and thereby deprive defendants of their due process right to reply to the evidence against them. See page 7 & note 4, *supra*.

the traffic.²⁸ While the complainant does not have unfettered discretion, it is the only party empowered to make these choices.²⁹ The railroads could submit reply evidence consistent with what they believe the correct network and traffic selection should be. No matter how reasonable those choices are, however, the case law is clear that AEPCO can reject the railroads' assumptions.

If on rebuttal AEPCO persisted in defending the flawed network and traffic selection offered on opening, the railroads' reply would be superfluous. The Board would then face the same decision this petition presents. If AEPCO instead filed a different stand-alone network and traffic base on rebuttal, then the Board would be required either to strike the evidence or to permit the railroads a chance to respond. Again, the parties will expend more resources to reach a point where AEPCO's evidence must be stricken and the case dismissed. The intervening reply and rebuttal filings will have been wasted effort.

UP believes that the parties and the Board stand at a crossroads. Even if defendants were to accept AEPCO's improper configuration and to attempt to make good faith judgments about what traffic AEPCO intended to select and how it otherwise might have developed proper opening evidence, the Board will be faced with an unsatisfactory record. In

²⁸ See note 11 *supra*; see also, e.g., *PPL I* at 9; *FMC Wyoming Corp. v. Union Pacific R.R.*, STB Docket No. 42022 (STB served May 12, 2000) at 25 ("In SAC cases, the complaining shipper has the responsibility for designing the stand-alone railroad and has the initial burden of supporting the feasibility of all components of its design and cost estimates.").

²⁹ *Arkansas Power*, 3 I.C.C.2d at 773-75 ("While defendants have offered alternative assumptions and analysis, they have not invalidated the complainant's assumptions and analysis (which are facially reasonable)."); *Arizona Public Service Co. v. The Atchison, Topeka & Santa Fe Ry.*, 2 S.T.B. 367, 380 (1997) ("To make a SAC presentation, a shipper designs a hypothetical new carrier (a stand-alone railroad or SARR) that is specifically tailored to serve an optimum traffic group with the optimum physical plant or rail system needed for that traffic."); *West Texas Utilities*, 1 S.T.B. at 655 (same).

UP's view, delaying a decision on the adequacy of AEPCO's opening stand-alone cost evidence serves no purpose. The parties' interest in a correct and expeditious decision and the interest of conserving the resources of the parties and Board are best served by rejecting that evidence now.

As discussed above, the Board would be well-justified if it chose to dismiss this case at this point. But in view of the fact that AEPCO could then choose to file a new complaint, UP believes that the more efficient approach would be to reject AEPCO's opening stand-alone cost evidence and permit it to file new stand-alone cost evidence promptly – perhaps within 45 days – after the decision granting this motion.

CONCLUSION

The defects of AEPCO's opening stand-alone cost submission are so fundamental and so egregious that the Board should reject that submission now. While it would be

appropriate to dismiss the case on this ground, UP urges that the Board instead require AEPCO to submit new opening evidence to correct the fundamental flaws we have identified.

UP further requests that the Board consider this petition on an expedited basis.

Respectfully submitted,

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April 18, 2003

CERTIFICATE OF SERVICE

I hereby certify that on April 18, 2003, I caused a copy of the foregoing "Union Pacific Railroad Company's Petition to Require Submission of New Opening Evidence or, Alternatively, to Dismiss" to be served by hand upon the following counsel:

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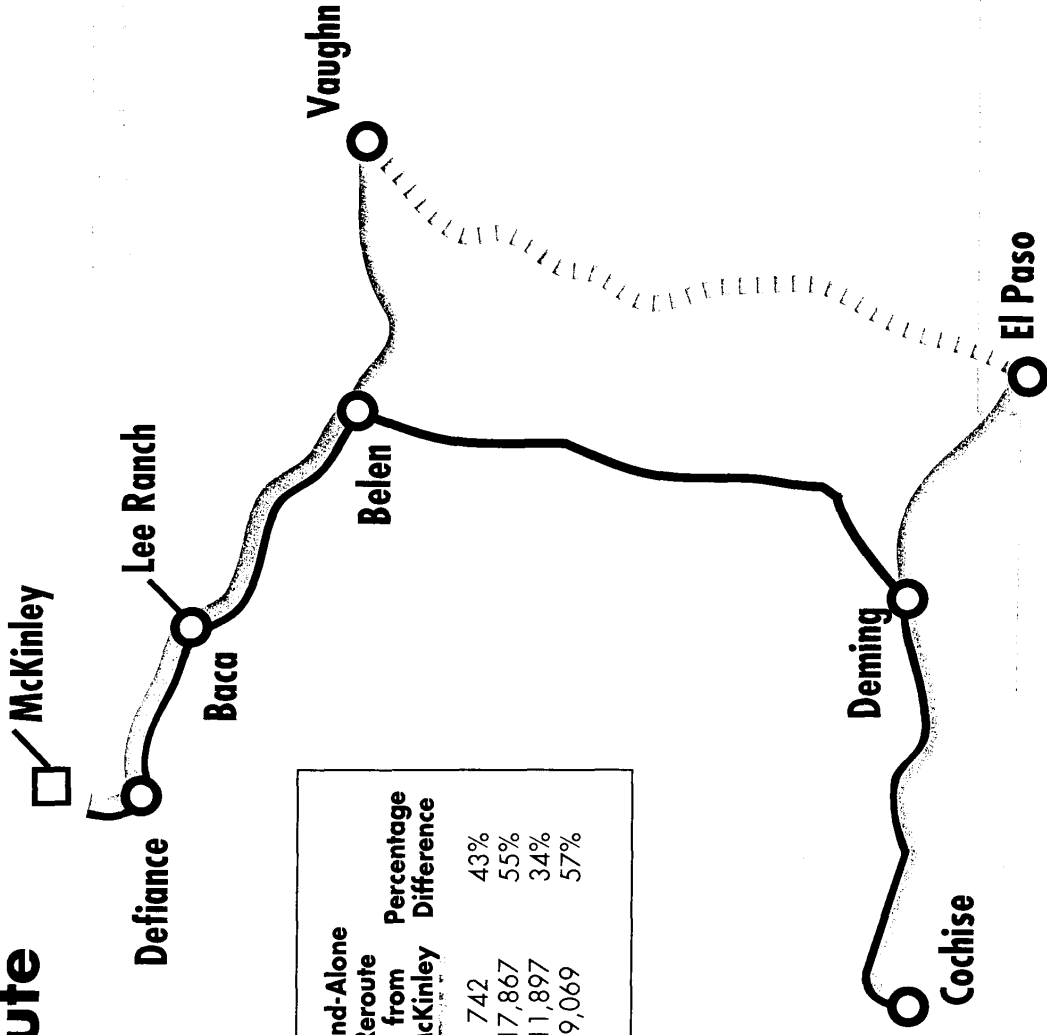
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MAPS

AEP CO Reroute



	Actual Route from McKinley	Stand-Alone Reroute from McKinley	Percentage Difference
Miles	520	742	43%
Rise and Fall (feet)	11,538	17,867	55%
Curvature (degrees)	8,893	11,897	34%
Fuel (gallons)	5,762	9,069	57%

(Loaded Direction)

—	Actual Route
- - -	Stand-Alone Reroute:
—	Lines Built
- - -	Trackage Rights on UP

—

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D

2001 AEPCO Traffic Depends on BNSF Network

REDACTED

	ACE Vaughn to Defiance
	BNSF Lines That Flow Traffic to ACE
	BNSF Trackage Rights Lines that Flow Traffic to ACE
	Other BNSF Lines
	Auto Facilities on BNSF
	Intermodal Terminals on BNSF

KLICK/MURPHY V.S.

VERIFIED STATEMENT
OF
JOHN C. KLICK AND JULIE A. MURPHY

Our names are John C. Klick and Julie A. Murphy. We are Senior Managing Director and Manager, respectively, at the Network Industries Strategies group of FTI Consulting, Inc. ("FTI"). FTI's offices are located at 1201 Eye Street, N.W., Suite 400, Washington, D.C. 20005.

FTI was jointly retained by the defendants, Union Pacific Railroad Company ("UP") and The Burlington Northern and Santa Fe Railway Company ("BNSF"), to analyze and help respond to the stand-alone cost ("SAC") evidence presented by Arizona Electric Power Cooperative, Inc. ("AEPCO") in this proceeding. We submit this verified statement in support of UP's "Petition To Require Submission of New Opening Evidence or, Alternatively, To Dismiss."

As detailed in our attached statements of qualifications (*see* Appendix), we and our colleagues at FTI have extensive experience performing analyses in railroad SAC cases. For example, we have analyzed issues concerning railroad traffic in more than two dozen SAC cases since 1985, and, as a result, have acquired substantial expertise and knowledge about how to identify traffic that may be selected by a shipper for its stand-alone railroad ("SARR").

We have concluded that AEPCO's opening evidence concerning its base-year traffic selections is so deficient that defendants cannot prepare reply evidence on the array of SAC issues that must be addressed in these cases. Part I explains that there is no way to determine what UP and BNSF traffic AEPCO selected for its SARR (the Apache, Cochise & Eastern Railroad ("ACE")). We reach this conclusion after spending literally hundreds of person-hours analyzing AEPCO's evidence and associated workpapers, as well as its responses to requests for additional

workpapers. Part II discusses certain characteristics of the potentially available cross-over traffic, significant portions of which AEPCO apparently intended to select.

FTI and its predecessors have worked on rate cases since the SAC standard was adopted by the Interstate Commerce Commission in the 1980s. As explained in this verified statement, AEPCO's opening presentation in this proceeding is the most poorly documented and most internally inconsistent of any presentation we have seen. These deficiencies are so significant that we cannot even determine what traffic AEPCO intended to select for its SARR. As a result, we have concluded that we are unable to reply in any comprehensive way to AEPCO's opening stand-alone cost evidence.

I. INABILITY TO IDENTIFY THE TRAFFIC AEPCO SELECTED

FTI spent approximately 750 person-hours trying to determine the traffic AEPCO selected for ACE. This effort was ultimately fruitless because of numerous deficiencies in AEPCO's evidence and workpapers.¹ We have concluded that AEPCO's selection of traffic from UP and BNSF data is impossible to decipher.

Based on our initial review of AEPCO's Opening Narrative, we expected that analyzing AEPCO's traffic selections would be a relatively straightforward exercise. Several statements in

¹ FTI extensively reviewed all electronic and hardcopy workpapers that AEPCO submitted. The sheer volume of programs, files, and calculations – coupled with inadequate documentation about programmatic and non-programmatic code – made this process unusually burdensome. For example, workpapers supporting calculations of base-year traffic and revenue for each carrier appear in approximately 100 files comprised of spreadsheets, Foxpro programs, and data files; more than 30 such files are individual programs that must be cobbled together just to begin to discern the process that AEPCO used in selecting traffic. Moreover, many programs lack "comments" (i.e., descriptions within the programs of code-line functions), thus requiring us to decipher the programmatic code used to develop AEPCO's base-year traffic. In addition, AEPCO's documentation is simply a Microsoft Word document that loosely identifies the sequential order in which various programs were run and provides a brief phrase that purports to describe the purpose of certain programs. The documentation does not provide an overarching traffic selection methodology or adequate documentation for specific code lines.

its Opening Narrative and Exhibits suggest that AEPCO may have intended to populate its stand-alone railroad with virtually all of the overhead traffic that UP moves between El Paso and Cochise and that BNSF moves between Vaughn and Defiance. AEPCO Narr. at III-A-2 and 5 and Exhibit III-C-5. It thus appeared that AEPCO intended to exclude only traffic that originates or terminates along these lines (which AEPCO refers to as "local" traffic) and the Amtrak and work trains that traverse these lines.

Upon closer analysis of AEPCO's net tonnage volume figures, however, it became apparent that something was seriously amiss. For UP, the total volume of traffic claimed for the stand-alone railroad significantly exceeded the total volume of overhead traffic that actually moves across the replicated UP segment. The same is true for the BNSF intermodal traffic claimed by the stand-alone railroad.² As we began to dig further, we realized that AEPCO's total volume and revenue figures for non-coal cross-over traffic were the product of massive "adjustments" to whatever selections AEPCO made from the traffic data UP and BNSF had produced in discovery. For BNSF, AEPCO's "adjusted" net tons were 56 percent greater, and its revenues 54 percent greater, than the "unadjusted" level yielded by whatever traffic AEPCO selected from BNSF's traffic data. For UP, AEPCO's adjusted net tons exceeded the net tons apparently selected from the UP traffic data by 26 percent, and adjusted revenues were 25 percent greater than those it selected from the UP traffic data.³

² We have not yet analyzed other BNSF traffic categories, in significant part due to confusion about what AEPCO intended to select.

³ The percentages cited in this paragraph are for the year 2001, which is the basis for AEPCO's base year net tons and revenues. For 2002, the percentage increases for net tons were 66% and 32%, respectively, for BNSF and UP, and the percentage increases for revenues were 64% and 29%, respectively. See AEPCO's electronic workpapers at ACE Non-Coal Traffic and

(continued ...)

AEPCO's drastic adjustments to the railroads' traffic data were alluded to only in a single cryptic sentence in a footnote in AEPCO's Narrative:

"In instances in which the Defendants did not provide revenue data for loaded railcars moving over the ACE, AEPCO utilized the average rate per car-mile for the applicable train type to estimate the missing railcar revenue data."

AEPCO Narr. at III-A-34 n.26. This sentence suggests that AEPCO drew some subset of data from the databases defendants produced in discovery and concluded – without any explanation – that those data did not reflect all of the non-coal traffic AEPCO was attempting to select. Rather than seek confirmation or clarification from the defendants about what was included in their data, AEPCO simply applied an upward adjustment procedure to “gross up” the actual net tons and revenues provided in the data.⁴ It derived the “adjustment ratio” by comparing the traffic data with the train movement file, a very different data base used for operations purposes.

We attempted to understand AEPCO's “adjustment,” whether there were any traffic selection criteria that guided its application, and the reason why AEPCO might have concluded that it was necessary to adjust the revenues and net tons obtained directly from defendants' traffic data. After spending hundreds of hours attempting to understand what AEPCO did, we drew two conclusions: First, there was no basis for any adjustment, because no revenue data were missing from the traffic databases produced by UP and BNSF in discovery. Second, based on the information AEPCO has provided, it is impossible to determine what traffic AEPCO intended to include on its stand-alone railroad from the potentially available universe of non-coal cross-over

(... continued)

Revenue Forecast.xls at worksheets titled “ACE UP 2001 Traf. and Rev.,” “ACE UP 2002 Traf. and Rev. ACE BNSF '01 Traf. and Rev.,” and “ACE BNSF '02 Traf. and Rev.”

⁴ AEPCO did not follow such a procedure for coal movements. Instead, it used the traditional approach of relying on traffic data to determine volumes and revenues for ACE.

traffic. Thus, even if we were to ignore the adjustment entirely, there is no way to decipher what specific traffic AEPCO intended to select from the potential universe of cross-over traffic.

Unfortunately, however, the defendants need to be able to understand precisely what traffic ACE will handle in order fully to test AEPCO's SAC analysis and prepare alternative SAC calculations. Without that information, defendants cannot address all of the traffic and revenue issues raised by AEPCO's selections, or the host of capacity and operating expense issues that flow from the traffic selections. The problem here does not involve just a handful of details. Our uncertainty involves very significant portions of the traffic base AEPCO intended for ACE. Because of the inadequacy of AEPCO's opening evidence, we simply cannot do more than guess at what traffic the stand-alone railroad will handle.

Because AEPCO performed separate analyses of the two defendants' traffic data, we describe our findings separately for UP and BNSF traffic.

A. UP Traffic

Despite extensive review, we have been unable to identify the UP traffic that AEPCO intended to select for ACE. It appears clear that AEPCO did not intend to select just the "unadjusted" non-coal traffic it selected from the UP traffic data. Otherwise, it would not have perceived a need to add a large amount of UP cross-over traffic through an adjustment.

AEPCO's statements in its Narrative are unhelpful. As noted above, they suggest an intention to select *all* of UP's overhead traffic on the El Paso-Cochise segment. However, that is not what AEPCO did. Nowhere in AEPCO's narrative or workpapers is there any standard or rationale that would permit us to identify the UP traffic to be selected.

AEPCO's underlying workpapers and computer programs do not resolve this issue.⁵

Instead, those materials confirm that it is impossible to divine AEPCO's intentions as to traffic selection. For example, in its initial selection from UP traffic data, AEPCO apparently sought to exclude "local" traffic, *i.e.*, non-coal traffic that originates and/or terminates on the ACE. But, in its analysis of the train movement data are used to calculate a revenue "adjustment ratio" (explained further below), AEPCO did not exclude "local" traffic.⁶ In other words, what AEPCO appears intent on eliminating at one stage of its traffic selection process, it appears to add at another stage.

⁵ In an effort to understand AEPCO's traffic and revenue calculations, defendants submitted numerous supplemental workpaper requests to AEPCO on February 21, 2003. AEPCO's responses, however, shed no light on its traffic selection. The following provides an illustration of AEPCO's non-responsiveness:

"Q. With respect to ACE Non-Coal Traffic and Revenue Forecast.xls at worksheet ACE UP 2001 Traf. and Rev. Columns T & S (Adjusted Revenue and Adjusted Tons), provide all workpapers showing the basis for the adjustment.

A. [REDACTED]

AEPCO's references to this worksheet merely reiterate that AEPCO assumed two units per flat car (as discussed in the text below) and state that AEPCO "Adjusted Revenue file statistics to foot with totals from train file," but provide no supporting workpapers or other rationale for this adjustment. Similarly, AEPCO's reference to its Opening Narrative simply points to the quote appearing earlier in our statement that indicates that AEPCO used an average rate per car-mile assumption when traffic data was allegedly "missing" – it sheds no light on how AEPCO determined that these data were allegedly missing. These responses do nothing to explicate or establish the need for AEPCO's large upward adjustments to the net tons and revenues it selected by reviewing the defendants' traffic data.

⁶ AEPCO made a variety of adjustments to the loaded car counts in the UP train movement data, some of which conceivably might have been intended to eliminate local traffic. However, none are described as such and none achieve such a result.

Another example concerns UP cross-over traffic that originates or terminates in the Pacific Northwest and Utah, which AEPCO may or may not have meant to exclude. The code in AEPCO's "sacsysod.dbf" file reveals a data field designated "sac_oh_mv" that apparently identifies the combinations of origin state and destination state that AEPCO sought to include when selecting UP traffic. This program excludes origins and destinations in the Pacific Northwest and Utah. However, we cannot locate a source program or any other documentation that explains how this field was populated. The only potentially relevant documentation provided by AEPCO were the following entries in AEPCO's description of its traffic and revenue summary:

- Add data field "sac_oh_move" (Char 1) to file SysODList.dbf.
- Populate "sac_oh_move" with "x" for SAC overhead moves.
- Copy records with marked "sac_oh_move" field to SACSysOD.dbf.

See AEPCO's electronic workpapers at UP Traffic Analyses.doc. This may indicate that AEPCO, when selecting non-coal traffic from UP's files, ignored any record that reflected a state-to-state origin/destination pair (including locations in the Pacific Northwest and Utah) that does not contain an "x" in the "sac_oh_move" field. However, we could not find a computer process that inserts the "x" into the sacsysod.dbf file (and we therefore assume that insertions were done manually).

It therefore appears that, in processing UP's traffic data, AEPCO intended to exclude certain origin/destination movements that, in the real world, moved in overhead service across the UP lines that AEPCO designated as part of ACE. However, in developing its "adjustment ratio," AEPCO made no effort to eliminate carloads moving to (or from) locations in the Pacific Northwest and Utah – suggesting an intention to include these carloads of non-coal overhead traffic. Because AEPCO nowhere provides a meaningful written description of its intentions, there is no way for us to resolve this inconsistency.

Our efforts to understand the nature of and basis for AEPCO's adjustment to net tons and revenues associated with UP's non-coal cross-over traffic only added to our confusion. We confirmed that the UP traffic data produced in discovery did not omit any traffic moving on UP's line between El Paso and Cochise. Thus, we could see no reason to make any adjustment. We were able to determine that AEPCO's development of the adjustment contained numerous obvious errors. Indeed, we know that AEPCO's upward adjustment to the UP traffic data cannot be correct, because it yields traffic volumes and revenues that exceed the total of all traffic UP handles over the El Paso-Cochise segment. Had the adjustment made sense, it might have disclosed something about what traffic AEPCO intended to selected, although the nature of this gross adjustment was such that it does not disclose precisely what traffic movements are included in the adjusted net tonnage totals. In any event, the apparent errors in the adjustment made it even more difficult to understand what traffic AEPCO intended to select.

One example of an apparent error in AEPCO's "adjustment" involves UP intermodal traffic. In comparing UP's traffic revenue file (which displays trailer/container units, or "TCU's") with the train movement file (which displays cars), AEPCO assumed that two loaded TCU's from the traffic file were the equivalent of a loaded intermodal car as reported on the train movement file. However, this calculation yields a higher number than the actual loaded TCU count in the traffic data, indicating that AEPCO's assumed factor is plainly too high.⁷ As a result AEPCO's methodology produces an understatement of the number of loaded intermodal cars actually

⁷ AEPCO seems to have confused the concept of hitch utilization with the concept of the number of loaded trailers per loaded intermodal car. Hitch utilization, which often approaches 2.0, refers to the number of TCU slots on an intermodal car that are actually occupied by either loaded or empty TCU's, but a figure of two *overstates* the number of *loaded* TCU's (including revenue empties) per loaded intermodal car, which is the figure AEPCO needed to make a relevant conversion from loaded TCU's from the UP traffic data to loaded cars on the train movement file.

associated with the loaded TCU's reported in the traffic file. By understating the number of loaded intermodal cars associated with the intermodal traffic reputed in UP's traffic database, AEPCO overstated the adjustment it applied to the non-coal cross-over traffic it initially selected from the traffic files.

There is also an important difference in the way in which the UP traffic data and train movement data report loaded intermodal cars, which reflects the different purposes they serve on the UP. The traffic data reflect only loaded TCU's – not empty, non-revenue TCU's – consistent with their purpose of identifying revenue-producing traffic movements. In contrast, the train movement file reports intermodal cars that are carrying empty, non-revenue TCU's (being repositioned for operational purposes) as loaded intermodal cars (because these cars are carrying TCU's – albeit empty ones – that increase train weight and affect the need for locomotive power and fuel). In comparing loaded car counts from the train movement file to its estimate of the number of loaded cars from the traffic data, without taking this difference in loaded car definition into account, AEPCO erroneously assumed there was a shortfall in the loaded cars reported in the traffic history file. As a result, it overstated loaded car counts, thereby inflating its adjustment.

AEPCO also erred in treating traffic data records for priority manifest trains (known as “Q trains”) as intermodal trains. As a result, it divided the carloads of Q trains by its flawed intermodal conversion factor (equal to two) to derive the number of loaded Q railcars from the traffic data. The effect of this misclassification was to understate further the number of cars that AEPCO purported to find on the traffic revenue file and therefore to increase the “adjustment

ratio” and the resulting total.⁸ Before July 1, 2000, “Q” was a designation applied to stack trains other than APL, but that designation was changed and provided to AEPCO in discovery. *See* U-A-C 027359. Apparently, AEPCO simply erred in interpreting this train symbol.

These errors suggest that AEPCO’s adjustment was more an effort to artificially increase traffic levels rather than one aimed at locating “missing” traffic records that AEPCO meant to include. However, that leaves the functional question of what actual traffic AEPCO intended to select wholly unresolved.

B. BNSF Traffic

It is equally impossible to identify the BNSF traffic that AEPCO intended to select for ACE. We are limited in our ability to discuss with UP the specific problems we have confronted in our effort to make sense of AEPCO’s selections because, for obvious reasons, BNSF regards its traffic data as highly sensitive. However, we can say that the difficulties we encountered in trying to understand those selections were even more severe than those we confronted with AEPCO’s UP traffic selections. AEPCO’s Narrative, exhibits and workpapers are confusing, inconsistent and inadequate in key respects that leave us unable to determine what potentially available BNSF cross-over traffic AEPCO intended to select. AEPCO’s failure to make clear traffic selections appears to stem in part from the same sorts of problems described above, including its improper and inconsistent efforts to draw connections between two different traffic and operating databases. In part the confusion stems from issues that only involve AEPCO’s use of BNSF’s data.

But the result is the same: we do not know what BNSF traffic AEPCO intended to select. AEPCO’s “adjusted” net tons and revenues from BNSF cross-over traffic do not disclose what

⁸ AEPCO’s consultants would have seen this if they had reviewed the AAR car type information that was reported in each loaded TCU record in the traffic revenue file.

traffic comprises those totals, and in any event we know that the adjusted figures cannot be correct. Indeed, AEPCO's adjustments for BNSF cross-over traffic are even more obviously wrong than the adjustments AEPCO applied to the UP traffic – in ways that should have been obvious to AEPCO had it paused to perform a reality check on its own figures. For example, for 2001, AEPCO's adjusted revenue figures show as much revenue earned on intermodal traffic moving over BNSF's east-west line between Defiance and Vaughn as BNSF earned on all of the intermodal traffic moving anywhere on its entire system,⁹ even though we know from available sources that the BNSF east-west line that is replicated by the ACE handles far less than all of BNSF's intermodal traffic.¹⁰

On the other hand, even if we ignored the BNSF adjustment altogether we still would not know what BNSF traffic AEPCO intended to select, because AEPCO's evidence and workpapers are unhelpful and internally inconsistent. It is impossible to understand what BNSF traffic AEPCO intended to select.

* * *

Although we know that AEPCO compared both defendants' traffic data with their train movement data in order to derive an "adjustment ratio," we have not been able to fully understand AEPCO's methodology, and the errors that we have been able to identify have only added to the

⁹ BNSF's intermodal volumes and revenues for 2001 are publicly available (*see* BNSF's 2000 and 2001 SEC Form 10-K), and indicate that BNSF earned approximately \$2.6 billion in revenue for all of its intermodal traffic – similar to what AEPCO claims would move over the ACE.

¹⁰ AEPCO had access to the data required to perform this simple calculation. Data supplied to AEPCO show that over [REDACTED] of BNSF's intermodal traffic moved in BNSF's important Pacific Northwest intermodal lanes. *E.g.*, "2001 Density by Traffic Type.xls" at BNSF/AEPCO 01724. None of that traffic touches the ACE. In addition, it is well known that BNSF has extensive intermodal operations in numerous additional lanes that do not touch the ACE, including the Chicago-Denver and Chicago-Texas corridors.

confusion. We can establish that that the adjustments AEPCO developed for both UP and BNSF traffic are clearly wrong, but we cannot “correct” the adjustment because AEPCO’s narrative and workpapers do not tell us what traffic AEPCO intended to select.

We know only that AEPCO did not intend to select all of the defendants’ overhead traffic, and that it wanted to select some unspecified body of traffic having total net tons and revenue that exceed the level it calculated in arriving at its “unadjusted” results. Although we know that range is large – amounting to more than one-third of the total “adjusted” level for BNSF traffic and more than one-fifth for UP – we cannot determine precisely what traffic comprised the outer bounds of that range. And we have even less of a basis for making guesses about what subset of traffic within that range AEPCO intended to select.

II. AEPCO IGNORES OFF-LINE COSTS OF CROSS-OVER TRAFFIC

In its Opening Narrative, AEPCO asserts that most of its traffic results from the SARR “serving as a bridge carrier for a range of different commodity groups that currently move over BNSF’s and UP’s east-west main lines through New Mexico and Arizona. Overhead traffic constitutes approximately 87 percent of the ACE’s traffic” (*see* AEPCO Op. Narr. at III-A-2). Revenue from overhead traffic accounts for approximately 95 percent of all SARR revenue (*see* AEPCO Op. Exhibit III-A-5 and III-A-6).

Despite the fact that it is impossible to identify the traffic AEPCO intended to flow over its SARR, we do know enough about its selection criteria to conclude that cross-over intermodal, automotive and merchandise traffic provides the overwhelming majority of the revenue for ACE. AEPCO’s revenue breakdown indicates that approximately 75 percent of the cross-over traffic AEPCO selected for its SARR is intermodal traffic. Automotive accounts for roughly six percent,

and manifest traffic represents another 15 percent. *See* AEPCO Op. Exhibits III-A-5 and III-A-6.¹¹ Automotive and intermodal traffic, all of which is exempt from regulation, thus accounts for over 80 percent of ACE's claimed base-year revenues of \$ [REDACTED]. A significant portion of "manifest" traffic necessarily consists of boxcar and other exempt traffic.¹² It is well known that these categories of traffic make less contribution to railroads' recovery of their fixed costs because such traffic is are subject to vigorous competition that drives rates closer to marginal costs.

AEPCO claims for its SARR a very significant percentage of the total revenues earned by UP and BNSF on these transcontinental traffic flows. Over all, ACE takes 14.7 percent of the revenues earned by UP on the traffic flowing over the ACE (applying AEPCO's revenue division methodology), leaving only 85.3% of current revenues to support UP's residual system. And, as noted, much of the UP traffic claimed by the ACE is relatively low margin automotive, intermodal, and manifest traffic, for which the residual UP would loose by 15.9%, 13.9%, and 16.1%, respectively, of its revenues.¹³ As the maps attached as Exhibits 2 and 3 of UP's Petition demonstrate, the cross-over traffic that AEPCO apparently intended to route over the SARR moves over very significant portions of the UP and BNSF systems.¹⁴ The off-line costs associated

¹¹ These figures are based on AEPCO's commodity classifications.

¹² We do not know enough about AEPCO's traffic selections to calculate this commodity breakdown, which AEPCO's consultants did not provide.

¹³ For UP and BNSF combined, ACE claims 13% of the revenues associated with its non-coal cross-over traffic.

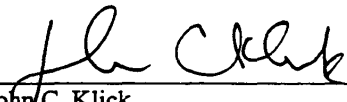
¹⁴ Those maps plot in red the UP or BNSF routes used by traffic that we believe AEPCO intended to select (although we cannot determine how much of the traffic using these routes AEPCO intended to select). The UP map also plots in blue the additional UP routes used by other traffic that AEPCO may or may not have intended to select. Additional routes likely could be shown on the BNSF map, but at this time we have not performed the necessary work using BNSF data to complete that exercise.

with this extensive use of the incumbent railroads' systems (including costs of origination and termination) must also be significant. However, during our extensive review of AEPCO's opening evidence, we have not seen any indication of the magnitude of off-line costs associated with cross-over traffic. There is no basis for AEPCO's apparent assumption that the incumbents, which are not revenue adequate and earn their lowest margins on the competitive transcontinental flows in which AEPCO's SARR would participate, could cover their costs if forced to do so with significantly reduced revenues.

VERIFICATION OF JOHN C. KLICK

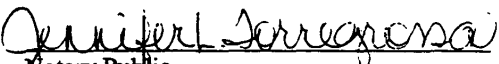
DISTRICT OF COLUMBIA)
)
CITY OF WASHINGTON) ss:

I, John C. Klick, being duly sworn, state that I have read the foregoing Verified Statement of John C. Klick and Julie A. Murphy, that I know its contents, and that those contents are true as stated.



John C. Klick

SUBSCRIBED AND SWORN TO before me this 17 day of April, 2003.

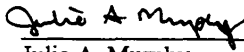


Notary Public
My Commission Expires: May 14, 2007

VERIFICATION OF JULIE A. MURPHY

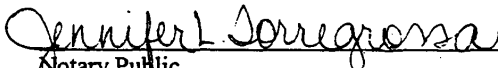
DISTRICT OF COLUMBIA)
) ss:
CITY OF WASHINGTON)

I, Julie A. Murphy, being duly sworn, state that I have read the foregoing Verified Statement of John C. Klick and Julie A. Murphy, that I know its contents, and that those contents are true as stated.



Julie A. Murphy

SUBSCRIBED AND SWORN TO before me this 17 day of April, 2003.



Notary Public
My Commission Expires: May 14, 2007

SALZMAN V.S.

VERIFIED STATEMENT

OF

DALE W. SALZMAN

My name is Dale W. Salzman. I am Director-Transportation Research for Union Pacific Railroad Company ("UP"). In this position, I am responsible for conducting studies of rail operations for various railroad departments. I began my railroad career with Missouri Pacific Railroad Company in 1965. At Missouri Pacific, I was primarily involved in operations planning. I moved to UP in 1974. Since then I have been involved in transportation and strategic planning in several capacities.

I have been involved in several rate reasonableness proceedings and have submitted testimony to the Surface Transportation Board on a number of occasions. I provided testimony regarding UP operations and regarding the operating plan of the stand-alone railroads in the *FMC* and *Wisconsin Power & Light* cases. Most recently, I provided testimony regarding UP operations in the *Northern States Power* case and in the opening evidence filed by UP and The Burlington Northern & Santa Fe Railway Company ("BNSF") in this case brought by Arizona Electric Power Cooperative, Inc. ("AEPCO").

In this verified statement, I will address the operating inefficiencies that would arise if AEPCO's coal and other coal traffic that UP and BNSF currently route via Belen, New Mexico, and Rincon, New Mexico, were rerouted via Vaughn, New Mexico, and El Paso, Texas. I will also briefly address the significant off-line costs associated with the cross-over traffic that AEPCO has selected for its stand-alone railroad ("SARR"), as well as the costs created by establishing new interchange and crew change points for cross-over traffic.

I. A VAUGHN-EL PASO ROUTING WOULD BE HIGHLY INEFFICIENT

BNSF and UP currently route AEPCO's coal and certain other coal traffic moving from mines in New Mexico to destinations in Arizona via BNSF's line from Belen to Deming.¹ In its opening evidence, AEPCO proposes a SARR that would reroute that coal via UP's line from Vaughn to El Paso. BNSF and UP would not institute the proposed routing. A Vaughn-El Paso route would be less efficient than the Belen-Deming route by every operational measure. Moreover, BNSF and UP could not reasonably implement a Vaughn-El Paso route without first improving their interchange facilities at Vaughn, and they would not invest in such an inferior route. There would be no operational benefit from implementing a Vaughn-El Paso route, and it would increase the costs of handling both the rerouted traffic and the other traffic currently using the affected lines.

A. A Vaughn-El Paso Route Would Be Inefficient For The Rerouted Traffic

BNSF and UP would not institute a Vaughn-El Paso routing for traffic that could move via Belen and Deming. As shown in Map No. 1, a Vaughn-El Paso routing would be significantly longer and more difficult to traverse than a Belen-Deming routing. Instead of turning south at Belen, AEPCO trains and other rerouted traffic would remain on BNSF's east-west main line for an additional and unnecessary 106 miles between Belen and Vaughn. Instead of using BNSF's lightly used, lower-grade 200-mile Belen-Deming line down the Rio Grande Valley, the trains would climb a 20- to 25-mile grade east of Belen through Abo Canyon to Mountainair, New Mexico. At Vaughn, they would have to wait to enter UP's capacity-constrained Tucumcari Line between Vaughn and El Paso. They would then negotiate 227 miles

¹ BNSF has leased the portion of its line between Rincon, New Mexico, and Deming, New Mexico, to Southwestern Railroad Company.

of single-track main line to El Paso, climbing another grade as they moved south to Corona, New Mexico. The rerouted trains would then use UP's east-west main line for an additional and unnecessary 89 miles from El Paso to Deming. They would also suffer delays in UP's congested El Paso Terminal, which is a major inspection and fueling facility for UP's east-west traffic. There would be no operational benefit from implementing the longer routing.

In order to better quantify the inefficiencies associated with a Vaughn-El Paso routing, I used UP's Train Performance Simulator ("TPS") to model operations on the current and proposed routes.² Compared with a loaded AEPCO train moving from McKinley Mine to Apache Station using the Belen-Deming route, a loaded AEPCO train using a Vaughn-El Paso route would:

- Travel 222 additional miles, an increase of 43%;
- Incur 6,329 additional feet of rise and fall in elevation, an increase of 55%;
- Negotiate 3,004 additional degrees of curvature, an increase of 34%;
- Consume at least 3,307 additional gallons of fuel, an increase of 57%.

In addition, the TPS model shows that the estimated minimum round-trip time for the Vaughn-El Paso route would be approximately 27 percent longer than the round-trip time for the Belen-Deming route. An AEPCO train departing from Lee Ranch would encounter the same inefficiencies. The detailed results of my comparison of AEPCO traffic, including a comparison

² UP's TPS uses actual track characteristics (*e.g.*, distance, grade, curvature, speed limits) and movement parameters (*e.g.*, number of locomotives, locomotive type, number of cars, car weight). The estimated minimum running time and fuel consumption data generated by TPS are useful for comparison purposes, but they can significantly understate real-world results. TPS assumes that trains will always operate at the maximum possible speed given available locomotive power and resistance conditions (*e.g.*, car types, trailing tons, grades, curves). It does not account for delays associated with train meets, train passes, maintenance, construction, weather, crew availability, or mechanical delays. Thus, while TPS does not identify absolute operating transit times or fuel consumption, it does indicate relative operating statistics.

of AEPCO trains moving from Lee Ranch Mine to Apache Station, are provided in Exhibit No. 1.

Other rerouted coal traffic would be subject to comparable inefficiencies. For example, Tucson Electric Power coal moving from McKinley Mine to Tucson Electric's Irvington plant near Tucson, Arizona, would travel a route that is 38 percent longer, with 42 percent more rise and fall and 26 percent more curvature. Its estimated fuel consumption would increase by 51 percent, and its estimated minimum round-trip time would increase by 23 percent. I provide additional details in Exhibit No. 2.³

As a result of the new route, transit times for the rerouted traffic would increase substantially beyond those suggested by the TPS model. The slow coal trains would travel longer distances over routes that are more difficult to traverse than the current route, and they would have lower priority than the many intermodal, automotive, and manifest trains handling service-sensitive traffic on the busy BNSF and UP lines that they would unnecessarily occupy. The operational inefficiencies would also be directly reflected in increased variable costs. Costs that increase with increases in gross ton-miles, locomotive unit-miles, train miles, or cycle time would all increase significantly as a result of the rerouting. These include costs that the railroads would bear, such as maintenance-of-way costs, road property ownership costs, and locomotive capital, maintenance and fuel costs, as well as costs that shippers would bear, such as car ownership and maintenance costs. The railroads would also incur higher wage costs due to the

³ I have not provided a similar assessment for California Portland Cement, because UP relies on manifest and local trains to haul the less-than-trainload shipments for this industrial customer, and the operating characteristics of the trains used to serve the customer were too varied to define a typical train for comparison purposes.

longer mileages, as well as the increased likelihood that crews would run out of time under the Hours of Service law on some of the longer crew districts.

B. The Rerouted Traffic Would Unnecessarily Occupy Busy Facilities

BNSF and UP would not reroute Belen-Deming traffic via Vaughn and El Paso for a second reason: the rerouted traffic would unnecessarily add traffic to BNSF's and UP's east-west main lines, UP's Vaughn-El Paso line, and UP's El Paso terminal.

Adding additional coal traffic to BNSF's east-west mainline would increase cycle times for the rerouted traffic and interfere with existing operations on the line. AEPCO trains from McKinley Mine currently move 172 miles over BNSF's busy east-west main line before turning south at Belen. Under AEPCO's proposal, these and other rerouted trains would occupy valuable track capacity for an additional 106 miles until reaching Vaughn. BNSF timetable rules limit loaded coal trains to 55 miles per hour over this segment, as compared to the 70 mile per hour maximum applicable to BNSF's intermodal traffic. Moreover, although much of BNSF's east-west main line is double track, the proposed routing contains a five-mile stretch of single-line track east of Belen through Abo Canyon on the 1.25 ruling grade against eastbound trains. Rerouted trains moving through Abo Canyon could often delay faster trains moving in both directions.

Adding rerouted traffic to UP's Vaughn-El Paso line would also create operating difficulties for the rerouted traffic. At Vaughn, the low-priority coal trains would have to wait for a suitable window before moving onto the line, thus increasing transit times. Once on the line, these slow-moving trains would compete for track capacity with significantly more trains – most of which carry UP's time-sensitive intermodal and automotive traffic – than on the shorter Belen-Deming line. The rerouted trains would more frequently be placed in sidings and thus

delayed in order to avoid causing delays to oncoming or overtaking intermodal and auto trains. At El Paso, which serves as a major fueling and inspection point for UP's east-west trains, the rerouted trains would suffer delays in the crowded terminal. These low-priority trains would also incur delays while traveling the 89 miles of heavily utilized, single-track east-west main line from El Paso to Deming.⁴

C. BNSF And UP Would Not Institute A Vaughn-El Paso Routing Today

Even if they were inclined to handle AEPCO trains via Vaughn, UP and BNSF could not implement AEPCO's proposed operation, because they cannot make straight-on movements of AEPCO coal trains at Vaughn. As shown in the attached photograph and topographical map, the railroads' main lines cross at a 40-foot grade separation at Vaughn. See Exhibit Nos. 3 & 4. The railroads have a connection in the northeast quadrant of the crossing to the west of a BNSF yard, but it is aligned to allow straight-on movements from east to south, not from west to south. In order to interchange AEPCO trains, the loaded train would have to stop in the yard, and the new crew would have to board what was formerly the rear of the train and

⁴ UP routes AEPCO's Colorado coal via Vaughn and El Paso, but only because there is not another viable routing for Colorado coal moving to Cochise. AEPCO had also used the Vaughn-El Paso route for Colorado coal in the past, though Burlington Northern Railroad served as a bridge carrier between Pueblo, Colorado, and Dalhart, Texas, because Southern Pacific had not obtained the trackage rights between Pueblo and Stratford that now allow UP to offer single-line service between the Colorado mines and Cochise.

The only other possible route for Colorado coal would be UP-Pueblo-BNSF-Deming-UP, but it would require the formidable task of moving a loaded coal train up and down a 3% grade between Trinidad and Raton, which would likely involve splitting the train and operating each piece separately with helpers, and then moving the loaded train up a 1.7% grade south of Las Vegas, New Mexico, and then down a 3% grade south of Glorieta, New Mexico (between Las Vegas, New Mexico and Albuquerque, New Mexico) which could require as many as 9 C44-9DC units to provide the necessary dynamic braking if the train were not split for that portion of the movement. These obstacles would add significantly to the transit time and the costs of the move.

relink the distributed power units before moving over the connection. In addition, there are no power switches in the yard or at either end of this connection, so switches would have to be thrown by hand. This interchange process would be highly inefficient as part of a regular operation.

AEPCO acknowledges the need for new construction. It proposes a new 0.85-mile connection to the southwest of the point where the BNSF and UP main lines cross. *See* AEPCO Narr. at III-B-11 & Ex. III-B-2.⁵ However, BNSF and UP would not construct a new connection or spend the money to modify their existing connection in order to handle the reroutes identified by AEPCO. The reroutes would create substantial inefficiencies, and thus the construction costs would not be offset by any benefits of using the new route.

II. CROSS-OVER TRAFFIC SELECTED FOR AEPCO'S SARR HAS SUBSTANTIAL OFF-SARR COSTS

AEPCO's SARR includes cross-over traffic that makes extensive use of UP's and BNSF's off-SARR gathering and distribution facilities but that requires no such facilities on the SARR. The gathering and distribution costs associated with the cross-over traffic are substantial, and they are all borne by UP and BNSF. The SARR would also impose additional costs on UP and BNSF by adding new interchange and crew change points where there is no such activity today.

A. UP And BNSF Bear All Gathering And Distribution Costs For Cross-Over Traffic

AEPCO's SARR relies extensively on cross-over traffic, but it bears none of the costs of originating or terminating that traffic, or switching or blocking the traffic en route.

⁵ The proposed connection is shown on Exhibit No. 4, which is based on AEPCO workpaper AEP 04446.

Defendants' consultants have prepared maps (Map Nos. 2 and 3) that highlight the SARR's dependence on UP's and BNSF's existing networks.

The SARR does not include a single intermodal terminal, yet its cross-over traffic apparently includes intermodal movements that originate or terminate at almost every major intermodal facility from Chicago to Houston, as well as intermodal movements that originate or terminate at every major facility in California. It does not include a single auto ramp, yet its cross-over traffic apparently includes auto traffic that relies upon UP and BNSF ramps throughout the Midwest and Southwest. It does not perform any local or industry service, yet its cross-over traffic apparently includes manifest traffic that must be gathered from and delivered to hundreds of individual shippers across UP's and BNSF's networks. It does not perform any pick-ups or set-outs or any block swapping, yet BNSF and UP perform such functions on almost every train that carries cross-over traffic.

The SARR thus bears none of the gathering and distribution costs that UP and BNSF must bear in order to generate the cross-over traffic. It does not have to construct or operate intermodal or auto facilities, or pay third-party contractors to perform terminal functions. All of those costs are borne by UP and BNSF. Nor does the SARR bear any of the substantial costs associated with gathering and distributing manifest traffic. It does not perform any industry or yard switching, and it is not responsible for the yard, industry, or local trains that pick up or deliver manifest traffic to shipper facilities. All of those costs are borne by UP and BNSF.

B. The SARR Imposes New Crew Change And Interchange Costs On UP And BNSF

AEPCO's SARR not only relies on UP and BNSF to bear the costs of gathering and distributing cross-over traffic, but it imposes additional costs of handling cross-over traffic

on UP and BNSF by altering their existing crew change and interchange points to facilitate its own operations.

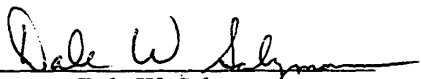
The SARR creates a new UP-SARR interchange and crew change point at Cochise, which will impose additional costs on UP. The closest UP crew change point is approximately 75 miles to the west in Tucson. Most UP trains use a single crew between El Paso and Tucson. In order to accommodate cross-over traffic from the SARR, UP would have to call a crew to make an eastbound run from Tucson and Cochise, and then hope that the same crew could return on a westbound train to Tucson. UP would have to provide a facility at Cochise for crews to receive their paperwork and to wait for the arrival of the train they would take back to Tucson. It would also incur costs to deadhead crews back to Tucson (or from Tucson to Cochise) whenever eastbound and westbound trains did not match up so as to allow a single crew to complete a round trip under hours of service laws. UP would also have to provide additional trackage at Cochise for the interchange, so that the interchange process would not delay other trains.

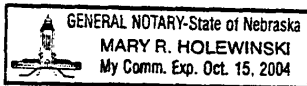
BNSF would incur similar costs at Vaughn. The closest BNSF crew change point is in Clovis, New Mexico. BNSF would have to try to use a single crew to shuttle trains between Clovis and Vaughn. It would have to build a facility at Vaughn to accommodate its crews and the requirements of conducting an interchange (*i.e.*, processing paperwork). It would also incur deadheading costs whenever a single crew could not complete a round trip between Clovis and Vaughn. BNSF would incur similar costs to develop a new interchange and crew change point at Defiance, New Mexico.

VERIFICATION

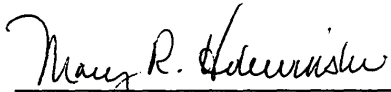
STATE OF NEBRASKA)
) ss:
COUNTY OF DOUGLAS)

I, Dale W. Salzman, being duly sworn, state that I have read the foregoing
Verified Statement, that I know its contents, and that those contents are true as stated.


Dale W. Salzman



Subscribed and sworn to before me on this 16th day of April, 2003.



Notary Public

My Commission expires: October 15, 2004

EXHIBIT No. 1

McKinley/Lee Ranch-Cochise
Comparison of Physical Characteristics and
Estimated Minimum Run Times and Associated Fuel Consumption

	<u>McKinley-Cochise</u>				<u>Lee Ranch-Cochise</u>			
	BNSF- Vaughn- UP	BNSF- Deming- UP	Δ	% Δ	BNSF- Vaughn- UP	BNSF- Deming- UP	Δ	% Δ
Miles	742	520	222	43	710	488	222	45
Rise and Fall (feet)	17,867	11,538	6,329	55	17,508	11,178	6,330	57
Curvature (degrees)	11,897	8,893	3,004	34	11,441	8,436	3,005	36
Fuel-Loaded (gallons)	9,069	5,762	3,307	57	9,621	5,915	3,706	63
Fuel-Empty (gallons)	7,404	5,081	2,323	46	7,661	5,265	2,396	46
Estimated Round-Trip Run Time (hr, min.)	31'44"	25'05"	6'39"	27	30'26"	23'27"	6'59"	30

Notes:

McKinley Train: 98 cars, 13,034 tons loaded, 2,450 tons empty

Lee Ranch Train: 110 cars, 15,400 tons loaded, 2,750 tons empty

EXHIBIT No. 2

McKinley/Lee Ranch-Irvington
Comparison of Physical Characteristics and
Estimated Minimum Run Times and Associated Fuel Consumption

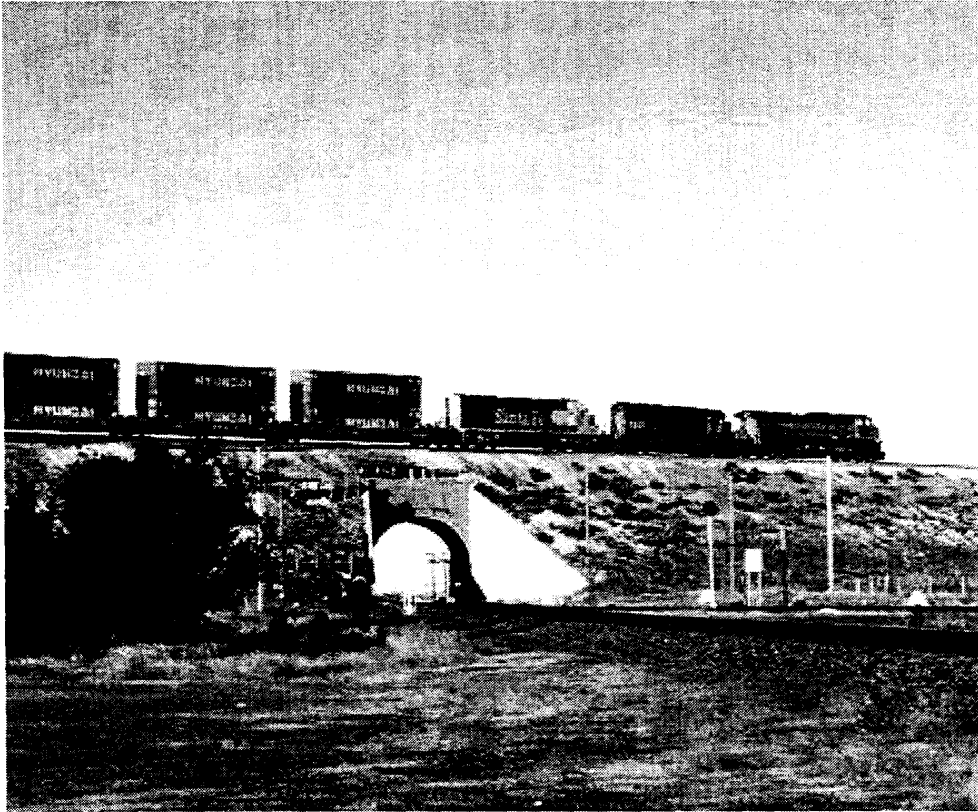
	<u>McKinley-Irvington</u>				<u>Lee Ranch-Irvington</u>			
	BNSF- Vaughn- UP	BNSF- Deming- UP	Δ	% Δ	BNSF- Vaughn- UP	BNSF- Deming- UP	Δ	% Δ
Miles	811	589	222	38	779	558	221	40
Rise and Fall (feet)	21,236	14,907	6,329	42	20,877	14,547	6,330	44
Curvature (degrees)	14,517	11,513	3,004	26	14,061	11,056	3,005	27
Fuel-Loaded (gallons)	10,147	6,733	3,414	51	9,771	6,360	3,411	54
Fuel-Empty (gallons)	8,754	6,357	2,397	38	8,487	6,160	2,327	38
Estimated Round Trip Run Time (hr, min.)	35'26"	28'44	6'42"	23	33'34"	26'45"	6'49"	25

Notes:

Train: 100 cars, 13,100 tons loaded, 3,000 tons empty

Vaughn route is via ACE Vaughn Yard and the proposed ACE connection to UP

EXHIBIT No. 3



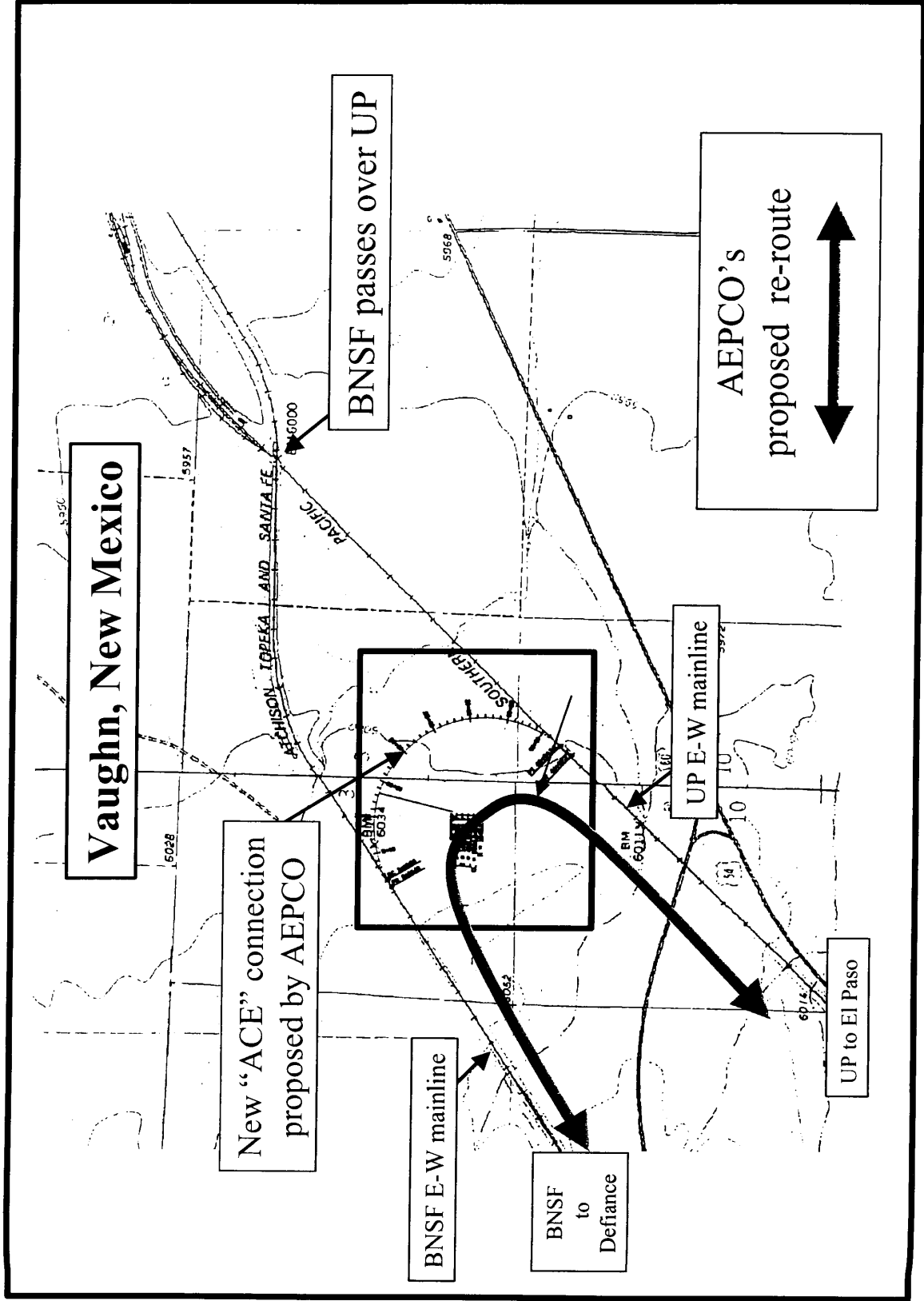
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Workpapers Index

UP Index of Electronic Workpapers

Section	File Name	Description
III.A.1		
	"AEPCO's Amended Requests.pdf"	AEPCO's Amended Discovery Requests.
	"AEPCO's Third Supplemental Requests.pdf"	AEPCO's Third Supplemental Discovery Requests.
	"UP Responses to Amended Requests.pdf"	UP responses to AEPCO's Amended Discovery Requests.
	"March 28 Transmittal Letter.pdf"	Letter transmitting UP traffic tapes to AEPCO.
	"December 4 Transmittal Letter.pdf"	Letter transmitting UP train movement data to AEPCO.
	"December 5 Transmittal Letter.pdf"	Letter transmitting UP traffic tapes and train movement data to AEPCO.
	"Peterson VS from FMC.pdf"	Testimony regarding traffic selection from <i>FMC</i> proceeding.
	"FN 5_AEPCO Wkpaper response.pdf"	AEPCO's Response to Railroads' Workpaper Request (relates to footnote 5 of Klick/Murphy VS)
	"Pg 3_AEPCO overhead traffic exceeds Sunset Route1.xls"	Spreadsheet summary comparing AEPCO's claimed revenues on El Paso-Cochise segment of ACE with actual revenues on Sunset route (relates to p. 8 of Klick/Murphy VS).
	"dbEl Paso Cochise Traffic.zip"	Database in Microsoft Access showing all traffic that actually traversed the El Paso-Cochise segment of the SARR in 2001 (relates to p. 8 of Klick/Murphy VS).
	"Pg 9_Qtrain Defn.doc"	Document relating to definition of Q trains (relates to p. 9 of Klick/Murphy VS).
	"Fn 9_BNSF Intermodal revenue.xls"	Spreadsheet comparing AEPCO's intermodal revenues for BNSF's segment of the ACE with BNSF's system-wide intermodal revenues (relates to footnote 9 of Klick/Murphy VS).
	"FN10_2001 Density by traffic type BNSF.xls"	Spreadsheet containing density analysis relating to BNSF's intermodal revenues (relates to footnote 9 of Klick/Murphy VS).

III.A.3.c			
	"Intermodal Margins Article.pdf"	Article regarding intermodal margins from <i>Progressive Railroading.com</i>	P
	"December 11 Divisions Letter.pdf"	Letter from AEPCO requesting information about information on UP traffic tapes.	HC
	"December 16 Divisions Letter.pdf"	Letter from UP describing information on traffic tapes produced to AEPCO.	HC
	"Intermodal Facilities Spending.pdf"	UP press release describing construction of a Chicago-area intermodal facility.	P
	"ACE Non-Coal Traffic and Revenue Forecast_Final CALCS.xls"	Spreadsheet containing analyses relating to percentage of UP's total revenues for traffic that AEPCO claims for the ACE (relates to p. 13 of Klick/MurphyVS).	HC
III.B			
	"TPS Runs.pdf"	UP train performance simulation data regarding AEPCO's proposed Vaughn-El Paso routing.	HC