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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

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MANAGEMENT
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COMPLAINANT ARIZONA ELECTRIC POWER COOPERATIVE, INC.'S
REBUTTAL EVIDENCE

NARRATIVE

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Docket No. 42058
AEPCO Rebuttal Evidence
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I Argument and Summary

ARIZONA ELECTRIC POWER	)	
COOPERATIVE, INC.,	)	
	)	
Complainant,	)	
	)	
v.	)	Docket No. 42058
	)	
THE BURLINGTON NORTHERN AND	)	
SANTA FE RAILWAY COMPANY and	)	
UNION PACIFIC RAILROAD COMPANY,	)	
	)	
Defendants.	)	
	)	

COUNSEL’S REBUTTAL ARGUMENT AND SUMMARY OF EVIDENCE

The ostensible purpose of a shipper's "rebuttal" evidence in a railroad rate case is to respond to the reply evidence submitted by the defendant railroad(s), particularly as to stand-alone cost ("SAC") issues which railroad defendants normally do not address on opening. In the past, railroads' reply submissions have consisted of extensive fact-specific criticism of virtually all aspects of the stand-alone railroad ("SARR") proposed by the shipper in its opening evidence.

In their Reply filings in this case, BNSF and UP wholly eschewed the established practice.¹ Instead, they largely limited their claims to the same SAC contentions presented in the “Petition to Require Submission of New Opening Evidence Or, Alternatively, to Dismiss” that UP filed on April 18, 2003 (“April 18 Petition”).²

The Railroads’ primary contention on Reply remains that there is no basis for AEPCO’s adjustments to the revenues for its SARR, the Apache, Cochise & Eastern Railway (“ACE”), and that AEPCO should have used “unadjusted” revenues from the Railroads’ traffic tapes rather than “adjusted” revenues derived by attempting to match the traffic tapes with the Railroads’ train and car movement records. The Railroads then

¹ BNSF and UP each submitted a separate Reply filing on SAC issues. AEPCO counsel is unaware of any other instances where defendants to a joint rate submitted separate evidence. The Railroads’ separate replies serve to increase AEPCO’s burden on rebuttal, and the filing of separate replies does not appear to be consistent with at least the spirit of the Board’s instructions for filing evidence in SAC rate cases in Ex Parte No. 347 (Sub-No. 3). It makes no sense for the Board to prescribe a standard format, only to allow joint defendants to make separate filings. Furthermore, in negotiating the procedural schedule, the Railroads insisted on the extended three and a half month period in the procedural schedule for filing reply evidence based on the need to integrate their arguments into a single filing (which was to have addressed AEPCO’s challenge to the Powder River Basin and Colorado rates as well as the New Mexico rates). Finally, UP’s claim that it had to file separately because it (rightly) could not join in BNSF’s arguments regarding the effect of the Settlement Agreement pertaining to rates from Colorado and PRB origins is wholly contrived, as it would have been a simple matter to include a footnote indicating UP’s lack of support for that portion of a joint Reply.

² AEPCO responded at length to those criticisms in its Reply to UP’s April 18 Petition filed on May 7, 2003. For convenience, a copy of AEPCO’s Reply is included as Exhibit I-4 to AEPCO’s Rebuttal Evidence.

use their alleged inability to discern the precise contours of the ACE's traffic group and revenues as justification for refusing to present substantive evidence on most aspects of the ACE's configuration, operating plan, operating expenses, and road property investment – as well as the development of stand-alone costs using the DCF model.

While, as explained infra, AEPCO continues to believe that a revenue adjustment is appropriate, and that BNSF's and UP's explanations as to the infirmities in their data lack credibility, AEPCO is nonetheless willing to accept the Railroads' claim. Accordingly, for purposes of this Rebuttal, AEPCO is basing its SAC calculations on use of the "unadjusted" revenues from the Railroads' traffic tapes.³ Moreover, AEPCO is doing so without making any adjustments for the costs and capacity associated with handling the trains associated with the now discarded revenue adjustments.

AEPCO's adoption of the Railroads' criticism is entirely permissible as a means to facilitate resolution of a central issue in dispute, and does not constitute impermissible rebuttal. See Docket No. 41989, Potomac Electric Power Company v. CSX Transportation, Inc. (Decision served Nov. 24, 1997) at 3; Docket No. 42070, Duke Energy Corp. v. CSXT Transportation, Inc. (Decision served March 25, 2003) ("Duke Energy") at 4. Moreover, to avoid a charge that it has engaged in improper rebuttal, AEPCO has been careful to avoid changing the configuration or operating plan of its

³AEPCO is also submitting an "Alternate" presentation that incorporates a revenue adjustment that is limited to just those trains for which AEPCO could locate no matching traffic tape/revenue records.

SARR, even though the certain result is to overstate the actually-needed road property investment and operating costs.

Removing the revenue adjustments has no impact on the outcome of the maximum reasonable rate analysis, i.e., the resulting SAC rates are still below the jurisdictional threshold. For the most recent period for which variable costs have been calculated, 1Q03, the tariff rate in high capacity aluminum cars was \$9.41 per ton, and AEPCO has calculated a variable cost of { } per ton and a jurisdictional threshold of \$6.06 per ton for Lee Ranch shipments.⁴ See Part II-A, infra. On Opening, AEPCO calculated a SAC rate level of \$4.03 per ton for the Lee Ranch movement in 1Q03. On Rebuttal, AEPCO's base SAC figure (using the unadjusted revenues) is \$5.67 per ton. While the Rebuttal figure is \$1.64 per ton higher than the Opening figure, it is still \$0.39 below the jurisdictional threshold. The use of the unadjusted revenues is thus unlikely to have any effect on the ultimate outcome of the maximum reasonable rate analysis, at least in the near term.

The alleged deficiencies in AEPCO's development of the ACE's revenues (which AEPCO has resolved on Rebuttal by accepting the Railroads' position) have nothing to do with the assessment of the ACE's configuration, operating plan and expenses, road property investment costs, or other aspects of the stand-alone traffic

⁴ The jurisdictional threshold is not 180% of the variable costs starting in 3Q01 because of AEPCO's treatment of the Southwestern Railroad Lease, as described in Part II-A, infra.

group. Regardless of whether AEPCO overstated the revenues available to the ACE, it was able to identify all of the trains that the ACE would move in the 2001 peak traffic year from the Railroads' train movement records. These included the issue and other coal trains, and all of the through freight trains that operated overhead on BNSF's east-west main line between Defiance and Vaughn, NM and on UP's east-west main between El Paso, TX and Cochise, AZ.

AEPCO's experts configured, constructed, staffed and equipped the ACE to handle these trains efficiently and produce transit times at least equal to, and generally faster than, the actual transit times that BNSF and UP experienced in 2001. The Railroads were well-aware of this, and have no legitimate excuse for failing to present whatever evidence they had on these matters. Their omission ought to be treated as a failure to reply thereby making AEPCO's evidence the best and only evidence of record. See, e.g., Bonneville, Ltd. v. Western Pacific R.R., 310 I.C.C. 71 (1960) (deciding case on the basis of complainant's evidence because defendant railroad failed to submit a required reply); Standard Lime & Stone Co. v. Norfolk & Western Ry., 294 I.C.C. 313, 317 (1955) (holding that when defendant railroad could have raised a counter-argument in its reply, but failed to do so, a later motion to strike on the same subject was improper). See also Burlington N. R.R. v. Huddleston, 94 F.3d 1413, 1415 (10th Cir. 1996) (Plaintiff had no further burden of proving its case when Defendant failed to file any pleading denying the allegations set forth by the plaintiff) (citing Fed. R. Civ. P. 8(d) ("Averments in a

pleading to which a responsive pleading is required ... are admitted when not denied in the responsive pleading.”))

The Board thus should not countenance any attempt by the Railroads to seize upon AEPCO’s use of the unadjusted revenues as the premise for seeking the opportunity to introduce additional criticisms of AEPCO’s SAC analysis. The Railroads are not entitled to a “second bite at the apple,” just as the Board has held that shippers must put in their entire case on opening, and may not make even minor adjustments to a SARR system on rebuttal.⁵ The Board would be guilty of a double standard if it were to permit the Railroads to submit additional responsive SAC evidence that could and should have been included in their Reply filing. Moreover, having failed to submit any evidence on most SAC matters, the Railroads should not be allowed to use any brief (if post-record briefs are ordered by the Board) as a vehicle for introducing additional evidence.

B. STAND-ALONE COSTS

Most of the Railroads’ Reply SAC “evidence” consists of legal argument. The primary contentions relate to the SARR’s traffic and revenues, including: (1) a challenge to the divisions proposed for certain cross-over traffic;⁶ (2) AEPCO’s decision

⁵ See, e.g., Duke Energy, *supra* (prohibiting the shipper, on rebuttal, from moving the eastern terminus of its SARR by 10 miles and from changing the configuration of one tunnel and related trackage).

⁶ BNSF has also added the remarkable claim that crossover traffic should be prohibited altogether.

to have the ACE carry the issue and a limited amount of other coal traffic over a route that is different (and longer) than the route used by the Railroads to move this traffic; and (3) the propriety of having the ACE use BNSF's existing trackage rights over UP between Vaughn and El Paso rather than constructing a line of its own either between these points or between Belen and Rincon, NM (thus duplicating the present route). The Railroads also assert that the ACE's insertion as an overhead carrier for most cross-over traffic would result in certain inefficiencies and increased costs in the residual incumbents' operations which should be taken into account, even though there is no off-SARR rerouting of that traffic.

AEPCO responds in detail to the Railroads' SAC contentions in Parts III-A through III-F, infra, and it presents the results of its revised DCF analysis (modified from Opening primarily to eliminate the upward revenue adjustment which is the principal focus of the Railroads' SAC Reply Evidence) in Part III-H, infra. AEPCO presents below a brief summary of its Rebuttal evidence and argument on the principal SAC issues raised by the Railroads.

1. Traffic and Revenues

In Part III-A, AEPCO addresses the Railroads' primary claim that the upward revenue adjustment AEPCO made is unwarranted. AEPCO explains the necessity of starting the identification of its traffic group with train event records rather than traffic tape data and the difficulty of matching the Railroads' revenue records to their

traffic tape data. AEPCO explains that it presented the revenue adjustment on Opening as a means of adjusting for the discrepancies in the two data sources (for which the Railroads appear to be responsible), but concludes, particularly in light of criticisms of the resulting volume of BNSF intermodal traffic, that the revenue adjustment appears to overstate at least some categories of traffic. AEPCO eliminates the revenue adjustment for that reason. AEPCO notes that even without the revenue adjustment, the SAC results are still below the jurisdictional threshold. AEPCO also presents an Alternate analysis based on a revenue adjustment limited to just those trains for which there were no matching revenue records in the BNSF and UP traffic data. See III-A-4 to 17, infra.

AEPCO next explains that the presence of the revenue adjustment had no impact on the Railroads' ability to analyze other aspects of AEPCO's traffic group (or other elements of AEPCO's SAC presentation) on Opening. In other words, the revenue adjustment affected only the volume and revenues for the ACE's traffic, and any criticisms that the Railroads' might have made of the inclusion of particular volumes and revenues (e.g., failure to cover off-SARR costs or presence of local traffic) would be equally valid, or invalid, regardless of the revenue adjustment. Furthermore, while AEPCO is eliminating the revenue adjustment, AEPCO is not eliminating any costs or expenses associated with handling the foregone volumes. Accordingly, elimination of the revenue adjustment should not become a basis for allowing the Railroads to file any additional evidence. See III-A-17 to 19, infra.

AEPCO then addresses the Railroads' (primarily BNSF's) contentions concerning the presence of local non-coal traffic in the ACE's traffic group and concludes that such contentions are groundless. AEPCO also concludes that BNSF's claims concerning non-coal traffic originating or terminating at Phoenix are also misplaced, although AEPCO also notes that the exclusion of such traffic would have a minimal impact upon the SAC results. See III-A-19 to 25, infra.

AEPCO then turns to the Railroads' extended claims that the ACE relies excessively on intermodal and other non-coal cross-over traffic that yields only "marginal" returns and that ACE's favorable results arise only from distortions or manipulation under the modified mileage block prorate ("MMP") method for calculating divisions on such traffic.

AEPCO explains that such traffic is not as marginal as claimed by the Railroads and that the rates on such traffic are actually relatively high compared with the rates on coal traffic. AEPCO also explains that even seemingly "marginal" traffic can yield very desirable returns if there is sufficient traffic density, as is the case with the ACE. AEPCO further explains that the Railroads have overstated the estimated costs for such traffic, in particular by failing to acknowledge or address the limitations in the Phase III URCS costing as applied to intermodal traffic. See III-A-33 to 44, infra.

AEPCO also addresses the Railroads' contentions regarding use of the MMP method for determining divisions on the ACE's overhead cross-over traffic

(assuming arguendo that the Railroads have met the threshold standards for challenging the MMP method given the limitations in their disclosure of market divisions data and their failure to rely on that data in any way). AEPCO explains that the MMP method is not inherently arbitrary or irrational, but instead represents a sound, reasonable, and actually conservative approximation of commercial realities for overhead divisions. AEPCO further explains that SAC principles require that shippers be allowed to include cross-over traffic, and that inclusion of such traffic is particularly appropriate here since the ACE was precluded from building out to serve PRB coal traffic that passes over the ACE's route. AEPCO also shows how the MMP method understates the overhead divisions that both BNSF and UP achieve in the real world and that the MMP method leaves the residual incumbents with R/VC ratios that are only slightly reduced from the through movement R/VC ratios of the defendants (i.e., the ratios without the introduction of the ACE as an overhead carrier). AEPCO thus demonstrates that the Railroads' objections to use of the MMP method are unfounded. See III-A-45 to 71, infra.

In summary, AEPCO has accepted the Railroads' position that it improperly adjusted the ACE's revenues by eliminating the adjustment, thus mooting their principal SAC contention, and shows that the Railroads' other challenges to AEPCO's traffic group and to the divisions for cross-over traffic are without substance. AEPCO's presentation on traffic and revenues constitutes the best evidence of record and should be accepted by the Board.

2. ACE System/Configuration

The ACE system consists of two east-west segments and a north-south segment connecting the two east-west segments (which are used to originate and terminate the issue traffic). The east-west segments, which the ACE will construct, replicate BNSF's main line between Defiance and Vaughn, NM, and UP's main line between El Paso, TX and Cochise, AZ. The north-south segment follows UP's line between Vaughn and El Paso. The ACE will operate over this line using existing BNSF trackage rights over UP. AEPCO configured both east-west segments to essentially replicate the existing track configurations and traffic-control systems on these high-density BNSF and UP lines.⁷ It did so to assure that the ACE can adequately serve its 2001 peak-year traffic, which consists, in addition to the issue and a few other coal movements, of essentially all of BNSF's and UP's non-coal freight traffic moving in through trains over the same east-west line segments.

In their separate Reply filings, neither BNSF nor UP challenged any aspect of the ACE's track, yard or facilities configuration or its CTC traffic control and communications systems – although, as explained in Parts III-B and III-C, infra, they could easily have done so because they were well-aware of the trains the ACE would

⁷ As AEPCO explained on Opening, it actually enhanced the capacity of the Defiance-Vaughn line segment compared with BNSF's present capacity, while eliminating Amtrak and local freight trains that use this line. See AEPCO Op. Narrative at III-B-8 to 11.

operate (if not the precise number of ACE loaded cars or the resulting revenues).⁸ The Defendants' only challenges to AEPCO's Opening Evidence on the ACE system related to (1) AEPCO's rerouting of the issue and a small volume of other coal traffic from BNSF's current Belen-Rincon-Deming route to the ACE's longer route via Vaughn and El Paso, and (2) the ACE's use of BNSF trackage rights over UP's Vaughn-El Paso line rather than construction of its own north-south line to connect the two east-west segments of its system.

AEPCO responds in detail to the Railroads' Reply evidence on both of these issues in Part III-B, infra. With respect to the rerouting issue, AEPCO demonstrates that use of the longer route via Vaughn and El Paso is fully consistent with the Coal Rate Guidelines, 1 I.C.C.2d 520, 543-44 (1985) ("Guidelines"), and has already been approved by the Board in its Decision in this proceeding served August 20, 2002 ("August 2002 Decision"). AEPCO also demonstrates that, notwithstanding the additional distance (222 miles) compared with the Railroads' present routing for the issue traffic via Belen-Rincon-Deming, it is more efficient for the ACE to use the longer route because doing so maximizes production economies (i.e., economies of density and utilization of available

⁸ As also explained in Parts III-B and III-C, infra, AEPCO has not changed the ACE trains or train sizes and weights from Opening even though elimination of the revenue adjustment would obviously result in traffic reductions. Nor has it altered the ACE configuration or Operating Plan as a result of any such reductions.

plant capacity). See III-B-5 to 8, infra.⁹ Finally, AEPCO demonstrates that the ACE is able to transport the affected trains faster (i.e., at lower round-trip transit cycle times) via the Vaughn-El Paso route than the real-world BNSF and UP did in the 2001 peak year, while also improving transit times for non-coal traffic. See III-B-9 to 10 and III-C-6 to 7, infra. Thus, AEPCO has shown that the new route “is reasonable and would meet the shipper’s transportation needs.” Docket No. 42056, Texas Municipal Power Agency v. Burlington Northern and Sant Fe Railway Co., Decision served March 24, 2003 (“TMPA”) at 21.

With respect to the ACE’s use of existing BNSF trackage rights between Vaughn and El Paso rather than construction of a north-south line of its own, AEPCO responds in detail to the Railroads’ criticisms of this approach at III-B-14 to 22, infra. In particular, AEPCO demonstrates that a SARR’s use of existing cost-sharing arrangements between railroads is fully consistent with SAC principles regardless of whether the arrangements are between co-defendants or between a defendant and a third-party railroad, and regardless of whether the co-defendants to a complaint involving a joint movement would agree to use such an arrangement for that movement in the real world.

⁹ AEPCO has also included all relevant costs, including road property investment costs and operating costs, resulting from use of the longer route. On Rebuttal, AEPCO also provides for the ACE to bear increases in car costs that would be incurred by the two affected shippers who supply their own cars (AEPCO and Tucson Electric Power Company) as a result of the increased mileage due to the re-route. See III-B-12 to 13, infra.

AEPCO also shows that the ACE's use of such arrangements between co-defendants to transport joint complaint traffic was previously approved by the Board in its August 2002 Decision in this case, and that the Defendants' attempt to characterize the holding of that decision as limited to single-line traffic is erroneous. Finally, in response to an argument that a SARR cannot avoid the ownership costs entailed in providing service over rail lines that one or the other of the defendants had to construct, AEPCO demonstrates that the fees paid by BNSF to UP for use of the Vaughn-El Paso line under the applicable joint facility agreement cover all of UP's relevant costs, including a return on UP's investment in the line. See III-B-19 to 20 and Exhibit III-B-3, infra.

3. ACE Operating Plan and Operating Expenses

In Part III-C of its Opening Evidence, AEPCO presented a detailed operating plan for the ACE, developed primarily by its highly-qualified rail operations expert, Frederic W. Yocum, Jr. AEPCO also presented, in Part III-D, a detailed explanation of the ACE's peak-year (2001) operating expenses, based on the configuration and operating plan developed by Mr. Yocum.

Again, the Railroads chose not to present any responsive evidence on either the substance or the details of the ACE's operating plan and operating expenses, as presented by AEPCO on Opening. Rather, their separate Reply filings on operational issues (Part III-C) were limited to: (1) a brief and generalized discussion (by BNSF only) of the string diagram analysis used by AEPCO's experts to verify the ACE's capacity to

handle its peak-period traffic efficiently and to develop certain operating statistics and operating expenses used as inputs in the DCF model, and (2) speculation as to how the ACE's presence as an overhead carrier operating between Defiance and Vaughn and between Vaughn and Cochise might affect UP's and BNSF's operations on off-SARR segments in handling this cross-over traffic as residual incumbents.

AEPCO responds to BNSF's brief discussion of its string diagram model at III-C-2 to 7, infra. BNSF's only real claim is that because the Board rejected a similar model's results in TMPA as inadequately supported, the results of applying the string model should also be rejected in this case. However, AEPCO demonstrates that it has corrected the deficiencies in the model noted by the Board in TMPA (and briefly summarized by BNSF at page III-C-1 of its SAC Reply), and that the model's results in this case should be accepted by the Board – particularly since the Railroads presented neither any modeling evidence of their own nor any specific criticisms of the ACE configuration, operating plan and operating expenses.

With respect to the inclusion of overhead cross-over traffic in the ACE's traffic group, the Railroads presented evidence concerning the impacts of the ACE's presence on their off-SARR operations as residual incumbents in the apparent hope that the Board would expand its TMPA holding (which was limited only to the effects of off-SARR rerouting of crossover traffic) to all cross-over traffic, including traffic that is not

rerouted on the residual incumbents' lines.¹⁰ As AEPCO explains at III-C-8 to 11, infra, the Defendants' position that a SARR should bear any cost increases that a residual incumbent might incur as a result of the SARR's inclusion of non-rerouted cross-over traffic has never been accepted by the Board in any SAC rate case, and is completely inconsistent with SAC principles.¹¹

In addition to demonstrating that the Railroads' position on off-SARR costs is utterly at odds with SAC traffic-grouping principles, AEPCO demonstrates that, in fact, the residual BNSF can continue to handle local traffic out of its Belen Yard or the new ACE interchange points at Vaughn and Defiance, and that how BNSF handles this traffic (which has been removed from the ACE's traffic group) is irrelevant for SAC purposes. See III-C-12 to 16, infra. AEPCO also demonstrates that, assuming the issue is relevant at all, insertion of the ACE as an overhead carrier between Defiance-Vaughn and Cochise-El Paso would enable BNSF and UP to re-arrange their crew districts in a

¹⁰ In TMPA The Board held only that the SARR should account for and bear costs attributable to operational changes on the residual incumbent resulting from the off-SARR re-routing of cross-over traffic. *Id.* at 22. In contrast, there is no rerouting of off-SARR traffic in this case.

¹¹ It is well-established that under the Guidelines' traffic grouping principles, a shipper may select a subset of the incumbent's available traffic, without the SARR's having to account for the incumbent's handling of the remaining traffic the shipper has chosen not to select. See the discussion at pp. III-C-9 to 11, infra. To hold otherwise would impose an impermissible entry barrier and would eviscerate shippers' ability to include cross-over traffic in a SARR's traffic group.

manner that actually reduces, rather than increases (as the Railroads claim), their crew costs in these corridors. See III-C-16 to 29, infra.¹²

4. Results of DCF and SAC/Maximum Reasonable Rate Analysis

Part III-G of AEPCO's Rebuttal Evidence describes the application of the Board-prescribed discounted cash flow ("DCF") model to implement the SAC analysis under the constrained market pricing of the Coal Rate Guidelines. In particular, AEPCO explains that the ACE does achieve the efficiencies contemplated for a least-cost, most-efficient carrier. AEPCO also explains how use of the RCAF-A to adjust the ACE's future operating expenses is appropriate, notwithstanding the contrary outcome in TMPA (which involved a coal-only railroad, as contrasted with the ACE, which is largely a non-coal railroad).

Part III-H presents the results of the SAC/DCF analysis and contrasts it with the results under the jurisdictional threshold.¹³ The analysis demonstrates that the jurisdictional threshold exceeds the SAC level for movements from both origins in both

¹² The Railroads also assert that the ACE should be required to bear the cost of facilities needed to accommodate BNSF train crews at the new interchange/crew-change points resulting from the ACE's operations. AEPCO shows in Part III-F, infra, that – assuming it were appropriate for a SARR to bear such costs – the cost of the additional crew facilities pales in comparison to the savings the Railroads are likely to realize from the turnaround crew operations that the ACE's presence makes possible. AEPCO has not reflected either the cost of the additional BNSF and UP crew facilities or the much greater crew-cost savings BNSF and UP would realize in its revised DCF calculations.

¹³ Variable costs and the jurisdictional threshold are discussed in the next section of this Part I.

high-capacity and low-capacity cars, with or without the limited revenue adjustment. The following table presents the maximum rate analysis for the high-capacity (aluminum) cars that AEPCO now uses:

TABLE I-1 Summary of Maximum Rate Calculations for Issue Traffic (3Q02 through 1Q03 -- High Capacity Cars)							
<u>Quarter</u>	<u>Mine</u>	<u>Rate per Ton</u>	<u>Var. Cost per Ton ^{1/}</u>	<u>Jur. Thr. per Ton ^{1/}</u>	<u>SAC Rate per Ton ^{2/}</u>		<u>Max. Rate per Ton ^{3/}</u>
					Base	Atl.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3Q02	Lee Ranch	\$9.23	{ }	\$5.85	\$5.53	\$5.03	\$5.85
	McKinley	9.23	{ }	6.53	5.53	5.03	6.53
4Q02	Lee Ranch	9.23	{ }	5.82	5.60	5.09	5.82
	McKinley	9.23	{ }	6.92	5.60	5.09	6.92
1Q03	Lee Ranch	9.41	{ }	6.06	5.67	5.16	6.06
	McKinley	9.41	{ }	6.97	5.67	5.16	6.97
Source: ^{1/} Exhibits II-A-44 through II-A-50. { } ^{2/} Exhibits III-H-3 and III-H-4. ^{3/} Greater of Columns (5), (6), or (7).							

The following table presents the equivalent analysis for the low-capacity (steel) cars that AEPCO has used in the past:

TABLE I-2 Summary of Maximum Rate Calculations for Issue Traffic (1Q01 through 3Q02 -- Low Capacity Cars)							
<u>Quarter</u>	<u>Mine</u>	<u>Rate per Ton</u>	<u>Var. Cost per Ton ^{1/}</u>	<u>Jur. Thr. per Ton ^{1/}</u>	<u>SAC Rate per Ton ^{2/}</u>		<u>Max. Rate per Ton ^{3/}</u>
					Base	Atl.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1Q01	Lee Ranch	\$9.35	\$4.27	\$7.69	\$5.85	\$5.32	\$7.69
2Q01	Lee Ranch	9.35	3.86	6.95	5.82	5.30	6.95
3Q01	Lee Ranch	9.35	4.17	7.51	5.81	5.29	7.51
4Q01	Lee Ranch	9.35	{ }	6.98	5.79	5.27	6.98
1Q02	Lee Ranch	9.54	{ }	6.65	5.86	5.33	6.65
2Q02	Lee Ranch	9.54	{ }	6.91	5.77	5.25	6.91
	McKinley	9.54	{ }	7.79	5.77	5.25	7.79
3Q02	Lee Ranch	9.54	{ }	6.66	5.71	5.20	6.66
	McKinley	9.54	{ }	7.50	5.71	5.20	7.50
Source: ^{1/} Exhibits II-A-36 through II-A-43. { } ^{2/} Exhibits III-H-3 and III-H-4. ^{3/} Greater of Columns (5), (6), or (7).							

Additionally, AEPCO has calculated total reparations for shipments through June 2, 2003, at approximately \$6.3 million (before interest), assuming that the jurisdictional threshold for the second quarter of 2003 is the same as for the first quarter of 2003. Part III-G further notes that the Railroads did not take issue with AEPCO's position on the appropriate interest rate or on reimbursement of the STB filing fee.

Part III-G also addresses BNSF's claim that it should not be subject to any reparations because of the { } Settlement Agreement. AEPCO explains that BNSF has misconstrued the provisions and economic basis of the Settlement

Agreement as well as the applicable law concerning settlements with one party to a joint and several obligation. AEPCO further explains that the Settlement Agreement {

}

C. MARKET DOMINANCE/JURISDICTIONAL THRESHOLD

In Part II-A of this Rebuttal Evidence, AEPCO restates the variable costs associated with the subject service to reflect adjustments warranted by additional information submitted by the Railroads in their Joint Reply, and demonstrates that the disputed common carrier rates exceed the Board's 180% jurisdictional threshold for each quarter encompassed within AEPCO's evidence.¹⁴

Part II-A also identifies the many significant overstatements in the Railroads' Reply calculations of variable costs, which chiefly include: (1) improperly treating BNSF's { } payment to the Southwestern Railroad Company, Inc. ("SWRR") as a variable cost rather than an offset to revenue; (2) improperly including certain expenses associated with operations over the SWRR line as BNSF variable costs; (3) dramatically overstating locomotive capital costs (i.e., locomotive spare margin, cycle times, numbers of locomotives, and locomotive lease costs); and (4) improperly relying

¹⁴ The Railroads have not disputed AEPCO's showing on Opening that they possess qualitative market dominance over the movements in issue.

on system average costs where movement-specific adjustments are appropriate (e.g., roadway maintenance, road property return, locomotive fuel, etc.). These issues are addressed in detail in Part II-A, infra.

The single most consequential variable cost dispute between the parties relates to the treatment of the SWRR Lease.¹⁵ The Railroads treat BNSF's payments to SWRR for handling the issue (and other) traffic, {
} as a variable cost of service, and in so doing, seek to extract an 80% mark-up over the actual level of the payment. The Railroads also improperly seek to include, in their variable cost evidence, costs that are associated with operations over the SWRR line, despite the fact that {
}
} AEPCO responds in detail to each of these arguments at pp. II-A-10 to 27, infra, and explains why it has submitted the best evidence of record regarding the treatment of payments under the SWRR Lease.

The jurisdictional threshold rate levels resulting from proper calculations of the Railroads' variable costs are set forth at p. II-A-78, infra, and in AEPCO Rebuttal Exhibits II-A-36 to II-A-50. Tables I-1 and I-2, supra, show that the Railroads' challenged rates significantly exceed the applicable jurisdictional threshold.

¹⁵ On September 7, 2001, BNSF and SWRR entered into a Lease Agreement (the "SWRR Lease") under which BNSF leased its line between Rincon and Deming, NW to the SWRR. This line is used to provide common carrier service to AEPCO.

D. CONCLUSION

AEPCO has met its burden of showing that the Railroads possess market dominance over the transportation of coal from the subject New Mexico origins to the Apache generating station, that the Railroads' rates for such transportation exceed a maximum reasonable level, and that AEPCO is entitled to relief. Accordingly, AEPCO requests the Board to prescribe maximum reasonable rates at the levels shown in Tables I-I and I-2, supra, and to award reparations payable by BNSF and UP to AEPCO for all charges collected since January 2, 2001, in excess of the rates prescribed by the Board together with appropriate interest, as well as reimbursement of the filing fee.

Respectfully submitted,

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Dated: July 3, 2003

Attorneys for Complainant

CERTIFICATE OF SERVICE

I hereby certify that on this 3rd day of July, 2003, I caused copies of
Complainant's Rebuttal Evidence, including both the Highly Confidential and Public
versions thereof, to be served by hand upon counsel for Defendants, as follows:

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II-A Quantitative Market Dominance

II. A. MARKET DOMINANCE – QUANTITATIVE EVIDENCE

In this Rebuttal, AEPCO responds to the Railroads' Joint Reply Evidence on variable costs ("Joint Reply") and identifies the methodological and empirical flaws by which the Railroads continue to overstate the actual costs of providing unit train coal service to AEPCO. AEPCO shows that the best evidence of record supports Board jurisdiction to adjudicate the reasonableness of the Railroads' common carrier rates for transportation of coal from the McKinley and Lee Ranch Mines (the "New Mexico Origins") to the Apache power plant near Cochise, AZ.

Table II-A-30 below compares AEPCO's Reply and restated Rebuttal variable costs:

TABLE II-A-30 Comparison of AEPCO Variable Costs (AEPCO's Rebuttal v. Reply)					
Quarter	Origin	Type of Cars	AEPCO Reply Var. Cost ^{1/}	AEPCO Rebuttal Var. Cost ^{2/}	Difference: (Rebuttal Less Reply)
1Q01	Lee Ranch	Low Capacity	\$4.31	\$4.27	(\$0.04)
2Q01	Lee Ranch	Low Capacity	3.91	3.87	(0.04)
3Q01	Lee Ranch	Low Capacity	4.21	4.18	(0.03)
4Q01	Lee Ranch	Low Capacity	{ }	{ }	{ }
1Q02	Lee Ranch	Low Capacity	{ }	{ }	{ }
2Q02	Lee Ranch	Low Capacity	{ }	{ }	{ }
	McKinley	Low Capacity	{ }	{ }	{ }
3Q02	Lee Ranch	Low Capacity	{ }	{ }	{ }
		High Capacity	{ }	{ }	{ }
	McKinley	Low Capacity	{ }	{ }	{ }
		High Capacity	{ }	{ }	{ }
4Q02	Lee Ranch	High Capacity	{ }	{ }	{ }
	McKinley	High Capacity	{ }	{ }	{ }
1Q03	Lee Ranch	High Capacity	{ }	{ }	{ }
	McKinley	High Capacity	{ }	{ }	{ }
^{1/} AEPCO's Reply variable costs were reported in Reply Table II-A-29 at II-A-102. ^{2/} AEPCO's Rebuttal variable costs are reported in Rebuttal Exhibits II-A-36 through II-A-50.					

Table II-A-31 below sets forth the revenue/variable cost ratios resulting from AEPCO's rebuttal cost determinations:

TABLE II-A-31 AEPCO's Rebuttal Variable Costs and R/VC Percentages						
Quarter	Origin	Type of Cars	Rate Per Ton	BNSF/UP Revenue Per Ton^{1/}	AEPCO Rebuttal Var. Cost^{2/}	R/VC ^{3/}
1Q01	Lee Ranch	Low Capacity	\$9.35	\$9.35	\$4.27	219%
2Q01	Lee Ranch	Low Capacity	9.35	9.35	3.87	242
3Q01	Lee Ranch	Low Capacity	9.35	9.35	4.18	224
4Q01	Lee Ranch	Low Capacity	9.35	{ }	{ }	{ }
1Q02	Lee Ranch	Low Capacity	9.54	{ }	{ }	{ }
2Q02	Lee Ranch	Low Capacity	9.54	{ }	{ }	{ }
	McKinley	Low Capacity	9.54	{ }	{ }	{ }
3Q02	Lee Ranch	Low Capacity	9.54	{ }	{ }	{ }
		High Capacity	9.23	{ }	{ }	{ }
	McKinley	Low Capacity	9.54	{ }	{ }	{ }
		High Capacity	9.23	{ }	{ }	{ }
4Q02	Lee Ranch	High Capacity	9.23	{ }	{ }	{ }
	McKinley	High Capacity	9.23	{ }	{ }	{ }
1Q03	Lee Ranch	High Capacity	9.41	{ }	{ }	{ }
	McKinley	High Capacity	9.41	{ }	{ }	{ }
^{1/} { — }						
^{2/} See Table II-A-30, <u>supra</u> .						
^{3/} BNSF/UP Revenue Per Ton divided by AEPCO Rebuttal Variable Cost.						

Finally, Table II-A-32 below compares AEPCO's Rebuttal Variable Costs with the Railroads' Reply Variable Costs, and shows that the Railroads' evidence continues to reflect significantly higher variable costs than AEPCO's evidence:

TABLE II-A-32 Comparison of Variable Costs (AEPCO's Rebuttal vs. the Railroads' Joint Reply)					
Quarter	Origin	Type of Cars	AEPCO Rebuttal Var. Costs^{1/}	Railroad Reply Var. Costs^{2/}	Difference (col. 5- col. 4)
(1)	(2)	(3)	(4)	(5)	(6)
1Q01	Lee Ranch	Low Capacity	\$4.27	\$5.28	\$1.01
2Q01	Lee Ranch	Low Capacity	3.87	4.79	0.92
3Q01	Lee Ranch	Low Capacity	4.18	5.14	0.96
4Q01	Lee Ranch	Low Capacity	{ }	5.26	{ }
1Q02	Lee Ranch	Low Capacity	{ }	4.94	{ }
2Q02	Lee Ranch	Low Capacity	{ }	5.07	{ }
	McKinley	Low Capacity	{ }	5.85	{ }
3Q02	Lee Ranch	Low Capacity	{ }	4.93	{ }
		High Capacity	{ }	4.37	{ }
	McKinley	Low Capacity	{ }	5.50	{ }
		High Capacity	{ }	4.78	{ }
4Q02	Lee Ranch	High Capacity	{ }	4.37	{ }
	McKinley	High Capacity	{ }	5.17	{ }
1Q03	Lee Ranch	High Capacity	{ }	4.52	{ }
	McKinley	High Capacity	{ }	5.20	{ }
^{1/} See Table II-A-30, <i>supra</i> . ^{2/} See Joint Reply at II-3.					

Additional supporting detail and a comparison of the parties' revenue/variable cost ratios are set forth in AEPCO Rebuttal Exhibit II-A-30. Variable cost differences by causal factor are shown in AEPCO Rebuttal Exhibit II-A-31.

1. Variable Costs

a. General Cost Estimation Procedures

AEPCO's cost restatements in this Rebuttal continue to use the Railroads' 2001 URCS for each quarter in 2001, but AEPCO based its 2002 and 2003 cost restatements on 2002 BNSF and UP URCS costs that were developed using standard, Board-accepted procedures.¹ Base year 2001 URCS costs were indexed to each quarter from the first quarter of 2001 ("1Q01") through the fourth quarter of 2001 ("4Q01") wage and price levels, while base year 2002 URCS costs were indexed from 1Q02 through 1Q03.

As is described in greater detail, infra, the parties continue to disagree regarding the proper treatment of Account 76 and Account 90.

b. Summary of the Parties' Variable Cost Evidence

In its Reply Evidence, AEPCO identified a number of reasons why the variable cost calculations contained in the Railroads' Opening presentation were

¹ The 2002 BNSF and UP URCS were calculated using the 2002 cost of capital accepted by the Board in Ex Parte No. 558 (Sub-No. 6), Railroad Cost of Capital – 2002, Decision served June 19, 2003.

overstated. In their Joint Reply, the Railroads corrected some of those mistakes. In particular:

1. The Railroads submitted cost evidence for the first time regarding McKinley;
2. The Railroads submitted T&O/cost evidence for the first time regarding 3Q02, 4Q02, and 1Q03;
3. The Railroads reduced their locomotive spare margin calculations;
4. The Railroads reduced their cycle time calculations;
5. The Railroads used 2002 URCS results for 2002 and 2003 costs; and
6. The Railroads accepted AEPCO's evidence as to:
 - the timing of the 2Q02 McKinley movement (Joint Reply at II-3 n.5);
 - average lading weights (with one exception) (id. at II-12);
 - tare weight per car (with one exception) (id. at II-13);
 - length of destination loop track (id. at II-17);
 - BNSF locomotive consist sizes (with certain exceptions) (id. at II-18);
 - the removal of cycles to non-New Mexico Origins in the cycle time calculations (id. at II-20 n.42); and
 - the indexing of non-T&E wage expenses (id. at II-66).

AEPCO's Rebuttal Evidence makes a number of modifications in response to points that the Railroads made, or to further information that the Railroads provided, in

their Joint Reply. Specifically, AEPCO's Rebuttal restatement reflects the following revisions to the development of variable costs in AEPCO's Reply:

1. In response to the Railroads' Joint Reply at II-65 to 66 and the availability of more current indices, AEPCO bases its Rebuttal index on the most current available indices;
2. In response to the Railroads' Joint Reply at II-39 n.67, AEPCO's Rebuttal modifies its allocation of the Southern Pacific acquisition premium in its calculation of UP's line-specific road property investment return and depreciation costs;
3. In response to the Railroads' Joint Reply at II-8, {

} —
4. In response to the Railroads' Joint Reply at II-22, AEPCO has modified its calculation of the number of substitute cars to reflect CEFX cars that the Railroads, for the first time, show are leased by the Railroads;
5. In response to the Railroads' Joint Reply at II-21 to 22, AEPCO has adopted the Railroads' methodology to determine the cost for railroad-supplied substitute cars;
6. In response to the Railroads' Joint Reply at II-17 and II-60 to 62 (discussing AEPCO's use of UP records for determining the size of the locomotive consists), AEPCO has edited the UP records to remove those records containing a number of locomotives that is obviously in error and adopted the Railroads' locomotives per train for 3Q02, 4Q02, and 1Q03 for the BNSF segment;
7. In response to the Railroads' Joint Reply, AEPCO has made the following additional revisions to its Traffic & Operating parameters:
(a) at McKinley, AEPCO has adopted the Railroads' treatment using

Lee Ranch tare weight for high capacity cars for the corresponding quarter; (b) AEPCO has included all trains for 1Q03 in determining T&O characteristics; and (c) AEPCO has accepted the Railroads' miles for McKinley movements;

8. In response to the Railroads' Reply at II-3, AEPCO now reflects the 1Q03 tariff rate of \$9.41 per ton;
9. In response to the Railroads' Joint Reply at II-4, AEPCO now uses a 2002 URCS for both BNSF and UP costs in 2002 and 2003;
10. In response to the Railroads' Joint Reply at II-47, AEPCO has modified slightly its calculation of locomotive maintenance costs;
11. In response to the Railroads' Joint Reply at II-49 to 55, AEPCO has modified its calculation of crew wage costs to reflect the 2002 special study factor as well as 2002 URCS variabilities and departmental overhead factors;
12. In response to the Railroads' Joint Reply treatment of UP 3Q02 wages, AEPCO has modified its treatment of these wages to adopt the Railroads' treatment which rejects the use of partial data for 3Q02 and adopts, instead, indexed 2Q02 wages;
13. In response to the Railroads' objection at II-64, AEPCO's Rebuttal now includes an additional 173 EOTD units in its Ownership Expenses; and
14. In response to the Railroads' objection at II-23 to 26, AEPCO has modified its development of switching minutes.

The principal flaws remaining in the Railroads' determination of variable costs are as follows:

1. The Railroads erred by treating the SWRR {
} is already stated at the
retail level;

2. The Railroads erred by treating certain costs {
} as BNSF costs;
3. The Railroads erred by using a non-standard URCS formula that substituted Account 90 for Account 76;
4. The Railroads overstated roadway maintenance costs by using URCS system average maintenance-of-way costs and not those calculated using the Speed Factored Gross Ton ("SFGT") formula;
5. The Railroads overstated road property investment return and depreciation costs because they used system average costs for both carriers and made no adjustment for the service-specific, line segment-specific investment and depreciation data by valuation section provided by UP in discovery;
6. The Railroads overstated locomotive capital costs because they did not use current lease payment rates, and they overstated spare margins;
7. The Railroads overstated locomotive maintenance variable costs because they did not reflect the actual maintenance costs that may be derived from the Railroads' leases and other related agreements;
8. The Railroads overstated variable locomotive fuel costs because they do not reflect movement-specific fuel consumption;
9. The Railroads overstated variable crew wage costs by applying an incorrect markup ratio to the wage data developed in a special study;
10. The Railroads inflated switching costs by overstating both the yard and road switching minutes required for the AEPCO service; and
11. The Railroads understated variable loss and damage costs by relying on system averages rather than specific cost information available from and produced by the Railroads in discovery.

c. **The Southwestern Railroad Lease Issue**

The single greatest cost disparity between the parties in this case arises from the treatment of BNSF's September 7, 2001 Lease Agreement with the Southwestern Railroad Company, Inc. (the "SWRR Lease").² The direct impact of this issue alone (i.e., not including the impact of the Railroads' associated effort to double count costs that should be attributed to SWRR), accounts for approximately { } of the variable cost difference between the parties for service from Lee Ranch in 2Q02.

Under the SWRR Lease, SWRR leased and assumed common carrier responsibility to provide service over the approximately 54-mile former BNSF rail line from Deming to Rincon, NM. In exchange for the SWRR's providing {

_____ } See id. at ¶¶ 23, 2(b), and 19(b) (emphasis added).³ Elsewhere, the SWRR Lease similarly provides that {

_____ } Id. at ¶ 22(b) (emphasis added).⁴

² AEPCO included the SWRR Lease in its Reply Workpapers at pp. 0003-0059.

³ See AEPCO Reply Workpapers at pp. 0048, 0007, and 0045.

⁴ See AEPCO Reply Workpapers at p. 0047.

{ (and for a number of other reasons explained in greater detail, infra), AEPCO treats { } as an offset to BNSF/UP's revenues for the AEPCO service. See AEPCO Op. at II-A-4. Accordingly, AEPCO does not include any variable costs for the Rincon to Deming segment since, {

{ (emphasis added).⁵

The Railroads disagree with AEPCO's approach, and treat BNSF's payment to SWRR as a variable cost, thereby attempting to extract an 80% mark-up in the determination of the appropriate jurisdictional threshold rate level. See BNSF/UP Op. at II-4 and 44; Joint Reply at II-6. Moreover, the Railroads' variable cost calculations also include all locomotive costs (i.e., capital, maintenance, and other LUM) associated with operations between Rincon and Deming, {

⁵ See AEPCO Reply Workpapers at p. 0008.

} . See BNSF/UP Op. electronic
workpaper file “BNSF-AEPCO-Open PRB FEC.123” at II-A-6, 7, and 12.⁶

(1) **The Railroads’ Reply Arguments are Invalid**

In their Joint Reply, the Railroads have claimed that the language of the
SWRR Lease { } is not dispositive
of the issue of whether that payment should be treated as a “revenue deduct” by the
Board. See Joint Reply at II-7. On the contrary, the Railroads contend that {
}, AEPCO is making an ill-
advised “form-over-substance argument.” See Joint Reply at II-7. Significantly,
BNSF/UP do not dispute that variable cost treatment would be manifestly improper if the
Board were to find that the payment to SWRR is, as AEPCO has argued, { }
Instead, BNSF/UP merely attempt to {
}.

While the Railroads first acknowledge that {

} See Joint Reply at II-7 (citing SWRR Lease at ¶ 19(c)).

⁶ In its prior evidence in this case, AEPCO inadvertently did not reflect ¶ 19(c) of
the SWRR Lease { } . AEPCO’s Rebuttal has corrected this
oversight. In Reply, the Railroads also failed {

} .

Notably, the very subsection that the Railroads cite {

} is not

inconsistent with AEPCO's treatment of the payment as an offset to revenue. {

}

⁷ While the heading to ¶ 19 of the Lease also includes {

}. _____

In any event, the Board should not be persuaded by the Railroads' claim that the agreement negotiated and signed by BNSF during the pendency of this case was drafted in a manner that the Railroads now wish to characterize as ambiguous. BNSF is a sophisticated corporation represented by competent legal counsel, and there is every reason to believe that BNSF was competently advised during the negotiation of the SWRR Lease. There is also no reason to think that BNSF entered into the arrangement under duress or that BNSF lacked bargaining leverage. The Railroads thus should not be permitted to hide behind the claim that BNSF's own agreement is too indefinite to constitute dispositive evidence.

The Railroads also argue in their Joint Reply that the Board's decision in the FMC rate litigation requires a finding that the SWRR payment constitutes a variable cost of service. See Joint Reply at II-7 (citing Docket No. 42022, FMC Wyoming Corp. v. Union Pacific R.R., Decision served May 12, 2000, at 67 ("FMC")). In FMC, the Board afforded cost treatment to two switching charges in situations in which: (a) UP did not directly serve any issue traffic destination in Chicago; and (b) UP and FMC previously had entered into an agreement through which FMC itself performed switching service at FMC's Westvaco facility. Id. In reaching its decision to allow cost treatment – and thus the 80% mark-up on those costs – the Board emphasized that UP had remained responsible for origin and destination switching:

UP points out that it is responsible for arranging for delivery of cars to its customers in Chicago and Westvaco,

and argues that what it pays to accomplish final delivery or initial pickup therefore should be considered a cost.

We agree with UP that, because UP is ultimately responsible for supplying the switching service, the expenses it incurs to provide these services are legitimate costs and not adjustments to revenues. FMC has presented no evidence to contradict UP's claim that UP is responsible for having the cars switched at origin or destination.

Id. at 68 (emphasis added).

Unlike the FMC case, abundant evidence exists in this case that SWRR itself has assumed common carrier responsibility for providing service to AEPCO. In particular, AEPCO has presented evidence {

} ; accord id. at ¶ 23.⁸

It is critical to observe that the SWRR Lease is not structured in a manner {

⁸ See AEPCO Reply Workpapers at pp. 0008 and 0048.

}

See SWRR Lease at 1 (emphasis added).⁹ The SWRR Lease also states that:

{

}

See id. at ¶ 2(a) (set forth in AEPCO's Reply Workpapers, p. 0007) (emphasis added).

{

} SWRR obtained common carrier authority from the Board and

now holds out, and is obligated under federal statute to provide service to the public. See

Finance Docket No. 34072, Southwestern R.R. – Acquisition, Lease, and Operation

Exemption – The Burlington Northern and Santa Fe Ry., Decision served Sept. 21, 2001.

This SWRR obligation, of course, cannot be relieved without formal abandonment authorization by the Board.

The FMC case is also distinguishable from the instant case because of the circumstances involved with respect to the service agreements themselves. In FMC, UP necessarily relied upon terminal switching arrangements for service to Chicago since it could not “directly serve any issue traffic destination in Chicago,” and UP operated

⁹ See AEPCO Reply Workpapers at p. 0004.

pursuant to an agreement with FMC itself to provide switching service at its own facility.

Id. at 67. Here, BNSF's mid-litigation decision to enter into the SWRR was entirely voluntary. Moreover, unlike FMC with respect to its switching agreement with UP, AEPCO had no involvement whatsoever in BNSF's decision to enter into the SWRR Lease.

In their Reply Evidence, BNSF/UP next argue that the { } payment "in no way resembles a revenue division" because: (i) "SWRR is not a carrier named in the common carrier price authority; it has no relationship with the shipper;" (ii) the "SWRR receives a fixed amount per car that does not vary with the transportation rate under which the traffic moves;" (iii) {

}; and (iv) the amount of the charge would not be affected by a rate prescription in this case. Id. at II-7 to 8 and n.20. These arguments are easily dismissed.¹⁰

First, the SWRR is not named in the common carrier price authority in dispute in this case because {

} . See SWRR Lease at ¶ 18 (AEPCO Reply Workpapers at pp. 0044-0045). In fact, {

¹⁰ As an initial matter, it is important to observe that BNSF/UP raise their four "resemblance" arguments regarding the form of { } immediately after chastising AEPCO for relying upon "form over substance." See Joint Reply at II-7.

} . Similarly, the fact that SWRR has no relationship with AEPCO is a matter that is entirely outside AEPCO's control.

Second, with respect to the Railroads' claim that "revenue divisions typically involve an arrangement where each carrier receives a fixed percentage of the revenues from the move" (see Joint Reply at II-8), the Railroads themselves must qualify their statement with the term "typically." In addition, the Railroads do not claim that a division cannot be established as a "fixed amount per car," and the Railroads do not even state they are not parties to divisions agreements that include such payment terms.

Third, the fact that {

} Furthermore, the Railroads did increase AEPCO's common carrier rates in 2002 and 2003.

Fourth, the fact that the amount of the SWRR Lease payment would not be affected by a rate prescription order in this case is purely a result of the choice made by BNSF to structure the Lease in the manner it has chosen (as well as the SWRR's limited leverage). In an analogous context, the record in this case does not include information regarding the terms of BNSF's divisions agreement with UP regarding the service at issue.

In sum, the Railroads' various arguments regarding the form of the SWRR payment do not override the explicit terms of the SWRR Lease itself, and do not invalidate AEPCO's treatment of { } as an offset to revenue.

**(2) An Examination of the Railroads' Own Evidence
Confirms the Impropriety of the Railroads' Cost
Treatment of { } _____**

AEPCO assumes that BNSF entered into the SWRR Lease for a legitimate business reason (i.e., to achieve cost savings), and that the transaction was not simply intended as a "sham" to game the outcome of this case. In order to be accurate, the Board's costing treatment of this transaction should reflect its true cost-saving nature. The Railroads' treatment of the SWRR Lease, however, results in increased, rather than decreased, costs.

To illustrate this point, AEPCO has examined the procedure that the Railroads used to reflect the impact of the SWRR Lease on BNSF's 4Q01 costs. In so doing, AEPCO discovered that the Railroads made only the following three changes:

1. Decreased T&O miles;
2. Decreased crew wage costs; and
3. Added the SWRR Lease per car payment.

These three changes are consistent with the Railroads' statement at p. II-8 of their Joint Reply that their costs "exclude roadway property, maintenance-of-way costs, and crew costs between Rincon and Deming" The Railroads captured the reductions in road

property and maintenance-of-way costs by reducing T&O miles, and captured the reduction in crew costs by measuring BNSF crew wages directly from the actual BNSF wage records. The Railroads' procedure yielded a cost of \$4.30 per ton for the BNSF portion of the movement.¹¹

To determine what BNSF's costs would have been in the absence of the SWRR Lease, AEPCO replicated the Railroads' costing procedure for 3Q01 using their own Joint Reply spreadsheet with the following three changes:

- AEPCO eliminated the reduction in T&O miles (i.e., AEPCO used the Railroads' own figure for 2Q01 miles);
- AEPCO eliminated the reduction in crew wage costs (i.e., AEPCO used BNSF's own 2Q01 crew wages of { } per train);¹² and
- AEPCO eliminated the SWRR Lease per car payment.

By making these modifications, AEPCO generated a comparison of the Railroads' own variable cost calculations: (a) with the SWRR providing service and treating the SWRR payment as a cost; and (b) without the SWRR providing service. The results of the "With-SWRR T&O" and the "Without-SWRR T&O" inputs to the Railroads' costing procedure are set forth in the Table II-A-33 below:

¹¹ See Joint Reply electronic workpaper file "BNSF-AEPCO-Reply.123," tab "Opr Stats," column E and summary tab D:H40.

¹² To approximate BNSF's crew wages without the SWRR, AEPCO took the pre-SWRR BNSF 2Q01 crew wages of { } per train. See Joint Reply electronic workpaper file "BNSF-AEPCO-Reply.123," tab "Opr Stats."

TABLE II-A-33
T&O Inputs to the Railroads' Costs for BNSF and
Resulting Variable Costs With and Without SWRR
(Lee Ranch to Rincon or Deming) (Steel- Low Capacity Cars/3Q01)

T&O Inputs/Cost	With SWRR ^{1/}	Without SWRR	Difference (Col. (3) - Col.(2))
(1)	(2)	(3)	(4)
Cars Per Train	104.7	104.7	0
Tons Per Car	101.5	101.5	0
Tare Tons Per Car	31.7	31.7	0
Miles	244.11	298.45	54.34
Crew Wages Per Train	{ }	{ }	{ }
SWRR Lease	{ }	\$0.00	{ }
Variable Cost (per Ton)	\$4.30	{ }	{ }

^{1/} See Joint Reply electronic file "BNSF-AEPCO-Reply with SWRR alternatives.123," tab Opr-Stats.

This replication of the Railroads' procedure for calculating costs shows that the "Without SWRR" approach produced a cost of { } per ton for the BNSF portion of the movement in 3Q01. In other words, the SWRR's insertion causes a cost increase in BNSF's variable costs of { }.¹³

¹³ See Joint Reply electronic workpaper file "BNSF-AEPCO-Reply with SWRR Alternatives.123," tab "Opr-Stats," column F and Sheet E - summary. {

}. See AEPCO Rebuttal electronic workpaper file
(continued...)

There is no legitimate business reason, however, why BNSF would have entered into the SWRR Lease if it really believed that it was increasing its own costs by { } per ton.¹⁴ This { } per ton increase raises the jurisdictional threshold for AEPCO service by { } per ton (i.e., { } times 180%). AEPCO should not be forced to pay an additional { } per ton simply because BNSF entered into the SWRR Lease (an agreement that one would expect to reduce BNSF costs) after the filing of the Complaint in this case.¹⁵ The regulatory costing should reflect the economic reality that BNSF entered into the transaction to achieve a cost reduction. To find a cost increase is to elevate form over substance and to encourage gaming.

**(3) SWRR Provides Service between
Deming and Rincon { }**

In addition to treating { } as a variable cost of service, the Railroads also improperly attempt to inflate their own costs by including certain of the costs of providing service between Deming and Rincon in their own variable costs of service. This inclusion { }

¹³(...continued)
“BNSF-AEPCO-REPLY with SWRR Alternatives.123.”

¹⁴ The far more plausible explanation is that both BNSF and SWRR expected that the SWRR would achieve costs savings because of its lower cost structure and the { } embodied a sharing of these savings.

¹⁵ { }

} See SWRR Lease

at ¶ 2(b).

In their Joint Reply, the Railroads acknowledged that the SWRR is responsible for certain costs of service between Deming and Rincon, but the Railroads continued to claim that BNSF should be compensated for other costs associated with that segment:

By excluding the time spent and distance traveled on the SWRR, AEPCO understates the actual locomotive ownership, maintenance, and fuel costs. Although the parties exclude roadway property, maintenance-of-way costs, and crew costs between Rincon and Deming from their variable costs for periods after September 7, 2001, AEPCO cannot ignore the costs associated with the BNSF locomotives that power its trains over this segment.

See Joint Reply at II-8 (emphasis added.)

The Railroads cite no authority for carving out “roadway property, maintenance-of-way costs, and crew costs between Rincon and Deming” as the only costs for which SWRR is responsible. {

}¹⁶

¹⁶ See AEPCO Reply pp. II-A-8 to II-A-10.

In effect, the Railroads are asking the Board to ignore {
}. These
disputed costs include Switching, Locomotive Costs (i.e., capital, fuel and maintenance),
Train-Mile Expense - Other than Crew, User Responsibility for Freight Car Repairs, Loss
and Damage, and Caboose/EOTD costs. With the exception of locomotive costs,
however, the Railroads do not even address these additional common carrier costs in their
Reply Evidence.

The Railroads' claim that "AEPCO cannot ignore the costs associated with
the BNSF locomotives that power its trains over this segment [between Rincon and
Deming],"¹⁷ but AEPCO does not ignore those costs. On the contrary, AEPCO has
shown that those costs are properly treated as SWRR costs, notwithstanding the
Railroads' claim to the contrary.

As previously indicated, the SWRR Lease obligates the SWRR to provide
service in moving AEPCO coal trains over its line between Rincon and Deming in return
for {
}. Nothing in the Lease relieves the SWRR
from incurring {

}.¹⁸ Therefore, it must be assumed that the SWRR is responsible for incurring

¹⁷ See BNSF/UP's Joint Reply at II-8.

¹⁸ See AEPCO Reply Workpapers at p. 0038.

locomotive costs as part of the service it provides in moving the AEPCO trains.¹⁹ Yet, BNSF is plainly providing the locomotives that are used to transport the AEPCO trains. Unless there is some sort of run-through or other side agreement between the SWRR and BNSF (which BNSF has not provided) under which SWRR compensates BNSF for discharging the SWRR's obligation to provide locomotives,²⁰ BNSF must be doing so for its convenience (i.e., to preserve the unit train nature of the operation and avoid having to use SWRR locomotives for part of the movement).²¹

BNSF apparently is willing to absorb this cost (which amounts to approximately { } per car, or { } per ton) because of its theory that the { } should be treated as a variable-cost item. Such treatment would entitle it to an 80% markup at the jurisdictional threshold rate level, or an additional { } per car ({ } per ton), which far exceeds the additional locomotive costs. However, it is wholly inappropriate to require AEPCO to pay an additional

¹⁹ SWRR's { } presumably reflects an adequate return over all of its costs (including locomotive costs), or SWRR would not have agreed to the arrangement.

²⁰ BNSF has represented that the SWRR Lease is the only relevant agreement between it and the SWRR pertaining to operation of the AEPCO coal trains between Rincon and Deming. See AEPCO Reply Workpapers at pp. 0064.

²¹ The "Official 2002 Edition of Locomotive Rosters & News" shows that the SWRR's locomotive fleet totaled 11 locomotives in 2002, all in the 1500 to 2500 horsepower range. See AEPCO Rebuttal Workpapers at pp. 0022-0023. BNSF and UP use high-horsepower locomotives on the AEPCO trains.

{ } per ton to compensate BNSF for a cost it incurs solely as a matter of convenience.

* * *

By accepting the Railroads' treatment of the SWRR Lease's { } as a variable cost, and marking up that variable cost by 80%, the Board would introduce a significant impediment to the accuracy and finality of its rate relief in stand-alone cost cases. Essentially, such a result would allow a defendant railroad to earn an 80% profit on whatever amount it elects to pay to a third party during – or after – rate reasonableness litigation.²² If a carrier knows that it will be permitted to earn that profit (and that the complaining shipper will have no means whatsoever to challenge the level of the defendant's payment to the third party), the carrier will have every incentive to set such payments as high as possible, even to the point of lowering payments to the short-line for other services that are unlikely to be the subject of rate cases.

The Railroads' cost treatment of the SWRR Lease would also give BNSF an incentive to increase its payment to SWRR in the future, and use that increase as a justification for raising the prescribed jurisdictional threshold for AEPCO service.²³

²² In this case, of course, the Railroads seek an even greater overstatement of costs by first claiming that BNSF must pay SWRR to provide service over its line and then claiming that BNSF itself is the party who is responsible for providing part of that service.

²³ As indicated supra, {

(continued...)

Since any increase in the level of BNSF's payment to SWRR would lead to an increase in the jurisdictional threshold of 180 percent of that amount, such an increase in the third party payment would increase BNSF's and SWRR's revenues – all at AEPCO's expense. In a regulatory environment in which carriers are able to reflect post-decision "cost" increases in their prescribed rates, this threat is entirely real. {

} (set forth in AEPCO's Reply Workpapers, p. 0046).

The Board cannot allow its variable cost methodology to be undermined in this fashion.

d. Traffic and Operating Characteristics

The differences in the T&O factors calculated by AEPCO and the Railroads are discussed below.

(1) Origins

In their Opening Evidence, the Railroads did not develop costs for any McKinley Mine movements. The Railroads corrected this omission on Reply and now include costs for service from both Lee Ranch and McKinley.

²³(...continued)
}.

(2) Weight of Lading Per Car

In their Opening Evidence, the Railroads understated the number of cars per train, and as a result, overstated their calculations of lading weight per car.²⁴ In their Joint Reply Evidence, the Railroads adopted AEPCO's lading weights per car (with one exception) and, thus, increased their costs by approximately 1%.

The sole exception to the Railroads' adoption of AEPCO's lading weights related to traffic moving in 1Q03, as to which AEPCO had data for only three trains when it submitted its Opening Evidence. Because additional information regarding 1Q03 has become available since that time, AEPCO also now uses that information in their development of lading weight. Consequently, there is no dispute between the parties regarding lading weights.

²⁴ See AEPCO Reply at II-A-16.

TABLE II-A-34 Weight of Lading Per Car (Lee Ranch and McKinley to Apache) (Tons)						
Quarter	AEPCO Rebuttal Evidence		BNSF/UP Joint Reply Evidence		Difference	
	Lee Ranch	McKinley	Lee Ranch	McKinley	Lee Ranch	McKinley
1Q01	100.2	—	100.2	—	0.0	—
2Q01	101.9	—	101.9	—	0.0	—
3Q01	100.6	—	100.6	—	0.0	—
4Q01	101.5	—	101.5	—	0.0	—
1Q02	101.2	—	101.2	—	0.0	—
2Q02	99.4	100.8	99.4	100.8	0.0	0.0
3Q02	99.2 (steel)/ 117.1 (alum.)	100.6 (steel)/ 110.3 (alum.)	99.2 (steel)/ 117.1 (alum.)	100.6 (steel)/ 110.3 (alum.)	0.0	0.0
4Q02	117.2	110.2	117.2	110.2	0.0	0.0
1Q03	118.0	111.3	118.0	111.3	0.0	0.0
Source: AEPCO Rebuttal Exhibit II-A-32.						

(3) Tare Weight of Car

In their Opening Evidence, the Railroads used incorrect data to determine tare weights.²⁵ In their Joint Reply, the Railroads adopted AEPCO's tare weights per car except for McKinley Mine movements occurring during the period from 3Q02 to 1Q03.

²⁵ See AEPCO Reply at II-A-17.

In this Rebuttal, AEPCO has accepted the Railroads' evidence regarding those McKinley movements. As such, there is no dispute between the parties regarding tare weight:

TABLE II-A-35 Tare Weight Per Car (Lee Ranch and McKinley to Apache) (Tons)						
Quarter	AEPCO Rebuttal Evidence		BNSF/UP Joint Reply Evidence		Difference	
	Lee Ranch	McKinley	Lee Ranch	McKinley	Lee Ranch	McKinley
1Q01	32.5	—	32.5	—	0.0	0.0
2Q01	31.7	—	31.7	—	0.0	0.0
3Q01	32.3	—	32.3	—	0.0	0.0
4Q01	31.7	—	31.7	—	0.0	0.0
1Q02	32.1	—	32.1	—	0.0	0.0
2Q02	33.2	33.2	33.2	33.2	0.0	0.0
3Q02	33.2 (steel)/ 25.5 (alum.)	33.2 (steel)/ 25.2 (alum.)	33.2 (steel)/ 25.5 (alum.)	33.2 (steel)/ 25.2 (alum.)	0.0	0.0
4Q02	25.3	25.2	25.3	25.2	0.0	0.0
1Q03	24.8	25.2	24.8	25.2	0.0	0.0
Source: AEPCO Rebuttal Exhibit II-A-32.						

(4) Identity of Car Owner

AEPCO provides nearly all of the cars used in the Apache service. See BNSF/UP Op. at I-2 (“[a]ll of the relevant movements occurred in trains of shipper-provided cars.”). The Railroads, however, provide substitute cars for the AEPCO movement on an as needed basis. In their Joint Reply, the Railroads point out for the first

time that they also use CEFX initial cars in this service. See Joint Reply at II-22.

AEPCO's Rebuttal restatement makes this revision.

AEPCO determined the appropriate car substitution ratio for railroad-provided cars on a quarterly basis, whereas the Railroads determined their car substitution ratio on an annual or semi-annual basis.²⁶ AEPCO has continued to use its quarterly car substitution ratios in this Rebuttal. See AEPCO Op. electronic workpaper file "T&O Data Provided by AEPCO.123." Because AEPCO's determination is more specific, it constitutes the better evidence of record, especially as the variable costs are calculated on a quarterly basis.

(5) Locomotive Lease Rental

As AEPCO pointed out in its Reply Evidence (at II-A-89 to 91), AEPCO based its locomotive lease costs on the locomotive lease rates for each specific costing period, whereas the Railroads normalized those lease rates. The Board's precedent favors AEPCO's approach. Id. at II-A-90 (citing WPL I at 57-58).

The Railroads wrongly claim in their Joint Reply that the number of locomotives moving over the BNSF portion of the route controls the number of locomotives UP uses over its portion of the route. See Joint Reply at II-18. While up to five locomotives are needed on some portions of the BNSF between the New Mexico Origins and Rincon, UP's portion of the haul from Deming to Apache is characterized by

²⁶ See AEPCO Reply at II-A-18.

somewhat less demanding grades and lower horsepower per trailing gross ton requirements. The Railroads also continue to assume 100% BNSF locomotives and to ignore the fact that UP provided 22.8 percent of the locomotives in the first two quarters of 2002. AEPCO shows in Part II-A-1(d)(11) that the Railroads' claims are not accurate.

(6) Cars Per Train

On Opening, the Railroads used incorrect cars per train because they failed to "true-up" the number of cars to those actually moved and for which freight charges were actually paid.²⁷ In their Joint Reply, the Railroads adopted AEPCO's cars per train determinations, except for the cars per train figures that AEPCO submitted regarding 1Q03, which AEPCO had based on the trains that moved in the early part of 1Q03. In their Joint Reply, the Railroads, for the first time, submitted evidence regarding cars per train for the entire 1Q03. Both parties now use the same information in their development of cars per train. A minor difference still exists for 3Q02 and 4Q02 because, in accepting AEPCO's cars per train, the Railroads rounded AEPCO's figures to the nearest whole number.

²⁷ See AEPCO Reply at II-A-19 to 21.

TABLE II-A-36 Comparison of Evidence Regarding Cars Per Train (Lee Ranch and McKinley to Apache)						
Quarter	AEPCO Rebuttal Evidence		BNSF/UP Joint Reply Evidence		Difference	
	Lee Ranch	McKinley	Lee Ranch	McKinley	Lee Ranch	McKinley
1Q01	97.0	—	97.0	—	0.0	—
2Q01	110.7	—	110.7	—	0.0	—
3Q01	98.2	—	98.2	—	0.0	—
4Q01	104.7	—	104.7	—	0.0	—
1Q02	111.9	—	111.9	—	0.0	—
2Q02	112.2	98.0	112.2	98.0	0.0	0.0
3Q02	110.5 (steel)/ 107.1 (alum.)	98.4 (steel)/ 104.9 (alum.)	110.5 (steel)/ 107.1 (alum.)	98.0 (steel)/ 105.0 (alum.)	0.0	(0.4) (steel)/ 0.1 (alum.)
4Q02	113.8	101.4	113.8	101.0	0.0	(0.4)
1Q03	113.0	105.0	113.0	105.0	0.0	0.0
Source: AEPCO Rebuttal Exhibit II-A-32.						

(7) Loaded Miles

AEPCO has adopted the Railroads' loaded miles between the Lee Ranch Mine and Apache, and with respect to the loaded miles between McKinley Mine and Apache.

Even though the parties now agree on the number of loaded miles during the "pre-SWRR" time period, they still disagree on the assignment of the SWRR miles. AEPCO treats those loaded miles as SWRR miles for all purposes, while the Railroads

treat those miles as BNSF miles for purposes of calculating locomotive costs. {

_____ } AEPCO's treatment of the SWRR miles is correct, and the Board should adopt AEPCO's loaded miles figures as the best evidence of record.

(8) Empty Miles

AEPCO also has adopted the Railroads' empty miles for the Apache movements. Once again, however, the Railroads treated the SWRR empty miles as if they were BNSF miles for calculating locomotive costs. AEPCO treats those empty miles as SWRR miles for all purposes. {

} AEPCO's treatment of the SWRR miles is correct, and the Board should adopt AEPCO's empty miles as the best evidence of record.

(9) Length of Origin Loop Track

A review of the Railroads' Evidence shows no difference between the parties in the treatment of loop track miles at Lee Ranch Mine. At McKinley Mine, the Railroads cited a small discrepancy regarding the milepost at the loop track switch.²⁸ AEPCO has adopted the Railroads' McKinley loop track miles figure for its Rebuttal cost restatement.

²⁸ See AEPCO Rebuttal electronic workpaper file "AEPCO Miles Rebuttal.123."

(10) Length of Destination Loop Track

In their respective Reply filings, AEPCO accepted the Railroads' Opening destination loop track miles and the Railroads' accepted AEPCO's Opening destination loop track miles. In this Rebuttal, AEPCO continues to use the Railroads' Opening destination loop track miles.

(11) Number of Locomotive Units

The parties have calculated virtually identical locomotive per train figures for the BNSF portion of the movement, but disagree with respect to the UP portion of the movement. AEPCO's Rebuttal Exhibit II-A-32, Line 12 and Table II-A-37, below, show the average locomotives per train for the BNSF portion of the movement.²⁹

²⁹ In response to the Railroads' objections in their Joint Reply at II-18, AEPCO has adopted the Railroads' Reply locomotives per train for 3Q02 through 1Q03 for the BNSF portion of the AEPCO movement.

TABLE II-A-37 Comparison of Evidence Regarding Locomotives Per Train (BNSF from New Mexico Origins to Deming or Rincon)						
Quarter	AEPCO Rebuttal Evidence ^{1/}		BNSF/UP Joint Reply Evidence ^{2/}		Difference	
	Lee Ranch	McKinley	Lee Ranch	McKinley	Lee Ranch	McKinley
1Q01	4.4	—	4.4	—	0.0	—
2Q01	4.5	—	4.5	—	0.0	—
3Q01	4.3	—	4.3	—	0.0	—
4Q01	4.4	—	4.4	—	0.0	—
1Q02	4.7	—	4.7	—	0.0	—
2Q02	4.9	5.0	4.9	5.0	0.0	0.0
3Q02 (steel)	4.0	3.9	4.0	3.9	0.0	0.0
3Q02 (alum.)	4.4	3.9	4.4	3.9	0.0	0.0
4Q02	4.7	4.7	4.7	4.7	0.0	0.0
1Q03	4.6	4.5	4.6	4.5	0.0	0.0
^{1/} See AEPCO Rebuttal electronic workpaper file "T&O Summary Rebu.123." ^{2/} See Joint Reply electronic workpaper file "BNSF-AEPCO-Reply.123."						

Table II-A-38 below, on the other hand, shows that the Railroads have overstated the number of locomotive units for the UP portion of the movement.

TABLE II-A-38 Comparison of Evidence Regarding Locomotives Per Train (UP from Deming to Apache)						
Quarter	AEPCO Rebuttal Evidence ^{1/}		BNSF/UP Joint Reply Evidence ^{2/}		Difference (BNSF/UP - AEPCO)	
	Lee Ranch	McKinley	Lee Ranch	McKinley	Lee Ranch	McKinley
1Q01	3.9	—	4.4	—	0.5	—
2Q01	4.4	—	4.5	—	0.1	—
3Q01	4.1	—	4.3	—	0.2	—
4Q01	4.3	—	4.4	—	0.1	—
1Q02	4.6	—	4.7	—	0.1	—
2Q02	4.9	4.9	4.9	5.0	0.0	0.1
3Q02 (steel)	3.6	3.6	4.0	3.9	0.4	0.3
3Q02 (alum.)	3.6	3.6	4.4	4.4	0.8	0.8
4Q02	4.4	4.4	4.7	4.7	0.3	0.3
1Q03	4.4	4.4	4.6	4.5	0.2	0.1
^{1/} See AEPCO Rebuttal electronic workpaper file "T&O Summary Rebuttal.123." ^{2/} See Joint Reply electronic workpaper file "BNSF-AEPCO-Reply.123."						

Both AEPCO and the Railroads relied on data from the Railroads' train movement files, but the Railroads erred by assuming that the number of locomotive units on the BNSF portion of the movement controls the number on the UP portion of the movement.³⁰ Data in BNSF's own train movement records shows that the number of

³⁰ See Joint Reply at II-18; see also *id.* at II-60 ("UP does not add or remove locomotives while AEPCO trains are on the UP portion of the route.").

locomotives on the returning empty train is not always the same as that recorded for the loaded movement.

For example, loaded BNSF train C0LRMDCH21A shows four locomotives in BNSF's records while the empty returning from UP shows only two locomotives in BNSF's records.³¹ UP's records show an average of 2.8 locomotives, however, for the entire UP portion of the trip. Conversely, train C0DCHLRM25A shows four locomotives for the loaded movement while UP's records show any average of 4.6 locomotives for the empty AEPCO trains.³² As such, it is evident that the Railroads are mistaken in their assumption that BNSF's number of locomotives should control the determination of consist size for the entire movement.

The Railroads also claim that AEPCO included obviously erroneous records in calculating the number of locomotives per train on UP. For example, the Railroads assert in their Joint Reply (at II-61) that loaded train C0ILRMDCH05A departed Lee Ranch with five locomotives, but is shown in UP's data at Deming with no locomotives. Significantly, however, that record did not impact AEPCO's number of locomotives figure since AEPCO's calculation was weighted by the number of miles traveled by each locomotive. Because locomotives travel zero miles at Deming, the record identified by

³¹ See Joint Reply electronic workpaper file "AEPCO Trains 1Q01 - 2Q02 Reply.xls," Tab 4, lines 14 and 15.

³² See AEPCO Reply electronic workpaper file "bnsf train movement summary T&O.123," Tab "bnsf train move," lines 61-62 and 71-72 respectively.

the Railroads on Reply did not affect AEPCO's answer. This is also true of the number of locomotives at Cochise.

AEPCO's Reply calculation of the number of locomotives per train on the UP did not include any statistics for trains that: (1) are incomplete movements; (2) have zero locomotives for any segment between two stations; or (3) show no locomotives for the entire movement. For purposes of its Rebuttal restatement of costs, however, AEPCO has reviewed the UP train movement records for 2001 and 2002 and eliminated data for trains that is obviously erroneous. These adjustments include loaded trains with less than three locomotives, unrealistic changes in locomotive counts during the movement, and trains with more than five locomotives in the consist.³³

Finally, in this Rebuttal, AEPCO also calculates locomotives per train separately for the Lee Ranch and the McKinley Mine movements just as the Railroads have done.³⁴ (This separation of Lee Ranch and McKinley Mine locomotives per train also affects the calculation for 1Q03 since it was based on previous quarters' data.)

(12) Cycle Time

The principal differences in the parties' calculation of cycle times involve: (i) the Railroads' improper inclusion of dwell time as part of the relevant cycle time; (ii) the Railroads' improper inclusion of time spent moving over the SWRR line as a part of

³³ See AEPCO Rebuttal files "UP Trn Mvmnt 2001 Deming-Cochise.xls" and "UP Trn Mvmnt 2002 Deming-Cochise.xls."

³⁴ See Joint Reply at II-18.

the relevant cycle time; and (iii) AEPCO's use of documents produced by the Railroads that the Railroads now characterize as "incomplete." See Joint Reply at II-19.³⁵

Table II-A-39 below compares AEPCO's rebuttal cycle times with those of the Railroads in Reply:

TABLE II-A-39 Comparison of Evidence Regarding Cycle Time (Lee Ranch and McKinley to Apache) (Hours)						
Quarter	AEPCO Rebuttal Evidence		BNSF/UP Joint Reply Evidence		Difference (BNSF/UP - AEPCO)	
	Lee Ranch	McKinley	Lee Ranch	McKinley	Lee Ranch	McKinley
1Q01	83.2	—	84.0	—	0.8	—
2Q01	77.1	—	78.0	—	0.9	—
3Q01	78.4	—	81.0	—	2.6	—
4Q01	89.1	—	102.0	—	12.9	—
1Q02	70.3	—	88.0	—	17.7	—
2Q02	72.9	65.2	78.0	78.0	5.1	12.8
3Q02	79.8	82.8	86.8	79.2	7.0	(3.6)
4Q02	74.3	74.9	88.7	78.6	14.4	3.7
1Q03	76.5	74.9	88.7	78.6	12.2	3.7
Source: AEPCO Rebuttal Exhibit II-A-32.						

³⁵ In their Joint Reply, the Railroads corrected an error in their Opening Evidence in which they calculated the overall average round trip cycle time for all shipments originating at Lee Ranch and terminating at Apache and included the empty time without regard to the mine at which the subsequent loading occurred.

AEPCO will not repeat its explanation of the Railroads' improper inclusion of dwell time and SWRR time. That discussion appears in AEPCO's Reply Evidence at II-A-24 to 28 (dwell time) and at pages II-A-22 to 27 of this Rebuttal Narrative (SWRR time).

At page II-19 of their Joint Reply, the Railroads are critical of AEPCO's use of BNSF's Train Dispatch Reports for determining cycle times (in the absence of the Railroads' train movement files for that period) because they claim that these Train Dispatch Reports are "incomplete" in some unspecified way. Nevertheless, the Railroads themselves relied on these same 4Q02 Train Dispatch Reports for the development of Locomotives per Train for that time period.³⁶

(13) Crew Districts and Turnaround Crews

The parties agree regarding crew district end points in both the loaded and empty directions. See AEPCO Op. at II-A-15 to 16 and BNSF/UP Op. at II-23. Other crew related issues are discussed in Part II-A-1(e)(9), Train-Mile Expense - Train and Engine Crew, infra.

³⁶ See Joint Reply workpaper BNSF/UP.RP.WP.II-A-021 included as AEPCO Rebuttal Workpapers at p. 0032 (adopting AEPCO's Locomotives per Train) and AEPCO Reply at II-A-24 & n.25 (explaining that AEPCO used 4Q02 Train Dispatch Reports to determine 4Q02 Locomotives per Train).

**(14) Locomotive Units Required
(by Type and Horsepower)**

The parties agree on this item. See AEPCO Op. at II-A-16 and BNSF/UP Op. at II-24.

(15) Spare Margin for Locomotives

AEPCO's evidence supports the use of a { } locomotive spare margin. This spare margin is consistent with the Board's recent ruling in the TMPA case, which also involved BNSF locomotives. See AEPCO Reply at II-A-92 to 93; see also AEPCO Op. at II-A-16 and Op. electronic workpaper file "Composite Loco Inputs.123." The Railroads, on the other hand, have advocated the use of a much higher spare margin; specifically { } for 2001 and { } for the first two quarters of 2002 (in their Opening Evidence), which the Railroads revised downward in their Reply Evidence to { } for 2001 and { } for 2002.³⁷

AEPCO's Reply showed that the Railroads incorrectly defined spare margin, and that the Railroads' calculations do not meet the requirements set out by Board precedent. AEPCO also showed that the Railroads' spare margin is { }
}. See AEPCO Reply at II-A-94 to 99. The Board has rejected the Railroads' comparable calculations on many previous occasions and has never accepted a locomotive spare margin at a level even remotely

³⁷ See Joint Reply at II-58 to 59.

close to that advocated by the Railroads. The Board should once again reject the Railroads' spare margin calculations and find that AEPCO's calculations are the best evidence of record.

(16) Yard and Road Switching Minutes

AEPCO's Reply Evidence presented an average of 2.52 minutes per train of switching by road-haul locomotives. AEPCO based its figure on hard evidence from the Railroads' files, particularly data from the "switching field" of BNSF's own Train Dispatcher Reports that showed that only two out of 3,455 cars had been switched.

In their Joint Reply, the Railroads present a figure of 189 minutes for road-haul locomotive switching for the Lee Ranch and McKinley movements. The Railroads also include 52 minutes for Lee Ranch and 38 minutes for McKinley to account for yard locomotive switching on yard tracks.³⁸

The total Lee Ranch road switching figures consist of 52 minutes per train of bad-order switching at Belen/Gallup and Lordsburg, as described infra (by yard locomotives), and 120 minutes of car repair switching at Apache by road locomotives. To this figure, the Railroads add: (i) 30 minutes for local switching at Cochise; and (ii) 39 minutes for road switching on non-yard tracks at Grants/Laguna and Deming/Rincon on BNSF and at Deming on UP, to reach a total of 241 minutes. For McKinley moves,

³⁸ See AEPCO Rebuttal electronic workpaper file "Rebuttal Switching.123." This file contains a side-by-side comparison of both parties' development of switching minutes for the AEPCO trains.

the Railroads inexplicably eliminate the bad order switching at Gallup (which is located on the McKinley route but not the Lee Ranch route) to derive 38 minutes of switching on yard tracks, and include the same 189 minutes of road locomotive switching.

The Railroads continue to base their figures on undocumented opinions and estimates of Railroad personnel, while simultaneously criticizing AEPCO's treatment of the hard data from the Railroads' own files (data that the Railroads continue to ignore).

On Rebuttal, AEPCO has concluded that an adjustment to its 2.5 minutes/train Reply figure is in order. Specifically, AEPCO has adopted the Railroads' criticism and relied on the "car count" fields from the train/car movement data rather than the "switching field" of the BNSF Train Dispatcher Reports. Reliance on that data results in an increase in AEPCO's switching minutes per train figure to 86 minutes. AEPCO's development of this 86-minute figure is described below.

Otherwise, AEPCO again notes that it is entirely dependent on the Railroads for data on matters such as switching and that it is inherently inequitable and unfair for the Railroads to present testimony based on undocumented opinions and assertions that are not supported by any sort of study or other empirical evidence. In TMPA at 45-46, the Board made clear that railroad defendants were expected to submit switching evidence based on current, empirical evidence. Nothing in the "evidence" that the Railroads have submitted in AEPCO's case appears to be superior in any way to what BNSF submitted and the Board found unacceptable in TMPA. Consequently, the only

action that the Board can take consistent with its own precedent is to reject the Railroads' evidence.

In the remainder of this section, AEPCO will address some of the many basic flaws in the Railroads' switching assertions. In some cases, AEPCO will suggest what might be an appropriate revision of a figure or calculation offered by the Railroads. Such suggestions are not intended to be viewed as a concession or admission that the Railroads' evidence is somehow acceptable. Instead, they are offered strictly on an arguendo basis to the extent that the Board should find that the Railroads have presented an adequate basis for their assertion.

(a) Yard Locomotive Switching on Yard Tracks

The Railroads seek to include 52 minutes of bad-ordered car switching that takes place en route at locations such as Belen, Gallup and Lordsburg. While the Railroads criticize AEPCO for having excluded this "inter/train switching" altogether (see Joint Reply at II-26), the fact is that AEPCO included this switching under the appropriate heading of "Switching by Yard Locomotives in Yards."

The Railroads' 52-minute figure relies on unsubstantiated estimates as to the number of minutes per car consumed in switching at Belen and Gallup on the BNSF and Lordsburg on UP, as applied to the estimated number of bad ordered cars switched per train. Even if the Railroads' estimated minutes required per car for switching had any validity, their estimate of the frequency and number of bad orders handled at each

location would still be fundamentally flawed. In particular, the Railroads always assume that cars are set out (or picked up) individually in each instance and that there are no efficiencies in handling more than one car at a time. That is manifestly not the case, particularly when a small group of cars are routinely cycled through car-repair maintenance facilities (as is the case at Apache) or when there is more than one car to be removed from or inserted into a train. The Railroads' calculations completely ignore these significant efficiencies.³⁹

The "Pick Ups Set Outs" worksheet of the Railroads' electronic workpaper "AEPCO Trains 1A01 to 2Q02.xls" indicates that the Railroads examined 143 AEPCO train cycles and summed the entries at each station for "-number tells you how many fewer cars left than came in" and "+number tells you how many more cars left than came in." The Railroads thus derived a figure of 100 set outs, which they divided by the number of train cycles to produce an average of 0.7 bad order cars per train. However, this figure is misleading because it ignores both the extent to which more than one car may have been set out at a time and the extent to which most trains may have involved no set outs.

In fact, set outs occurred only on 38 occasions, which equates to 26.6% of the time (38/143). Moreover, as noted earlier, the average number of cars set out was 2.5.

³⁹ AEPCO Rebuttal electronic workpaper file "Rebuttal Switching.123," footnote 2, shows that both AEPCO's and the Railroads' data indicate that 2.5 cars, on average, are switched at a time.

Accordingly, the Railroads' figure of 52 switching minutes per train (where there was a switch) actually equates to a much smaller average yard switching minutes per train on yard tracks.

Specifically, at Belen, the Railroads estimate that only 45 of the average 51 minutes per train involve "Removal of car from unit train."⁴⁰ Accordingly, the 45 minutes equates to a direct switching time per car of 18 minutes (45/2.5). AEPCO incorporated this 18 minutes per car and multiplied it by the 2.5 average number of cars switched and then by the 26.6% of trains switched to derive the 12 minutes that AEPCO included at Belen. Similar adjustments were made at Gallup and Lordsburg. Summarizing the yard locomotive switching on yard tracks cost category, AEPCO has adjusted the Railroads' yard locomotive switching minute requirements from 52 minutes to 16 minutes.

(b) Road Locomotive Switching on Non-Yard Tracks

AEPCO has also adjusted the Railroads' road switching on non-yard tracks category. The first element of the Railroads' presentation for this category is a claim of 120 minutes for car-repair related switching at Apache. See Joint Reply at II-23. At best, this figure represents an estimate for time consumed when switching is provided at Apache. However, the Railroads' own train movement data shows that no switching occurred at Apache for 44.2% of the trains in 2001 and 45.2% of the trains in 2002.

⁴⁰ The Railroads have not accounted for the other 6 minutes.

Accordingly, the adjusted figure for switching per train can be no higher than 66 minutes, and the Railroads have overstated this component by at least 54 minutes (120 minutes times 44.2%). AEPCO has incorporated the 66 minutes in its Rebuttal development of switching costs.

The Railroads also seek to add an additional 30 minutes for switching provided by Tucson-Lordsburg local trains that apparently deliver repaired bad-order cars to Apache. The Railroads claim, with no evidentiary or factual support, that this process takes 60 minutes on average, to which they apply a 0.5 cars/train factor for which they also provide no support. UP has provided no documentation concerning how often or how many such cars are switched at Apache, although the record is replete with examples of AEPCO's sustained complaints about the shortcomings in the Railroads' handling of bad-ordered cars.⁴¹ It seems clear that such bad-ordered cars were returned only on a highly sporadic and infrequent basis. Even assuming the 60 minutes figure had any validity, some specific evidence would still be required as to how many or how often such cars are switched, and the Railroads have not provided this necessary information. Accordingly, there is no legitimate basis on which this figure could possibly be accepted, even in part. Therefore, it must be rejected in its totality.

⁴¹ See AEPCO Rebuttal electronic workpaper file "AEPCO Switching Requests.pdf."

The Railroads' estimated 14 minutes of switching at Grants/Laguna is devoid of any support beyond an expert witness claim, which is plainly inadequate, particularly as the Railroads have failed to provide details as to minutes per switch, frequency of switch, and average number of cars switched. As explained supra, empirical evidence on these items is essential for developing a meaningful figure.

UP asserts that it "occasionally" receives bad-ordered cars that BNSF repaired at Deming and switches them into trains at Deming, which "averages 40 minutes to collect the cars from the interchange track and switch them into the train." See BNSF/UP Op. at II-13. Assuming that there are 2.5 cars per switch, the average is 16 minutes per car, and assuming that switches occur at Deming 26.6% of the time, the average switch is only 4 minutes per train.⁴² The 26.6% figure is extremely generous, given that UP itself claims that the switching occurs only "occasionally" and that AEPCO's equipment receives preventive and other maintenance at Apache by AEPCO's on-site car repair vendor, Union Tank Car.⁴³ Nonetheless, AEPCO is including the 4 minutes in its Rebuttal switching minute calculations to be conservative.⁴⁴

⁴² See AEPCO Rebuttal electronic workpaper file "Rebuttal Switching.123."

⁴³ AEPCO has since replaced its fleet with new aluminum cars and has also changed repair vendors. However, the new cars are receiving program maintenance.

⁴⁴ The Railroads also refer to switching on BNSF at Deming/Rincon. However, even assuming such switching occurs (and it is anything but documented), those minutes would be the responsibility of the Southwestern Railroad following its lease of that segment from BNSF as of September 7, 2001. Accordingly, including such minutes
(continued...)

Accordingly, even if the Railroads' were deemed to have overcome the TMPA threshold (notwithstanding their failure to provide any better documentation than in TMPA), the maximum possible switching minutes would be 86 minutes, consisting of 16 minutes of yard switching on yard tracks at Belen, Gallup or Lordsburg, 4 minutes at Deming (road switching on non-yard tracks), and 66 minutes at Apache Station (road switching on non-yard tracks). AEPCO reiterates that the Railroads' submission should be rejected in its entirety and that AEPCO's should be accepted because it constitutes the best evidence of record. However, even if the Board concludes otherwise, the maximum number of switching minutes that can possibly be found cannot exceed 86 minutes.

(17) Joint Facility Payments

The Railroads included system-average road operating expenses for each of BNSF's and UP's portions of the AEPCO route. See BNSF/UP Op. at II-26. AEPCO has excluded joint facility payments from its costs because the subject movements to Apache do not use any joint facilities. See AEPCO Op. at II-A-17. AEPCO's approach is service-specific and is based on the actual route of movement, whereas the Railroads' approach plainly is not.

⁴⁴(...continued)
would result in another double count.

e. **Variable Cost Calculations**

(1) **Account 76 and Account 90**

AEPCO's evidence on variable costs is based upon the 2001 and 2002 BNSF and UP URCS's developed in accordance with the methodology prescribed by the ICC in its various URCS rulings and most recently reaffirmed by the Board in the FMC and WPL decisions. This adherence extended to the development of the general overhead ratio for return on investment. Consistent with Board policy and precedent (prior to the issuance of the TMPA decision), the URCS developed by AEPCO included monies recorded in Road Property Account 76 (Interest During Construction), and excluded monies recorded in Account 90 (Construction Work in Progress).

In their Opening and Joint Reply Evidence, the Railroads based their cost analyses on an URCS formula that the Railroads had adjusted to include costs recorded in Account 90 ("Construction Work in Progress") and exclude costs recorded in Account 76 ("Interest During Construction"). In the narrative portion of their Opening Evidence, the Railroads urged the Board to reverse its long-held treatment of those accounts for purposes of calculating variable costs. BNSF made similar arguments in the TMPA proceeding, and in its March 24, 2003 decision in that case, the Board stated that it agreed with BNSF "that the longstanding precedent is that substitution of Account 90 for Account 76 is appropriate in rate cases unless the construction projects included in

Account 90 are long-term in nature such that they will not be available for transportation service for an extended period of time.”⁴⁵

AEPCO respectfully disagrees with the Board that longstanding agency precedent permits the substitution of Account 90 for Account 76 when construction projects are of “relatively short duration.”⁴⁶ On the contrary, a review of the decisions cited by the Railroads in their Opening Evidence and by the Board in its TMPA decision reveals only that (1) the ICC permitted the substitution in the context of its discussions regarding revenue adequacy prior to the Staggers Rail Act of 1980 and the Coal Rate Guidelines; and (2) the substitution was not permitted in any coal rate reasonableness cases prior to TMPA, save for the 1993 Georgia Power decision, which the Board in its 2000 decision in FMC treated as an aberration.⁴⁷ In Reply Exhibit II-A-24, AEPCO provided additional discussion regarding the application of these two accounts in URCS costing.

In Rebuttal Exhibit II-A-33, AEPCO shows that neither UP nor BNSF has demonstrated that their Account 90 projects are of “short duration.” AEPCO also shows that the Railroads’ analytical support for their conclusion does not even match the time

⁴⁵ See TMPA at 42.

⁴⁶ Id.

⁴⁷ See FMC at 48 (“the adjustments have generally not been accepted in subsequent maximum rate cases and are rejected here as inconsistent with current procedures.”).

frame of the 2001 R-1 and URCS. Neither of the Railroads presented any evidence whatsoever that the 2002 Account 90 projects are of relatively short duration.

For all the foregoing reasons, the Board should reject the Railroads' non-standard URCS execution, and consistent with established policy and precedent, include Account 76 and exclude Account 90 monies from the development of URCS for either railroad for both 2001 and 2002.

(2) Individual Variable Cost Categories

Table II-A-40 below compares AEPCO's and the Railroads' Reply cost calculations, and AEPCO's restated Rebuttal cost calculations for an illustrative movement: Lee Ranch to Apache (2Q02) in low capacity (steel) cars.

TABLE II-A-40 Comparison of AEPCO Reply, BNSF/UP Reply, and AEPCO Rebuttal Variable Costs Per Ton for Lee Ranch to Apache Movement (2Q02)				
ITEM	AEPCO Reply	BNSF/UP Reply	AEPCO Rebuttal ^{1/}	Difference (col. 3 - col. 4)
(1)	(2)	(3)	(4)	(5)
1. Carload O/T Clerical Expense	{ }	{ }	{ }	{ }
2. Carload Handling – Other Expense	{ }	{ }	{ }	{ }
3. Switching Exp – Yard Locomotives	{ }	{ }	{ }	{ }
4. Switching Exp – Road Locos (Non-Yard)	{ }	{ }	{ }	{ }
5. Switching Exp – Road Locos (Yard)	{ }	{ }	{ }	{ }
6. Gross Ton-Mile Expense (GTM)	{ }	{ }	{ }	{ }
7. Loop Track Expense – Origin & Destination	{ }	{ }	{ }	{ }
8. Train-Mile Expense – Other than Crew	{ }	{ }	{ }	{ }
9. Train-Mile Expense – Train & Engine Crew	{ }	{ }	{ }	{ }
10. Helper Service Expense – Other than Crew	{ }	{ }	{ }	{ }
11. Helper Service Expense – T&E Crew	{ }	{ }	{ }	{ }
12. Locomotive Unit-Mile Expense	{ }	{ }	{ }	{ }
13. Locomotive Ownership Expense	{ }	{ }	{ }	{ }
14. User Responsibility For Car Repair Expense	{ }	{ }	{ }	{ }
15. Car Operating Expense	{ }	{ }	{ }	{ }
16. Car Ownership Expense	{ }	{ }	{ }	{ }
17. Caboose & EOTD Ownership Expense	{ }	{ }	{ }	{ }
18. Loss and Damage Expense	{ }	{ }	{ }	{ }
19. SWRR Payment (including overheads)	{ }	{ }	{ }	{ }
20. Total Variable Cost Per Carload	{ }	{ }	{ }	{ }
21. Tons Per Car	{ }	{ }	{ }	{ }
22. Variable Cost Per Ton	{ }	{ }	{ }	{ }
23. RFA-URCS Linking Factor	0.9934	0.9934	0.9934	0.00
24. Linked Variable Cost Per Ton (L.22 x L.23)	{ }	5.07	{ }	{ }
25. Jurisdictional Threshold { }	{ }	9.13	6.91	2.22
26. Rate Per Ton	9.54	9.54	9.54	0.00
27. R/VC% { }	{ }	188%	{ }	{ }
^{1/} Source: AEPCO Rebuttal Exhibit II-A-41.				

(1) **Carload Originated or Terminated – Clerical Expense**

On Reply, AEPCO adopted the Railroads' indexing procedures and thus eliminated almost all of the difference between the parties' station clerical expenses. See AEPCO Reply at II-A-35.

(2) **Carload Handling – Other Expense**

On Reply, the Railroads corrected their calculation of this cost to remove those portions inapplicable to unit train coal movements, that is: (1) cleaning car interiors; (2) car loading devices and grain doors; and (3) adjusting and transferring loads as approved by the Board in FMC, WPL I, and TMPA.⁴⁸ Therefore, the parties are in basic agreement regarding this cost category.

(3-5) **Switching Expense**

AEPCO explained its development of switching costs at AEPCO Op. at 51-52⁴⁹ and Reply at II-A-36. The Railroads explained their development of these costs at BNSF/UP Op. at 29 to 32⁵⁰ and Reply at II-28 to 32. AEPCO explained the superiority of its development of switching minutes, supra, at Part II-A-1(d)(16).

⁴⁸ See Docket No. 42022, FMC Wyoming Corp. v. Union Pacific R.R., Decision served May 12, 2000 ("FMC") at 73; Docket No. 42051, Wisconsin Power and Light Co. v. Union Pacific R.R., Decision served September 13, 2001 ("WPL" or "WPL I"), at 49; TMPA at 53.

⁴⁹ See AEPCO Opening electronic workpaper files "VC AEPCO BNSF Opening.123 errata" for BNSF and "VC AEPCO UP Opening.123" for UP.

⁵⁰ See BNSF/UP Opening electronic workpaper files "BNSF-01-Switch Split.123" for BNSF and "UP-01-Switch Split.123" for UP.

Most of the switching cost difference between the parties' Opening Evidence resulted from the divergent service units (i.e., switch engine minutes ("SEM's")) used by the parties. See column (6) of lines 3-5 of AEPCO Rebuttal Exhibit II-A-31, page 6 of 15. Because of the superiority of AEPCO's SEM's, the Board should adopt AEPCO's switching costs as the best evidence of record.

(6) Gross-Ton-Mile Expenses

The differences between AEPCO's and the Railroad's GTM expense per car for a representative movement (Lee Ranch-to-Apache 2Q02) are shown in Table II-A-41.

TABLE II-A-41 Comparison of GTM Expense Per Car Lee Ranch to Apache (2Q02)					
	<u>Item</u> (1)	<u>AEPCO</u> <u>Reply</u> ¹ (2)	<u>BNSF/UP</u> <u>Joint Reply</u> ² (3)	<u>AEPCO</u> <u>Rebuttal</u> ² (4)	<u>Difference</u> ³ (5)
1.	Maintenance-of-Way	\$22.65	\$25.38	\$21.94	\$3.44
2.	Return on Road Property	42.67	53.37	43.86	9.51
3.	Road Property Depreciation	19.56	22.62	20.76	1.86
4.	Fuel	17.31	28.60	15.87	12.73
5.	Locomotive Maintenance	8.62	11.72	7.48	4.24
6.	Other GTM	13.29	20.56	12.94	7.62
7.	Total	124.10	162.25	122.85	39.40
¹ <u>See</u> AEPCO Reply electronic workpaper file "Reply VC Difs Lee Ranch Low 2Q02 BN&UP.123." ² <u>See</u> AEPCO Rebuttal Exhibit II-A-31, page 6 of 15. ³ Column (3) - Column (4)					

(a) Maintenance-of-Way (SFGT)

AEPCO used the SFGT formula to calculate movement-specific MOW costs. See AEPCO Op. at II-A-20 to 35. The Railroads relied on URCS system average MOW costs, citing the TMPA treatment of this cost item. See Joint Reply at II-33. For the reasons set forth in AEPCO's Reply Evidence at II-A-37 to 51, AEPCO continues to rely on its Opening calculation procedures with regard to this cost component.

**(b) Road Property Investment
Return and Depreciation**

AEPCO developed variable costs for return on investment and depreciation of investment in road property ("road property capital costs") differently for the UP and BNSF portions of the Apache coal movement. Consistent with the Board's long-standing preference for movement-specific variable costs where data to make movement-specific adjustments is available, AEPCO prepared a special study to calculate movement-specific road property capital costs for the UP portion of the movement based on valuation records provided by UP in discovery.⁵¹ AEPCO then calculated an adjustment ratio based on a comparison of line-specific road property capital costs and system average road property capital costs. AEPCO multiplied this adjustment ratio by the URCS system average road

⁵¹ Because of inadequacies in the line-specific valuation data provided by BNSF in response to a Board order, AEPCO had to use system-average road property capital costs for the BNSF line segments used to transport the issue traffic.

property depreciation costs and system average road property return costs to derive the corresponding line-specific values.⁵²

The Railroads used system-average road property return and depreciation data to calculate road property capital costs for both the UP and BNSF portions of the movement, claiming that both BNSF's and UP's internal records were inadequate. See BNSF/UP Op. at II-33 to 34 and Exhibit BNSF/UP II.A.6 and the Railroads' Joint Reply at II-34 to 42. Most of the Railroads' Opening and Reply objections to AEPCO's calculation of movement-specific UP road property capital costs have already been addressed in AEPCO's Reply at II-A-55 to 63. The points made in AEPCO's Reply will not be repeated here.

AEPCO's Rebuttal Exhibit II-A-31, page 6 of 15, Line 6(d), compares AEPCO's Rebuttal road depreciation cost calculations with the Railroads' comparable Joint Reply calculations. Line 6(e) of this exhibit makes the same comparison for return

⁵² The property investment accounts that are assigned on a specific basis are determined by the accounts flowing into the URCS unit costs for road depreciation (D1L234C10) and road return (D1L251C10). Those accounts are 2 Land, 3 Grading, 4 Other ROW, 5 Tunnels and Subways, 6 Bridges, Trestles & Culverts, 7 Elevated Structures, 8 Ties, 9 Rails & OTM, 11 Ballast, 13 Fences, Snow Sheds & Signs, 17 Roadway Buildings, 27 Signals & Interlockers and 39 Public Improvements. All other road property accounts are included in URCS, but not on a Gross Ton-Mile basis, so they are included in AEPCO's costs on a system average basis. Account 37 Roadway Machines is also included in the URCS unit costs but UP's road investment database has no money assigned to this account. In its Opening Evidence, AEPCO incorrectly included Accounts 37 (Roadway Machines) and Account 57 (Work Equipment) in the system denominator. Those accounts were removed from the system calculation in AEPCO's Reply statement and are excluded in this Rebuttal statement, as well.

on road property investment costs. Column (16) of the exhibit shows that the total 2Q02 difference between the parties is \$1.86 per car for road depreciation and \$9.51 per car for return on road property investment, or a total of \$11.37 per car equivalent to \$0.11 per ton or { } of the total difference in variable costs between the parties.⁵³ Of the total \$11.37 per car difference, \$10.27 is associated with UP road property capital costs and \$1.10 is associated with BNSF road property capital costs.⁵⁴

In their Joint Reply, the Railroads correctly observe that AEPCO's allocation of the SP acquisition premium adjustment should have been based on SP total track miles, but instead was allocated to the valuations sections based on running track miles. AEPCO has revised its calculation of valuation section track miles to include yard and switching track miles measured from UP track charts (see AEPCO Rebuttal Workpapers at pp. 0037-0103). On Rebuttal, AEPCO has allocated the SP acquisition cost premium at the time of the purchase by account, per track mile, to the track miles of the former SP valuation sections traversed by AEPCO trains.

(c) Locomotive Fuel

On Opening, AEPCO developed locomotive fuel consumption and costs using information from a 1985 fuel study that was based on the direct observation of fuel

⁵³ Columns (5) through (15) of AEPCO Rebuttal Exhibit II-A-31, page 6 of 15, detail the factors causing or contributing to that difference.

⁵⁴ The difference for BNSF is attributable to the parties' different treatment of Accounts 76 and 90 since both parties used system average road property capital costs for the BNSF portion of the movement.

consumption by locomotives transporting coal trains between the Mentmore Mine (a now-closed mine that was located near McKinley Mine) and the Apache power plant. That study demonstrated that fuel consumption associated with the AEPCO movement was approximately 72% of the 1986 system average fuel consumption by the carriers (ATSF and SP) serving the movement at that time. AEPCO then applied the 72% figure to the Railroads' current system average fuel consumption to yield a current movement-specific estimate.

In their Joint Reply, the Railroads dispute AEPCO's determination of fuel consumption on a movement-specific basis, but notably do not take issue with the level of fuel consumption that had been calculated for the movement in 1985. Instead, the Railroads contend that this level of fuel consumption (i.e., 11,911 gallons for the 1985 round-trip AEPCO movement) cannot legitimately be applied to generate current fuel consumption. In support of their argument, the Railroads posit several faults in AEPCO's approach: (i) the railroads now involved are different than those in the 1985 study; (ii) the origin mine is different; (iii) the locomotive models are different (the Railroads now use primarily C44-9W locomotives rather than the SD40-2 model used in 1985); (iv) the locomotive consist is different; and (v) the trains are different sizes and weights.

Taking the Railroads' arguments in turn, the fact that different railroads are now involved in this movement is not detrimental to AEPCO's adjustment. BNSF and UP are the successors to ATSF and UP. They move AEPCO's traffic over the same lines

and route, and it is therefore logical to expect a correlation between fuel consumption results. AEPCO also notes that the locomotive fleets of ATSF and SP were not substantially different from those of BN and UP – for example, all of the western Class I carriers had large fleets of SD40-2 locomotives in 1985. The improvements in system average fuel consumption over the years resulting from advances in locomotive technology would most likely have occurred with ATSF and SP if they had not merged with BN and UP.

The difference in mine origins plainly is not significant either. The Mentmore Mine was located on the Defiance Spur, just a few miles south of McKinley Mine. The round-trip distance between Mentmore Mine and Apache, used in the 1985 fuel study, was 1,015 miles. See AEPCO Op. Workpapers, Vol. 4, p. 01951. The round-trip distance between McKinley Mine and Apache is 1,050 miles. Thus, the current McKinley Mine movement uses 96.7% of the same track used in the 1985 movement. Consequently, the two movements are comparable for fuel consumption purposes.

The use of different locomotive types and changes in the size of locomotive consists and train sizes do not prohibit a comparison either. Different locomotive models consume fuel at different rates, but those differences (as well as differences in the size of the locomotive consist and the trailing weight per train) are easily accounted for in calculating fuel consumption. Indeed, the various locomotives are typically benchmarked

against each other – often by the manufacturers themselves – so that the railroads can determine the potential benefits of acquiring newer models.

For example, the fuel efficiency of the SD40-2 locomotives used in AEPCO service in 1985 can be compared with the fuel efficiency of the C44-9W locomotives used today by examining the Brake Specific Fuel Consumption (“SFC”) for each locomotive type. SFC is a pounds (of fuel) per horsepower hour rating frequently used by manufacturers and railroads to compare the fuel efficiency of locomotives with different horsepower capabilities. The SFC is calculated by dividing the duty cycle⁵⁵ fuel consumption rate (which is represented in lbs./hour) by the duty cycle horsepower.

Based on the 1985 AAR standard duty cycle for SD40-2 locomotives, the SFC for the SD40-2 in 1985 was 0.4487 (lb./hp/hr.). See AEPCO Rebuttal electronic workpaper file “AEPCoSD40-2.xls,” cell J20. In contrast, the SFC for the C44-9W used in AEPCO service today is 0.3501 (lb./hp/hr.). See AEPCO Rebuttal electronic workpaper file “AEPCoC44-9W.xls,” cell J20.⁵⁶ The improvement in efficiency between the two SFC calculations is 22%. The 22% increase in fuel efficiency per horsepower

⁵⁵ The term “duty cycle” refers to the percentage of time a locomotive spends (and thus fuel consumed) in each throttle position during a particular movement. The AAR standard duty cycle for a particular locomotive type is a duty cycle for a “typical” movement in terms of train weight, locomotive consist, and distance/time.

⁵⁶ The C44-9W duty cycle is the EPA line-haul duty cycle for this locomotive type, which is more accurate and reflects more recent data than the older AAR Duty Cycle. See Rebuttal electronic workpaper file “EPA Line Haul Duty Cycle.pdf.”

over time due to the conversion from SD40-2 to C44-9W locomotives supports a downward adjustment from system average fuel consumption.

AEPCO has also performed a check of its “relationship-generated” fuel figures for 2001 and 2002 by comparing those fuel consumption figures with the Railroads’ past statements and locomotive manufacturer’s pronouncements. “BNSF Today” of January 22, 1998 stated, “Railroad fuel efficiency has increased 61 percent since 1980”⁵⁷ The “trainweb.org” website discusses fuel efficiency and other locomotive improvement facts in “The AC Revolution FAQ.” It states that: “AC units [that is, the C44-9W’s that are primarily used in AEPCO’s service] are more fuel efficient than DC locomotives [that is, the SD40-2’s used in the 1985 study]. This is because they produce more TE [tractive effort] per horsepower than a DC unit.” Trainweb.org goes on to state that “AC traction motors, in conjunction with new wheel-slip control systems that can only work with AC motors, increase adhesion from about 25% for the average locomotive to around 35% [an improvement of 40% - 10% divided by 25%].”⁵⁸

To summarize, in response to the Railroads’ criticisms of AEPCO’s use of the 1985 fuel study results to estimate fuel consumption for the present AEPCO movement, AEPCO has shown that the 28% reduction from system average in fuel

⁵⁷ See “BNSF Today” for January 22, 1998 from BNSF’s website, “www.bnsf.com/media/html/bnsf_today_98_88.html” included as AEPCO Rebuttal electronic workpaper file “Fuel efficiency.pdf.”

⁵⁸ See AEPCO Rebuttal electronic workpaper file “Fuel efficiency.pdf.”

consumption used in its Opening Evidence is reasonable given the 61% reduction touted by BNSF, the 40% improvement in tractive effort reported on industry websites, and the nearly 24% improvement in SFC using C44-9W versus SD40-2 locomotives.

(d) Locomotive Maintenance

In their Joint Reply, the Railroads raise a number of objections to AEPCO's movement-specific adjustments regarding system average locomotive maintenance expenses. In its own Reply Evidence, AEPCO addressed many of those criticisms. Criticisms that have not previously been addressed will be discussed below.

On Reply, AEPCO explained that its locomotive maintenance costs were based on BNSF's contracts with its locomotive maintenance vendors⁵⁹ and UP's special study of its locomotive maintenance costs. See AEPCO Reply at II-A-63 & n.40. AEPCO showed that its development of locomotive maintenance costs was demonstrably superior to the Railroads' system average approximation of their actual locomotive maintenance costs.

In this Rebuttal, AEPCO has modified its calculation of Locomotive Maintenance costs in response to the Railroads' objections in their Joint Reply at II-44 to 48. These modifications include: (1) the use of system average locomotive maintenance

⁵⁹ BNSF's maintenance contracts {

} See AEPCO Rebuttal Workpapers at p. 0030.

costs for all locomotive hours that are not encompassed under a maintenance contract; (2) the correction of an error on Reply under which the overhaul costs for two groups of locomotives had been linked to an incorrect agreement; and (3) the conservative use of the Railroads' {

}

Table II-A-42 below compares AEPCO's Reply and Rebuttal locomotive maintenance costs with the Railroads' Reply costs.

TABLE II-A-42 Comparison of Locomotive Maintenance Costs Lee Ranch Movements (per car) (2Q02)		
AEPCO Reply Evidence	BNSF/UP Joint Reply Evidence	AEPCO Rebuttal Evidence
\$19.65	\$26.96	\$19.90
See AEPCO Rebuttal Exhibit II-A-31, page 6 of 15, line 6(f) and 11(e) and AEPCO Reply electronic workpaper file "Reply VC Difs Lee Ranch Low 2Q02 BN&UP.123."		

AEPCO's Rebuttal Locomotive Maintenance costs differ from the Railroads' by \$7.07 per car or \$0.07 per ton for 2Q02, or { } of the total difference in variable costs between the parties.⁶⁰ The major factor contributing to the difference between the parties

⁶⁰ Columns (5) through (15) of AEPCO Rebuttal Exhibit II-A-31, page 6 of 15, detail the factors causing or contributing to that difference.

was AEPCO's special study regarding the BNSF-provided locomotive maintenance agreements for the equipment used in the Apache service.⁶¹

As an initial matter, AEPCO explained in its Reply that it has properly accounted for both routine and non-routine locomotive maintenance costs in response to the Railroads' objection in this regard on page II-45 and 46 of their Joint Reply. See AEPCO Reply at II-A-65 to 66.

In their Joint Reply at II-46, the Railroads objected to AEPCO's procedure for including the cost of locomotive overhauls, but the Railroads' comments reflect a misunderstanding of Board precedent and the correct procedure for costing locomotive overhauls. Consistent with Board precedent, AEPCO has included overhauls only in the year in which those overhauls occur. See Arizona Pub. Serv. v. The Atchison, Topeka and Santa Fe Ry., 2 S.T.B. 367, 425 (1997) ("cost associated with the overhaul of locomotives should only be included in the year the maintenance takes place."). Three of the major factors that result in an overhaul being performed in a specific year are (1) the minimum number of years stated in the maintenance contract between overhauls, (2) the year in which the contract is put into effect, and (3) the level of utilization of the

⁶¹ Variable locomotive maintenance costs are addressed in AEPCO's Rebuttal Exhibits II-A-35A and II-A-35B, and at pages 5 and 6 of 12 of each of the variable cost detail exhibits (see AEPCO Rebuttal Exhibits II-A-36 through II-A-50). For UP locomotive maintenance, AEPCO used UP's special study "2000 Fully Allocated Locomotive Repair Costs by Model" as a basis for its calculations. See AEPCO Op. at II-A-7B.

locomotives. AEPCO has taken all three of these factors into account in determining the timing of overhauls.

In their Joint Reply (at II-47), the Railroads also object to AEPCO's application of the terms of BNSF's maintenance contracts instead of the locomotive maintenance bills BNSF produced in discovery. In support of this objection, the Railroads' Joint Reply also included electronic file "BNSF Loco Maintenance Bills_2001.xls." {

} The Railroads summarized the data for each locomotive group on a monthly basis for 2001 and then developed an annualized average cost per mile for each agreement.

The payments in this data set reflect the rate that is applicable to {

} The Railroads' electronic file includes no explanation of what {
}. Based on AEPCO's route miles and cycle times, the monthly utilization level in AEPCO service is 13,159 miles. {

} ⁶²

The simple system average approach used by the Railroads ignores all of the differences in maintenance costs between the locomotives used to provide service to AEPCO and the balance of the locomotives used by the Railroads. The Railroads have also ignored the fact that UP provides some of the locomotives.⁶³

AEPCO's service-specific locomotive maintenance costs are demonstrably superior to the Railroads' system average locomotive maintenance costs. The Board should adopt AEPCO's costs as the better evidence of record.

(e) Other Gross Ton-Mile

AEPCO's Rebuttal costs in the "Other GTM" category differ from the Railroads' Joint Reply costs by \$6.69 per car or \$0.07 per ton for 2Q02, or { } of the total difference in variable costs between the parties.⁶⁴ Both parties agree that the difference in Other GTM is caused primarily by the impact on the overhead costs of the fuel and locomotive maintenance adjustments.

⁶² The Railroads should have provided – but did not provide – similar bills for all other locomotive types used in the AEPCO service and for both railroads.

⁶³ In 2002, UP provided 22.8% of the locomotive hours, but the Railroads ignored these UP locomotives for the purposes of calculating Locomotive Maintenance costs.

⁶⁴ Columns (5) through (15) of AEPCO Rebuttal Exhibit II-A-31, page 6 of 15, detail the factors causing or contributing to that difference.

(7) Loop Track Expenses

AEPCO's Rebuttal Loop Track costs differ from the Railroads by \$4.71 per car or \$0.05 per ton for 2Q02. As indicated, supra, at Part II-A-1(d)(9) and (10), the parties use the same miles at the origin, but slightly different miles at the destination. While this accounts for a small amount of the difference in costs between the parties, the bulk of the difference can be attributed to disparities in overhead costs (i.e., the Railroads' failure to properly adjust fuel costs and locomotive maintenance costs).

(8) Train-Mile Expense – Other than Crew

Both parties used the same procedures to determine train mile – other costs. In its Reply restatement, AEPCO adopted the Railroads' index, and, thus, eliminated almost all of the difference between the parties' costs.

(9) Train-Mile Expense – Train and Engine Crew

Both AEPCO and the Railroads developed crew wage costs on a movement-specific basis using information provided by BNSF and UP in discovery.⁶⁵ AEPCO has made certain modifications to its crew wage costs for purposes of its Rebuttal cost restatement. In particular, AEPCO has made the following adjustments:

1. AEPCO has applied the 2002 special study crew wages factor developed using recently available 2002 Annual

⁶⁵ See AEPCO's Op. Narrative at II-A-45 to 46, Exhibit II-A-9, Line 9 of Exhibits II-A-11-12 and II-A-17-18, and at page 6 of 12 of each of Exhibits II-A-13 through II-A-16 and AEPCO's Reply Narrative at II-A-68 to 86 and Exhibit II-A-29; see also BNSF/UP Op. at II-35 to 37 and Joint Reply at II-49 to 55.

Report R-1 Schedule 410 statistics, as well as 2002 URCS variability and departmental overheads factors to the 2002 BNSF⁶⁶ crew wages and the 2002 UP crew wages.⁶⁷

2. AEPCO has accepted the Railroads' procedure to index UP 2Q02 crew wages for all subsequent quarters, rather than use partial third quarter data.

AEPCO's Rebuttal crew costs differ from the Railroads' Reply crew costs by \$0.20 per car or \$0.002 per ton for 2Q02.⁶⁸ As modified, AEPCO's costs constitute the best evidence of record because AEPCO's costs more accurately adjust for erroneous payroll data (e.g., payments made for movements not along AEPCO's route, payments made to firemen not operating on AEPCO trains, and payments made for an extra engineer or an extra conductor per district per trip), estimate the crew wage expenses associated with shipments originating at McKinley Mine, and allocate non-train related wages in the calculation of the non-train related mark-up percent.

(10-11) Helper Service

Since no helpers are used in the AEPCO service, this item is not relevant to the instant case.

⁶⁶ See AEPCO Rebuttal electronic workpaper file "BN Rebuttal Wages Summary.xls."

⁶⁷ See AEPCO Rebuttal electronic workpaper file "UP Wages Summary Rebuttal.xls."

⁶⁸ See AEPCO Rebuttal Exhibit II-A-31, page 6 of 15, line 9, col. 5 through 16.

(12) Locomotive Unit-Mile Expense

The difference between AEPCO and the Railroads with respect to the fuel portion of LUM costs is caused by the difference in the fuel adjustment discussed previously. The difference in locomotive maintenance costs between the parties results from AEPCO's locomotive maintenance special study adjustment. Finally, the difference in other expenses between the parties is caused primarily by the impact on the overhead costs of the fuel and locomotive maintenance adjustments.

(13) Locomotive Ownership Expense

AEPCO's Rebuttal calculation of Locomotive Ownership costs differs from the Railroads' Joint Reply calculation by \$11.62 per car (\$0.12 per ton), which accounts for { } of the total cost difference between the parties for 2Q02.⁶⁹ The major factors contributing to that difference, in order of significance, include: (i) locomotive cycle time; (ii) the Railroads' use of a normalized lease rate as opposed to the lease rates currently in effect; and (iii) the Railroads' use of extraordinarily high locomotive spare margins.⁷⁰ Differences caused by the parties' divergent number of locomotives have already been discussed, supra, in Part II-A-1(d)(11).

⁶⁹ AEPCO addressed locomotive capital costs at page II-A-44 of its Opening Narrative. In this Rebuttal, Locomotive Capital costs are covered at pages 6 and 10 of each of AEPCO's Rebuttal Exhibits II-A-36 through II-A-50.

⁷⁰ A small difference arises in the equipment life, salvage value and depreciation rate column due to the Railroads' failure to reflect any UP locomotives in their costs.

AEPCO's Rebuttal Exhibit II-A-31, page 6A, detailing BNSF costs, shows that the BNSF portion of the move contributes \$38.02 of the difference between the parties regarding locomotive capital, and Page 6B, detailing UP costs, shows that the UP portion of the move contributes (\$26.40) of the difference at the 2Q02 cost level. In this Rebuttal (just as on Reply), the disparity in the calculation of the carriers' relative cost shares arises because the Railroads assumed that BNSF provides all locomotives and assumes all costs even though UP provided 22.8% of the locomotives in 2002 (after providing only 0.2% in 2001) and thus also incurs locomotive costs.

AEPCO's treatment of these capital costs is consistent with the manner in which URCS records both expenses and traffic and operating statistics. BNSF locomotives operating over UP tracks develop LUM's. Those LUM's are reported in UP, not BNSF, traffic and operating statistics and in UP's R-1. To the extent that BNSF incurs costs for locomotive capital when BNSF locomotives run on UP tracks, UP reimburses BNSF through run-through agreements.⁷¹ Other locomotive expenses incurred while BNSF locomotives are on UP tracks are UP expenses, not BNSF expenses, so the Railroads' treatment of all LUM's as BNSF LUM's mishandles those expenses.

⁷¹ The run-through agreements are generally based on the relative number of horsepower-hours each railroad incurs while operating over the other railroad.

(i) Cycle Times

AEPCO addressed the difference in the parties' cycle times in its Reply Evidence at II-A-24 to 28 and II-A-89. The Railroads' Joint Reply addressed cycle times at II-18 to 20 and II-62 to 64. The Railroads objected to AEPCO's failure to include the Deming dwell time, but AEPCO had already addressed that issue in its Reply. The primary flaws in the Railroads' cycle times calculations include the treatment of SWRR cycle time as if it were BNSF cycle time, and the inclusion of that portion of Deming dwell time that is properly attributed to SWRR.

The revised locomotive cycle times for each quarter from 1Q01 through 1Q03 are shown in AEPCO's Rebuttal Exhibit II-A-32.

(ii) Special Study of Locomotive Lease Costs

In addition to the error of ignoring the UP locomotives that were provided for the AEPCO service, the Railroads also err by averaging the annual lease rates for locomotives over the life of the given lease. That approach is inconsistent with Board precedent. Specifically, in WPL I, the Board rejected locomotive lease costs "based on the average lease rate over the life of the lease agreement." Id. at 57. The Railroads compound their error by calculating their average lease rate as the simple average of each year's lease rates, totally ignoring the time value of money.⁷²

⁷² See AEPCO Reply at II-A-92 to 93 and AEPCO Reply Exhibit II-A-28.

(iii) Locomotive Spare Margin

There is a significant difference in the parties' locomotive spare margin calculations which generates \$10.60 per carload of the difference in the total variable costs for the 2Q02 movement from Lee Ranch in steel cars. See AEPCO Rebuttal Exhibit II-A-31, page 6 of 15, column 11, line 12. On Reply, AEPCO showed that its { } locomotive spare margin was developed in a manner that is consistent with the TMPA decision, and reflects each contract between the Railroads and their vendors that guarantees locomotive availability.⁷³

In their Joint Reply (at II-58), the Railroads claim that AEPCO's calculation had not accounted for "locomotives involved in {

} [since they] would not be considered as "unavailable" under the contract . . ."

As AEPCO demonstrated in its Reply Exhibit II-A-28 at page 3, however, AEPCO has already taken this factor into account in developing its spare margin calculation.

On Reply, the Railroads made a minor revision to their spare margin calculation to reclassify (1) In Shop, (2) Sanding/Fueling/Servicing, and (3) Other Unavailable from "unavailable" to "available" (and thus reduced their spare margin calculation significantly). However, the Railroads did not address any of AEPCO's Reply objections to the Railroads' study.

⁷³ See AEPCO Reply Exhibit II-A-28.

In summary, the Railroads effectively {

}. AEPCO utilized the methodology adopted by the Board in TMPA to derive a
{ } spare margin for the locomotives actually used to provide the Apache service.
The Board should adopt AEPCO's { } spare margin as the best evidence of record.

(14) User Responsibility for Repairs to Shipper-Owned Cars

The parties costed Car Repairs-User Responsibility expense using the same procedures. See AEPCO Op. at II-A-50; BNSF/UP Op. at II-37 to 38 and Joint Reply at II-56.

(15) Car Ownership Expense

In its Reply (at II-A-99 to 100), AEPCO adopted the Railroads' treatment of this cost category. The remaining difference between the parties involves the parties' differing calculation of the frequency of railroad freight car substitution. On Reply, the Railroads pointed out that AEPCO had neglected to include the CEFX car series that the Railroads, for the first time, identified as being BNSF leased cars.⁷⁴ See Part II-A-1(d)(4), supra. AEPCO's Rebuttal cost restatement corrects this oversight.

The Railroads continue to err in their car substitution rate calculation by calculating only annual car substitution rates⁷⁵ for Lee Ranch and applying Lee Ranch's

⁷⁴ See Joint Reply at II-21 to 22.

⁷⁵ See BNSF/UP Op. electronic workpaper file "Cochise Car Info.xls."

substitution rates to both Lee Ranch and McKinley movements.⁷⁶ Because AEPCO calculated and applied these frequency ratios separately for each mine and did so on a quarterly basis⁷⁷ – corresponding to the quarterly costs being calculated – the Board should adopt AEPCO’s costs as the best evidence of record.

(16) Car Operating Expense

The immediately preceding variable cost discussion addresses both car ownership and operating expenses for cars substituted by the Railroads.

(17) Caboose & EOTD Ownership Expense

AEPCO treated this cost category at page II-A-100 of its Reply and the Railroads treated it at page II-64 of their Joint Reply. The Railroads objected to AEPCO’s inadvertent exclusion of 173 EOTD units from its ownership expense calculations. AEPCO’s Rebuttal cost restatement corrects this error.⁷⁸

(18) Loss and Damage Expense

AEPCO treated this cost category at pages II-A-100 to 101 of its Reply and the Railroads treated it at pages II-56 to 57 of their Joint Reply. On Rebuttal, AEPCO continues to follow the treatment it used on Opening and Reply.

⁷⁶ See BNSF/UP Op. electronic workpaper file “Cochise Car Info.xls.”

⁷⁷ See AEPCO Rebuttal electronic workpaper file “T&O Rebuttal Data Provided by AEPCO.123.”

⁷⁸ See AEPCO Rebuttal electronic workpaper file “BNSF EOTD Rebuttal.123.”

(19) SWRR Payment

BNSF's payments to the SWRR are discussed by the Railroads in Reply at II-64 and by AEPCO at Reply pages II-A-7 to 11, and at pages II-A-10 to 27, supra. For the reasons set forth in that discussion, the Board should reject BNSF/UP's treatment of this payment and adopt AEPCO's treatment as the best evidence of record.

(20) Indexing

AEPCO discusses indexing in AEPCO Op. at II-A-54 and AEPCO Reply at II-A-101, and the Railroads discuss the subject in BNSF/UP Op. at 45 and Joint Reply at II-65 to 66. On Reply, AEPCO adopted the Railroads' treatment of the fuel index and the Railroads' use of quarterly, as opposed to annual, indices for developing quarterly costs in that same year. In response to the Railroads' Joint Reply (at II-65 to 66) and the availability of more current indices, AEPCO's Rebuttal index is now based on the most current available indices.

2. Rates and Resulting R/VC Calculations

Table II-A-43 below summarizes AEPCO's Rebuttal restatement of its evidence regarding variable costs per ton, and the resulting revenue-variable cost ratios, for the 1Q01 through 1Q03 time periods for all subject movements.

TABLE II-A-43
Summary of AEPCO's Rebuttal
Restatement of Variable Cost Evidence

Qtr.	Origin	Type of Cars (capacity)	Variable Cost	Rate Per Ton	BNSF/UP Revenue Per Ton^{1/}	J.T.^{2/}	R/VC Ratio
1Q01	Lee Ranch	Low	\$4.27	\$9.35	\$9.35	\$7.69	219%
2Q01	Lee Ranch	Low	3.87	9.35	9.35	6.97	242%
3Q01	Lee Ranch	Low	4.18	9.35	9.35	7.52	224%
4Q01	Lee Ranch	Low	{ }	9.35	{ }	7.00	{ }
1Q02	Lee Ranch	Low	{ }	9.54	{ }	6.65	{ }
2Q02	Lee Ranch	Low	{ }	9.54	{ }	6.93	{ }
	McKinley	Low	{ }	9.54	{ }	7.79	{ }
3Q02	Lee Ranch	Low	{ }	9.54	{ }	6.68	{ }
		High	{ }	9.23	{ }	5.85	{ }
	McKinley	Low	{ }	9.54	{ }	7.50	{ }
		High	{ }	9.23	{ }	6.53	{ }
4Q02	Lee Ranch	High	{ }	9.23	{ }	5.84	{ }
	McKinley	High	{ }	9.23	{ }	6.92	{ }
1Q03	Lee Ranch	High	{ }	9.41	{ }	6.06	{ }
	McKinley	High	{ }	9.41	{ }	6.97	{ }

^{1/} The BNSF/UP revenue figures in this Table reflect the treatment of { } as a revenue offset.

^{2/} For 1Q01-3Q01, the jurisdictional threshold equals variable cost x 180%. For 4Q01-1Q03, the jurisdictional threshold equals { }

{ } (see AEPCO Reply Workpapers pp. 0003-0059).

**III-A Stand-Alone
Traffic Group**

III. A. STAND-ALONE TRAFFIC GROUP

AEPCO's traffic group for its stand-alone railroad ("SARR"), the Apache, Cochise & Eastern Railroad ("ACE"), constitutes the focus of much of BNSF's and UP's Reply Evidence. The Railroads' principal attacks are that: (1) AEPCO has made a revenue adjustment that substantially overstates the overhead traffic and revenues available to the SARR; (2) the ACE is too heavily dependent on intermodal and other exempt cross-over traffic that is of marginal profitability and thus incapable of supporting a SARR; and (3) AEPCO's use of the modified mileage block prorate ("MMP") method for allocating revenues on the overhead cross-over traffic between the SARR and the residual incumbents is defective, at least as applied to AEPCO's traffic base. These three, as well as some additional, matters are addressed infra.

Before turning to those matters, a brief overview is in order. First, while, as explained infra, AEPCO is modifying the traffic group analysis it presented on Opening to remove the revenue adjustments,¹ AEPCO is retaining the same SARR configuration and operating plan that it presented on Opening. Additionally, AEPCO is not reducing its SARR capital and operating costs to reflect any savings associated with handling a reduced volume of traffic. AEPCO's modification of its traffic group thus constitutes appropriate rebuttal under Docket No. 41989, Potomac Electric Power Company v. CSX

¹AEPCO is also presenting on Rebuttal an alternate revenue adjustment limited to just those trains for which there were no matching revenue records.

Transportation, Inc., (STB served Nov. 24, 1997) (“PEPCO”), and Docket No. 42070, Duke Energy Corp. v. CSX Transportation, Inc., (STB served March 21, 2003) (“Duke Energy”). Indeed, failure to accept AEPCO’s traffic volume and revenue modification would be tantamount to holding that a shipper could never accept a carrier’s claims on rebuttal, and such a holding would undermine the rate case process generally.

Second, the ACE’s configuration, as depicted on Exhibit III-A-1 of AEPCO’s Opening Evidence, is entirely rational and appropriate for a least-cost, most-efficient carrier that does not face barriers to entry or exit in serving the issue traffic and other traffic that can be routed over the same SARR. The issue traffic originates from coal mines located along BNSF’s high-density east-west mainline. Likewise, AEPCO’s Apache Generating Station is located along UP’s high-density east-west mainline. A least-cost, most-efficient SARR would logically incorporate the favorable economies inherent in those high-density mainlines.

In the real world, BNSF and UP route the issue traffic and a small volume of other coal traffic over BNSF’s low-density line running north-south between Belen and Deming, NM. That routing makes sense in the real world only because the line is already built (and has been in existence since at least 1916, over sixty years before AEPCO’s coal-fired plants began operation).² However, in the stand-alone world designed to serve

² The Belen-Deming line is shown on 1916 valuation records, the oldest records to which AEPCO’s consultants have access. See AEPCO Op. Workpapers Vol. 9, p. 04402.

AEPCO's traffic (and with the Board's current cross-subsidy and other routing restrictions on stand-alone traffic), the Belen-Deming routing makes no economic sense, and would not be built, compared to a Vaughn-El Paso "clean sheet" routing design utilizing BNSF's overhead trackage rights over UP between those two points. While the Vaughn-El Paso routing may be longer ("more circuitous" in the Defendants' parlance), the densities and other economics are far more favorable, and the Coal Rate Guidelines, 1 I.C.C.2d at 543-44, directly encourage a longer, high-density SARR routing over an existing shorter, but lower-density, routing, so long as the additional costs associated with the longer routing are taken into account, as they plainly are in AEPCO's analysis. Moreover, the elimination of the low-density Belen-Deming segment constitutes a readily apparent advantage of the ACE over the existing BNSF-UP configuration. In contrast, requiring AEPCO's SARR to build the inefficient Belen-Deming line would increase the SAC rate above that of a least-cost, most-efficient carrier, thereby forcing AEPCO to cross-subsidize BNSF's other traffic, including the traffic that travels between Belen and Vaughn.

Third, in considering how AEPCO configures its SARR and the extent to which AEPCO supposedly failed to take into account the off-SARR costs associated with the cross-over traffic, it is important to note that AEPCO was required to limit its SARR to only those facilities that would be utilized to handle the issue traffic under the Board's decisions in this proceeding served December 31, 2001 (the "December 2001 Decision"),

and August 20, 2002 (the “August 2002 Decision”). Absent such restrictions (which AEPCO continues to believe are misplaced since they impose an entry barrier on the SARR that does not apply to incumbent defendants), AEPCO might have configured its SARR to extend from the Powder River Basin and possibly foregone intermodal and other non-coal traffic and associated revenues in the process.

It would thus be inherently irrational, as well as unfair, for the Board to find that AEPCO’s SARR is precluded (on grounds of cross-subsidy, no less) from including any economies associated with traffic outside the minimum SARR configuration, while simultaneously claiming that the SARR must be burdened with, i.e., forced to cross-subsidize, various off-SARR costs. If the SARR is going to be forced to bear such costs, then it must be permitted to expand its configuration to include additional territory of its choosing; if its configuration is limited to only that needed to handle the issue traffic, then it should not be required to absorb, i.e., cross-subsidize, costs of traffic moving over facilities that the issue traffic does not utilize.

With these background considerations in mind, AEPCO will now proceed
•
to the substantive rebuttal to the Railroads’ contentions.

1. Stand-Alone Railroad Traffic

a. The Revenue Adjustment

The Railroads’ principal attack on AEPCO’s stand-alone traffic group is that AEPCO’s revenue adjustments are unwarranted and unsound. BNSF SAC Reply at

III.A-1 to 20; UP SAC Reply at III-A-1 to 9. Most of what the Railroads have to say on this matter was previously presented in the “Petition to Require Submission of New Opening Evidence Or, Alternatively, to Dismiss” that UP filed on April 18, 2003 (the “April 18 Petition”), and which is attached as Exhibit I-1 to UP’s Reply Evidence. AEPCO responded at length to those criticisms in the Reply it filed on May 7, 2003, which is attached hereto as Exhibit I-4.

Little would be served by reiterating the parties’ contentions at length, especially in view of AEPCO’s decision to forego the revenue adjustments on Rebuttal. Nonetheless, a brief recapitulation is in order, in part because the Railroads’ data infirmities have implications for other issues they seek to raise.

i. Origin of the Revenue Adjustment

BNSF and UP produced separate data regarding train movements (BNSF train event data and UP train movement data) and traffic/revenue (the traffic data). The train data shows when and where the trains operated, the total number of cars, and the number of loaded cars (however loosely defined). The traffic tapes show origin, destination, commodity or type of car, weight, and revenue. One must use common fields (and, in UP’s case, a third database, the “Car Movement File”) to link the two databases.

AEPCO began its traffic group selection by identifying { } non-coal trains that traversed the east-west segments of the ACE’s route in 2001, and then looked to the traffic tapes to determine the revenue-related contents of those trains. AEPCO’s

approach was entirely appropriate and, frankly, unavoidable since the ACE was conceived largely as a replacement for overhead movements. It would have been pointless for AEPCO to attempt to construct its traffic base on an individual carload basis, when AEPCO's objective was to replace the transportation that BNSF and UP provide in moving complete trains (not individual carloads) between Defiance and Vaughn and between Cochise and El Paso, respectively. Furthermore, the origin-destination ("O-D") information depicted on the traffic tapes is often insufficient to identify the route with sufficient precision, such as the Pacific Northwest to Chicago movements noted in UP's April 18 Petition and in UP SAC Reply at I-6 n.7. The traffic tape records are also extremely voluminous, which would also complicate the task of preparing the traffic group initially from those records, instead of the train event data.

In many cases (an aggregate of { } of the trains) for both BNSF and UP, AEPCO was able to make a complete "match" between the number of loaded cars shown on traffic tape records and the individual loaded or revenue-bearing cars and containers identified on the train data. (If the two data fields were as "incompatible" as the Railroads claim, UP SAC Reply at III-A-8 to 9, BNSF SAC Reply at III.A-10 to 11, it seems unlikely that there would have been any complete matches for intermodal and similar trains.) However, in a number of cases, particularly with the BNSF data, AEPCO could not find the traffic records to account for or match the number of loaded cars specified in the train files. Moreover, in a number of cases, AEPCO could not find any

matching traffic records for the trains, even though the trains were designated as transporting revenue-generating traffic.³

AEPCO Rebuttal Exhibit III-A-7 presents the results of the matching process. The following table summarizes those results on a percentage basis for each category of traffic. Note that in { } of the cases { } trains out of the total of { } revenue-bearing trains) AEPCO could match no carloads to a particular train:

³ BNSF has a data designation for trains that carry no revenue-generating freight, and AEPCO did not include such trains in its revenue traffic selection, although AEPCO did include such trains { } in both its cost analysis and its string analysis. Consequently, there appear to be { } revenue-bearing trains.

Table III-A-7 Correspondence Between Train Event and Traffic Tape Data						
Traffic Category	0% Match	100% Match	76%-99% Match	51-75% Match	26-50% Match	1-25% Match
BNSF						
Grain	{					}
Manifest	{					}
Intermodal	{					}
Auto	{					}
Other	{					}
Total	{					}
UP						
Grain	{					}
Manifest	{					}
Intermodal	{					}
Auto	{					}
Other	{					}
Total	{					}
Combined						
Grain	{					}
Manifest	{					}
Intermodal	{					}
Auto	{					}
Other	{					}
Total	{					}
Source: BNSF and UP train and traffic data as summarized in AEPCO Rebuttal Exhibit III-A-7 and AEPCO Rebuttal electronic workpaper "Match Results 2001 (III-A-7 and III-A-9pl).xls."						

Where there was not a complete match, AEPCO concluded on Opening that the information presented in the train data concerning the number of revenue-bearing carloads was correct and that, for whatever reason (data entry errors, corrupted fields, unexplained decoders, etc.), the corresponding revenue records could simply not be located in the traffic data. Since the train records were represented as being correct, AEPCO adjusted (trued-up or calibrated) the revenue data to correspond to records presented in the train data. The “missing” carloads were deemed to have characteristics corresponding to the average for carloads that could be matched in the relevant traffic group. For UP’s intermodal traffic, AEPCO utilized a conservative average ratio for containers to cars since many intermodal cars are capable of carrying multiple containers, and the train records identify only that a car was carrying loaded or revenue-bearing containers, and not the number of containers.

ii. The Railroads’ Disagreement with the Adjustments

In UP’s April 18 Petition, and in somewhat greater specificity in their separate SAC Reply narratives, BNSF and UP assert that the data in the train data regarding the number of loaded cars is simply incompatible – that is, inconsistent – with the traffic data. Indeed, the Railroads assert that one simply cannot use the train data to determine how many revenue-bearing carloads or containers were present in the trains moving over the SARR’s route in the 2001 base year because a loaded car means two entirely different things for train event and traffic tape purposes, BNSF SAC Reply at

III.A-10 to 11, UP SAC Reply at III-A-8 to 9, even though the two data bases are constructed from the same raw source data, at least in BNSF's case. BNSF SAC Reply at I-8.

On this basis, the carriers criticize AEPCO's revenue/traffic adjustment, claiming that it yields too much revenue, particularly as compared to BNSF's total system revenues for intermodal traffic. Significantly, the carriers are very careful not to identify what the "correct" revenue/traffic level is for the ACE.⁴ Instead, they claim (UP SAC Reply at I-6 n.7) that they are incapable of making that determination because they cannot discern what traffic universe AEPCO is seeking to select (although the nature of AEPCO's objective is readily apparent, as confirmed by BNSF's very detailed, albeit unquantified, claims that AEPCO should have excluded certain traffic that is switched into and out of the supposed overhead trains at Belen).

The carriers also indicate that AEPCO's only proper course was to have proceeded directly from the traffic data and to have ignored the train event data altogether. BNSF SAC Reply at III-A-7 ("There was no need for AEPCO to use the train

⁴ The Klick/Murphy V.S. attached to UP's April 18 Petition at 9 asserted that AEPCO incorrectly treated "Q" trains as intermodal trains instead of priority manifest trains. As explained in AEPCO's Reply to UP's April 18 Petition, UP provided inconsistent decoders for the "Q" train designation. On Rebuttal, AEPCO has adopted UP's revised designation (even though UP did not address the classification of the "Q" trains in its Reply filing). The impact is quite minor, particularly in conjunction with the elimination of the revenue adjustment and AEPCO's reliance only on matched train/traffic records.

event database for any purpose...."); UP SAC Reply at III-A-7 ("In fact, there was no need to link the traffic data to any other data."). Such statements are absurd. Without the train event database, AEPCO could not determine when a train left or arrived at a given point, which would have made it impossible to determine if the ACE provides service comparable -- or superior -- to BNSF and UP. The Railroads would have criticized AEPCO severely if it had ignored such considerations.⁵

iii. AEPCO's Response to the Railroads' Criticisms

AEPCO has concluded that its revenue adjustments likely lead to some overstatement, at least with respect to BNSF's intermodal traffic. Accordingly, for

⁵ The Railroads' claim that the traffic tape data has been adequate in the past (UP SAC Reply at III-A-5 to 6 & n.45, and BNSF SAC Reply at III.A-6 n.6) is spurious. Where coal is concerned, the search of the traffic data is greatly facilitated by being able to use a single waybill number that encompasses a unit train. While a few shippers may have also included non-coal traffic in their traffic groups, in no prior case has a shipper relied on intermodal traffic to this extent. In those other cases, the resulting traffic group was likely understated.

Furthermore, UP's apparent practice of counting an intermodal car containing empty (or non-revenue) trailer container units (TCUs) as a loaded car in the train movement file does not comply with the Board's definition of loaded cars. Instruction (H) to Schedule 755 of the Annual Report Form R-1 states that railroads should "report miles made by flatcars carrying loaded highway trailers or empty highway trailers moving under revenue billings as loaded freight car-miles and miles made by flatcars carrying other empty highway trailers as empty freight car miles" (emphasis supplied). Instruction (P) to Schedule 755 states that "Each car moving under revenue billing shall be considered as a loaded car." Therefore, if UP is moving empty TCUs, the railcars are properly considered loaded railcars only if UP receives revenue for at least one TCU on the car. If no revenue is received, then the UP train file should classify the railcars (and TCUs) as empty cars (and TCUs).

purposes of Rebuttal, AEPCO has eliminated the revenue adjustment it made on Opening.

Nonetheless, AEPCO continues to believe that some adjustment remains appropriate to account for the data mismatch. Moreover, AEPCO remains confident that BNSF and UP possess the ability to manipulate their train and traffic data in ways that are not possible utilizing just the data and data formats that the Railroads produced to AEPCO in discovery. It is inconceivable that BNSF and UP would be incapable of identifying the traffic that moved over a particular line segment except by reviewing the origin and destination information on a carload-by-carload basis. It is also inconceivable that BNSF and UP would have no other specific knowledge as to, and no other ability to match carloads to a particular train and thus determine, how many revenue-bearing carloads and containers were contained in, or what revenues were derived from, a specific train or specified universe of trains moving over a particular route.

Without such information, BNSF and UP would simply not be in a position to determine the profitability of their intermodal movements, and thus could not determine what traffic to seek, what traffic to avoid, what rates to offer, how effectively existing equipment and facilities are being utilized, how efficient are existing operating practices, what changes to those operating practices might improve efficiency, what return is being generated on existing investment, how much and what kinds of additional equipment may be needed to support additional traffic, what investments to make, what investments to avoid, etc. These are basic, fundamental matters for running a railroad (or

any business enterprise, for that matter), and are especially vital for the intermodal traffic that the Defendants view as critical for their continued success, notwithstanding their claims of its “marginal” profitability.

Furthermore, both carriers have invested heavily in what purport to be sophisticated information systems that would seem to be designed to provide readily available answers to questions such as these. UP, in particular, has touted the ability of its information processing systems, a/k/a its “Data Warehouse,” to apply “Integration and Transformation” to UP’s “Operational and Financial Systems” and provide “Analysis and Reporting” to provide “Any user, any question, any data, any time” to “Subject-Oriented, Integrated, Historical Data,” including CRM [Customer Relationship Management], Transportation Control System, Accounts Receivable, Revenue Shipment Processing, and Contract Administration.⁶ Those capabilities appear entirely sufficient, perhaps optimal, for determining the traffic and revenue that AEPCO seeks to include in its SARR and tying that traffic to the train and traffic databases. AEPCO is also confident that BNSF would not allow its information processing abilities to trail significantly behind those of

⁶ See the powerpoint for the presentation that Rick Holmes, UP’s Director of Information Systems Auditing, gave on October 25, 2002 to the Computer Science Engineering CSE 291 class at Michigan State University, which is available at http://www.cse.msu.edu/~cse291/Speakers_files/holmes291.pdf and was included as Attachment 1 to AEPCO’s May 7, 2003 Reply to UP’s April 18 Petition.

UP, especially considering the larger proportion of intermodal traffic handled on the former ATSF before its merger with BN.⁷

Accordingly, AEPCO continues to believe that the unadjusted revenue substantially understates the overhead traffic and revenues passing over the ACE's route, that some upward revenue adjustment is appropriate, and that the carriers have the capability to divulge what an appropriate adjustment would be, but have avoided doing so on the grounds of self-interest. In this regard, it is again significant that the Railroads purport to demonstrate that AEPCO's revenue adjustment is unfounded, but they are very careful not to indicate what a more accurate figure would be.

iv. AEPCO's Abandonment of Adjustments for Rebuttal

AEPCO continues to believe both that the Railroads have effectively "hid the ball" as to their traffic and revenues and that some revenue adjustment is still appropriate. However, AEPCO has, for purposes of rebuttal, elected to forego the revenue adjustment in order to narrow the issues in dispute and facilitate the Board's resolution of the case without need for further evidentiary submissions. While AEPCO continues to believe that some revenue adjustment is in order, AEPCO recognizes that its calculation on Opening appears to overstate the adjustment, at least as applied to BNSF's

⁷ATSF's 1994 Annual Report to shareholder indicates that 37.2% of its loads were intermodal. AEPCO Rebuttal Workpapers p. 110.

intermodal traffic, and is thus abandoning the adjustment for all non-coal traffic for both BNSF and UP.

AEPCO's incorporation of the Railroads' criticism constitutes fully permissible Rebuttal, especially as it removes an area of otherwise vigorous factual dispute. Duke Energy, supra, at 4 (indicating that "simply seeking to support what [the party] presented in its opening evidence or adopting evidence submitted by [carrier]" constitutes permissible rebuttal); PEPCO. AEPCO is simply adopting the Defendants' position, rather than seeking to introduce a new and untested position on rebuttal. Moreover, as explained in Parts III-B, C, and D, infra, AEPCO is not making any changes in its calculations to reflect the reduced capital costs and operating expenses associated with handling less traffic, even though there would be a significant reduction in the trailing tons being transported, and even though AEPCO's capacity analysis and operating statistics presented on Opening reflected the adjusted traffic and revenue levels. It should be very apparent that AEPCO's analysis is very conservative because it is premised on handling substantially greater traffic than there are actual revenues.

AEPCO is, however, presenting an alternate calculation for illustrative purpose that reflects a limited revenue adjustment that applies only to the { } BNSF and UP revenue-generating trains (as identified in their train data) for which AEPCO was

Table III-A-8 Comparison of 1Q01 Results under Different Revenue Calculations			
	Opening Case (With Revenue Adjustment)	Base Case (No Revenue Adjustment)	Alternate Case (Limited Revenue Adjustment)
BNSF Revenues (Gen. Freight)	{		}
UP Revenues (Gen. Freight)	{		}
Coal Revenues	{		}
Total Revenues	174.9	124.6	136.9
1Q01 SAC Costs	77.6	77.9	77.9
Percentage Reduction 1Q01	56%	37%	43%
2001 Lee Ranch Tar. Rate	\$9.35	\$9.35	\$9.35
1Q01 Jurisdictional Thresh.	\$7.69	\$7.69	\$7.69
1Q01 Lee Ranch SAC Rate	\$4.15	\$5.85	\$5.32
Source: AEPCO Opening Exhibit III-H-1 and AEPCO Rebuttal Exhibits III-H-3 and 4.			
The \$77.6 million SAC costs for the Opening reflects original DCF analysis. The Third Errata increases SAC costs to \$77.9 million, but a revised DCF analysis was not submitted with the Third Errata because of the minor nature of the cost increase.			

The SAC results are substantially below the jurisdictional threshold in each instance. In other words, the revenue adjustment has no bearing on the initial maximum rate calculation.

It should also be noted that the foregone revenue adjustment goes only to the issue of how much traffic the ACE will handle, not what kinds of traffic or how that traffic is distributed among different categories. AEPCO's now-foregone revenue adjustment (like the limited revenue adjustment) did not assume that the additional traffic

would have any specific origins, destinations, weights, or revenues, e.g., AEPCO did not assume that there would be x number of additional intermodal or auto carloads moving from Los Angeles to Houston. Instead, AEPCO's assumed that the missing traffic would have the same average characteristics in terms of distance, weight, equipment, etc., as the confirmed or matched traffic.

Accordingly, elimination of the revenue adjustment presents no new quantitative (or qualitative) issues in terms of whether the cross-over traffic covers its off-SARR costs or whether the traffic should be excluded because it is not really overhead traffic by virtue of any intermediate switching along the SARR's route, etc. Whatever analysis or criticisms would have been appropriate based upon the matched train/traffic data in the presence of the revenue adjustment thus remains equally valid (or invalid) in the absence of the revenue adjustment (or even the limited revenue adjustment in the "Alternate" case).

If, for example, the Railroads had attempted to make any sort of systematic or empirical demonstration that the MMP revenue allocation method for cross-over traffic did not enable the residual incumbent to cover the appropriate level of costs (rather than rely on highly generalized assertions for which the carriers present virtually no factual support), then the Railroads would have had the same impetus, opportunity, and ability to make that demonstration without the revenue adjustment as with it. Similarly, if the Railroads wanted to show that the ACE's traffic included local movements, that is,

movements that originated or terminated between Defiance and Cochise on UP or between Defiance and Vaughn on BNSF, their ability and motive to do so is unaffected by AEPCO's abandonment of the revenue adjustment.

Consequently, AEPCO's elimination of the revenue adjustment should not be found to provide any sort of basis for the Railroads to seek to introduce any additional evidence in this proceeding. As noted, AEPCO is accepting in toto the Railroads' objection to the revenue adjustment, without making any accompanying reductions in capital costs or operating expenses. Whatever additional evidence or arguments that the Railroads might want to present would have been equally applicable to the SARR with the now-foregone revenue adjustment. If shippers are to be precluded from making such changes on rebuttal as moving a terminal yard a relatively short distance to eliminate what is obviously an oversight,¹¹ then it should be equally impermissible for defendants to belatedly seek to introduce evidence or claims that could have been submitted on reply.

Accordingly, with the elimination of the revenue adjustment, AEPCO's presentation as to its stand-alone traffic constitutes the best evidence of record and should be accepted by the Board.

b. Other Traffic Group Matters--Switching at Belen

The Railroads, particularly BNSF, elsewhere contend that AEPCO's traffic group is overstated because it includes non-overhead traffic that is switched in or out of

¹¹See Duke Energy, supra.

through trains at various locations, of which only Belen (on the BNSF) is discussed with any specificity. BNSF seeks to create the impression that Belen is a major operations point with a substantial volume of traffic entering and leaving BNSF's main east-west line at that point from both the north and the south. BNSF SAC Reply at III.A-18 and Part III.C.

In fact, Belen serves primarily as a crew change point and a car inspection location, two functions that can be shifted to other locations with little difficulty, as discussed in Part III-B and III-C. Additionally, the Belen Yard has only eighteen tracks, thus belying any notion that it serves as a major classification or switching facility. Moreover, the volume of traffic that enters or leaves BNSF's east-west line at Belen to move from or to the north or the south is quite limited.¹²

As indicated in AEPCO's Opening Evidence, AEPCO designed the ACE's traffic group to consist of (1) the issue traffic, (2) some additional coal traffic, (3) traffic that moves in overhead service over BNSF between Defiance and Vaughn, and (4) traffic that moves in overhead service over UP between Cochise and El Paso. AEPCO recognized that the number of cars on an overhead train entering the ACE at a terminal

¹² BNSF's data shows a traffic density of { } million gross tons per mile south of Belen, of which { } million gross tons per mile or { } consists of AEPCO and Tucson Electric Power coal traffic that the ACE reroutes through Vaughn and El Paso. The volume of traffic north of Belen is only { } million gross tons per mile. See AEPCO Op. electronic workpaper "ACE Coal Traffic and Revenue Forecast.xls" (coal volumes) and AEPCO's Reb. electronic workpaper "2001 Traffic Density Map.pdf."

point might be lower, or greater, than the number of cars leaving the ACE on that same train, and so, as the Railroads recognize (BNSF SAC Reply at III.C-9), AEPCO selected the lower of the entry or exit car numbers for the train. AEPCO's approach was quite conservative because some of the difference would be attributed to bad-ordered cars, meaning that a bad-ordered car would cause its original train to be shorter upon its exit from the ACE, whereas the train the car eventually moved on would be longer on its exit. AEPCO's practice of using the shorter of the entry or exit figures causes AEPCO to exclude the car out of an abundance of caution.

However, in addition to using the lower of the entry/exit railcar counts, AEPCO also checked the particular railcars (for which there were matches between the train and traffic data) by origin and destination to confirm that the cars were not routed to or from non-overhead locations such as Deming, El Paso, or Albuquerque.¹³ This procedure prevented the inclusion of the traffic that BNSF would seek to exclude. Furthermore, the elimination of the revenue adjustment means that AEPCO has included only traffic for which it found a traffic tape record that matched an overhead train entry in the train event data. There is thus no basis for BNSF to claim that AEPCO has

¹³ See AEPCO Rebuttal electronic workpapers "ALB-traf-01.xls," "ELP_traf_01.xls," "ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls," and "Match Results 2001 (III-A-7 & III-A-9pl).xls" Reviewing the traffic tape records that matched the train event data to determine if there were any records that should be excluded from the ACE's traffic base is a far more limited and more feasible task than reviewing all of the traffic tape records to determine which records might be included in the ACE's traffic base.

improperly included a local movement, and, indeed, neither BNSF nor UP specify any particular carload that was improperly included.

c. Belen-Phoenix Trains

The carriers, or rather BNSF, also criticize AEPCO for having included in its traffic group carloads on trains that move between Belen and Phoenix, which is located west of ACE's western terminus at Defiance. BNSF appears to assert that because these movements involve some switching at Belen, AEPCO must either replicate the switching at Belen (just as AEPCO must apparently replicate, or enable the residual incumbents to replicate, other aspects of the incumbents' operations, such as crew change points, or compensate the incumbents for the increased costs) or forego the traffic. BNSF SAC Reply at III.C-6.

AEPCO objects strongly to the predicate of the carriers' assertion. AEPCO has constructed the ACE as primarily an overhead carrier, and has eliminated Belen as an interchange for non-coal traffic, as well as the corresponding Deming interchange on the UP segment and the connecting BNSF line between the two, because they are inefficient and/or unduly complicate AEPCO's presentation of its SAC evidence.¹⁴ Under the Coal

¹⁴ The ACE does receive a small volume of coal in interchange at Belen from York Canyon. If, however, AEPCO had made provision for the ACE to conduct local switching for non-coal traffic at Belen (or elsewhere), the Railroads would likely dispute many, if not all, aspects of the proposed operation (e.g., adequacy of infrastructure, personnel, switching times, etc.). Given the abundance of pure overhead traffic on the two east-west lines, AEPCO perceived no adequate reason for introducing these

(continued...)

Rate Guidelines as well as SAC theory generally, a SARR is not required to replicate the incumbents' operations, and is certainly not required to engage in operations that benefit the incumbents' activities on segments of their rail networks not traversed by the issue traffic. Indeed, to require a captive shipper to design and operate its SARR so as to replicate such functions would violate its least-cost, most-efficient nature and impose a severe entry barrier that would result in the very type of inefficiency and associated cross-subsidy that the SAC test is intended to eliminate.¹⁵

BNSF presumably conducts its Phoenix-related switching activities at Belen because BNSF already has a switching and car inspection facility at that location and BNSF finds it more efficient to stop the other trains only once, at Belen, rather than at both Williams Junction (where the branch line to Phoenix meets the mainline) and Belen.¹⁶ The switching activities for the Phoenix-bound or Phoenix-originated trains

¹⁴(...continued)
additional factual complexities and thus elected not to include this additional traffic in its SARR.

¹⁵Alternatively, AEPCO should be entitled to additional compensation for providing a service that benefits off-SARR operations.

AEPCO recognizes that the SARR was held to be required to absorb some off-SARR costs in STB Docket No. 42056, Texas Municipal Power Agency v. The Burlington Northern And Santa Fe Railway Company, (STB served March 24, 2003) ("TMPA"), but the SARR in TMPA was held responsible only for the additional costs associated with the rerouting of non-issue traffic. AEPCO's SARR does not involve the off-SARR rerouting of any cross-over traffic.

¹⁶ The ACE performs the car inspection activities for the BNSF overhead trains at
(continued...)

could, however, be carried out at other locations where BNSF might locate or already have a yard or available tracks, such as the Defiance or Vaughn interchanges with the ACE or Williams Junction.¹⁷ There is no reason to think that switching tasks would entail any greater operating expense if they were performed at some location other than Belen. Moreover, it makes no sense for the ACE to locate any facility at Belen (other than the interchange track for certain coal movements) because the ACE does not receive or deliver any local, non-coal traffic at that location. Nor does the ACE need to locate any railcar inspection facilities at Belen since such facilities would be duplicative and redundant of what the ACE already has at Vaughn.

Accordingly, requiring the ACE to conduct the Phoenix-related switching operations on its line would simply require AEPCO to absorb the cost of an activity from which it derives no benefit and would thus amount to a cross-subsidy. Even without the Belen switching activities, AEPCO will deliver the same Phoenix-bound cars (less any local arrivals at Belen) to BNSF at Defiance. While BNSF might then switch the Phoenix

¹⁶(...continued)

Vaughn, which conforms to the FRA's train inspection requirements.

¹⁷AEPCO acknowledges that if the switching activities were carried out at Vaughn or some point further to the east, the BNSF might well not be able to include in the train whatever traffic arrives at Belen from the north or the south. However, as the preceding discussion establishes, AEPCO has already eliminated such traffic from the ACE's traffic base, so such traffic is not improperly included. Under basic SAC principles, AEPCO is certainly entitled to eliminate discrete portions of an incumbent's traffic.

cars at some other location,¹⁸ that switching is a cost activity attributable to service to the Phoenix shippers, not to AEPCO, and requiring AEPCO to absorb such costs is to impose a cross-subsidy on AEPCO, in contravention of the basic principles of SAC theory. There is thus no reason to hold AEPCO responsible for the costs of switching the Phoenix trains at Belen (or at any other location).

If, however, the Board should decide the issue differently, AEPCO would elect to forego the Phoenix-Belen traffic rather than introduce a complicated and inefficient switching arrangement at Belen that would impair the ACE's operations generally. Exhibit III-A-8 and associated electronic workpaper "Exhibit III-A-8.xls" identifies and quantifies the traffic and associated ACE revenues on the Phoenix-Belen trains. Should the Board disagree with AEPCO, those revenues should be deducted from the ACE's revenues. AEPCO estimates that the impact on the SAC rate level would be no more than { } per ton at the 1Q01 level. See AEPCO Rebuttal electronic workpaper files "Exhibit III-H-P.123" and "Exhibit III-A-8.xls." Elimination of the traffic would also result in a modest reduction in operating expenses (and an improvement in various operating statistics), but AEPCO has not calculated the associated savings.

¹⁸ The direct costs of providing the switching should be the same, whether that switching is provided at Belen, Williams Junction, or some other location.

2. Volumes (Historical and Projected)

a. Historical Volumes

The adjustments that AEPCO has made on Rebuttal to its selection and identification of historical or base-year volumes are described above. Details of the resulting Rebuttal traffic volumes are set forth in AEPCO's Part III-A electronic workpaper files "ACE Coal Traffic and Revenue Forecast.xls" and "ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls."

On Rebuttal, AEPCO has continued to cap the ACE's coal and non-coal traffic separately (not collectively) at the 2001 level. As on Opening, AEPCO's evidence indicates a decrease for coal traffic in 2002 (resulting primarily from the mild weather). AEPCO has not attempted to replace the 2002 coal shortfall with 2002 non-coal traffic, and the result is that the ACE's total 2002 traffic is less than the 2001 level.¹⁹ These levels reflect the extremely conservative nature of AEPCO's SAC calculations.

b. Projected Volumes

On Rebuttal, AEPCO has continued to cap total annual coal and non-coal volumes separately at their 2001 levels.

¹⁹ Moreover, under the ACE's conservative coal forecast, the ACE's coal volumes remain below the 2001 level until { }, notwithstanding indications that 2002 presents an unrepresentative decrease in coal consumption.

i. ACE Non-Coal Volumes

AEPCO has held the ACE's non-coal traffic volumes for 2002-2020 constant at the revised 2001 level not only in the aggregate { }, but also by commodity group (intermodal, auto, grain, manifest, and other), as shown in Table III-A-9 below:

TABLE III-A-9 ACE Non-Coal Traffic Volumes for Each Year of Operations (by Commodity Group) (in thousands of tons)		
Commodity	BNSF Annual Tons	UP Annual Tons
Auto	{	}
Grain	{	}
Intermodal	{	}
Manifest	{	}
Other ^{1/}	{	}
Total	{	}
Total BNSF/UP Combined	{ }	
Source: electronic workpaper file “ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls.”		
^{1/} For BNSF, “Other” trains include “Unit Trains Other than Coal or Grain” and “High/Wide Traffic.” For UP, “Other” trains include “Ore” and “Customer Special Trains”		

AEPCO's analysis is again extremely conservative in that it ignores the significant increases in non-coal traffic reflected in the Defendants' internal volume forecasts. BNSF's 2003 to 2007 Long Range Plan for three non-coal commodity groups,

i.e., Consumer Products (automotive and intermodal),²⁰ Agricultural Products, and Industrial Products, projects annual compound growth rates of {

}.²¹ Similarly, UP's 2002-2003 forecast database is organized by Business Group, including the Agricultural Products, Automotive, and Intermodal Business Groups, and projects annual growth of { }.²² While these forecasts, especially for intermodal traffic, may appear high, they are entirely reasonable given the rate of growth that the railroad industry has achieved over an extended period.²³

Under relevant precedent such as FMC, BNSF's and UP's projections would justify volume forecasts of the stated magnitude for not only the covered years, but also for later years in the DCF analysis. Accordingly, the { } annual increase for

²⁰ BNSF's 3Q02 Analysts Presentation includes automotive and intermodal traffic in its Consumer Product Commodity Group. See AEPCO Op. Workpapers Vol. 5, pp. 02098-02101.

²¹ See AEPCO Rebuttal electronic workpaper "ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls," worksheet "BNSF '03-'07 Traffic Forecast."

²² See AEPCO Rebuttal electronic workpaper "ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls," worksheet "UP '02-'03 Traf. & Rev. Forecast."

²³ According to UBS Warburg, North American Railroads Weekly (Feb. 21, 2003), at p. 5, "[s]ince 1980, intermodal has grown at a CAGR [compound annual growth rate] of 6% and 2003 is shaping up as a typically high growth year, with QTD volumes up 10% in the U.S." UBS further explained that the "current boom is being driven by a geographical shift in supply [to Asia, and especially China] ... [and is] expect[ed] to continue for the foreseeable future." Id. The UBS Warburg report is included in AEPCO's Rebuttal Workpapers at pp. 111-134.

BNSF Consumer Products traffic would more than { } the level of this traffic by year { }.

Moreover, the growth rates would in time exceed the now foregone revenue adjustments. BNSF's { } rate of growth for Consumer Products traffic overcomes the now-eliminated { } volume adjustment (BNSF SAC Reply III-A-10, Table III.A-1) within { } years. UP's { } Intermodal traffic growth rate exceeds the eliminated UP { } volume adjustment (UP SAC Reply III-A-3, Table UP III.A-1) in less than { } years.

However, AEPCO has foregone these traffic increases in the interests of conservatism and minimizing dispute.

ii. ACE Coal Volumes

On Reply, neither BNSF nor UP presented any real criticism of AEPCO's treatment of its coal volumes. Accordingly, AEPCO has continued to use the same volumes for rebuttal purposes. Accordingly, Table III-A-10 below presents the same information that AEPCO presented in Opening Table III-A-3:

TABLE III-A-10 Total ACE Coal Traffic (in thousands of net tons)						
Year	Shipper					Total ^{2/}
	AEPCO	APS	SRP	TEP	Industrial ^{1/}	
2001	{					}
2002	{					}
2003	{					}
2004	{					}
2005	{					}
2006	{					}
2007	{					}
2008	{					}
2009	{					}
2010	{					}
2011	{					}
2012	{					}
2013	{					}
2014	{					}
2015	{					}
2016	{					}
2017	{					}
2018	{					}
2019	{					}
2020	{					}
^{1/} Includes California Portland Cement Company (Rillito, AZ), Phoenix Cement Company (Clarksdale, AZ), Mitsubishi Cement Company (Cushenbury, CA), and Stone Container Corp. (Snowflake, AZ). ^{2/} Rows may not total due to rounding. Source: AEPCO Opening electronic workpaper "ACE Coal Traffic and Revenue Forecast.xls."						

3. **Revenues (Historical and Projected)**

The Board's decision in Ex Parte No. 347 (Sub-No. 3), General Procedures for Presenting Evidence in Stand-Alone Cost Rate Cases, (STB served March 12, 2001), specifies that revenues (historical and projected) are to be discussed under four headings: (a) single-line, (b) divisions – existing interchanges, (c) divisions – cross-over traffic, and (d) other.²⁴ AEPCO has retained those organizational headings on Rebuttal, even though BNSF and UP did not address all of them on Reply.

a. **Single-Line**

The ACE's single-line traffic consists of issue traffic moving from the McKinley and Lee Ranch mines to Apache and constitutes a relatively small portion of the ACE's revenues. BNSF's and UP's Reply Evidence essentially ignores AEPCO's coal traffic, and AEPCO's presentation as to these matters must thus be deemed the best evidence of record.

b. **Divisions – Existing Interchanges**

As explained above, the ACE will not exchange any rail traffic with other carriers other than the residual BNSF and UP. The traffic interchanged with these carriers constitutes cross-over traffic moving via new interchanges.

²⁴ AEPCO's Rebuttal evidence regarding stand-alone revenues is sponsored by its witnesses Thomas D. Crowley (generally), William W. Whitehurst (particular cost analyses), George H. Borts (cross-over traffic issues), and John P. Toren (rate divisions for non-coal traffic).

c. Divisions – Cross-Over Traffic

The largest category of traffic to handled by the ACE constitutes so-called “cross-over” traffic. This category includes: (i) coal and non-coal traffic that the ACE handles as a bridge carrier (i.e., most of the traffic handled by the ACE); (ii) non-issue coal traffic that the ACE originates at either McKinley or Lee Ranch and forwards in interchange either at Defiance (BNSF) or Cochise (UP); and (iii) non-issue coal traffic that the ACE receives in interchange and delivers to AEPCO or to the residual UP at Cochise.

As explained on Opening, AEPCO developed divisions for allocating revenues for these movements between the ACE and the incumbents. Consistent with the methodology endorsed by the Board in McCarty Farms, 2 S.T.B. at 472, and subsequent cases, AEPCO has allocated revenues using the modified mileage block prorate (“MMP”) method as described in the User Guide for the 1995 Surface Transportation Board Waybill Sample. Under this formula, each participating carrier is credited with one “block” for each 100 miles (or portion) that it handles a shipment, plus an additional block if the carrier originates or terminates the shipment. Total blocks are divided into total revenue, and the resulting revenue per block is multiplied by the total number of blocks credited to the ACE to arrive at the ACE’s allocated revenue share.

BNSF and UP take great exception to both the ACE’s heavy reliance on cross-over traffic and AEPCO’s use of the MMP method, especially as applied to the non-coal traffic and particularly the intermodal traffic. The Railroads’ opposing arguments

boil down to two main points: (1) intermodal and other exempt traffic is of such marginal profitability that it cannot possibly render the ACE viable; and (2) to the extent that the traffic does render the ACE viable, it is only because the MMP allows the ACE to capture revenues while avoiding costs.

These and other matters are addressed below.

i. The “Marginal” Nature of Intermodal Traffic

Both BNSF and UP attack the ACE’s substantial reliance on intermodal (and, to an unclear extent, other non-coal) traffic on the grounds that such traffic offers only “marginal” returns. BNSF SAC Reply at III.A-38 to 42; UP SAC Reply at I-5 and III-A-15.

The Railroads’ assertion of the “marginal” nature of intermodal traffic must be viewed with great suspicion in view of the enormous success that BNSF, UP, and the other major carriers have had in “growing” this segment of their business and in publicizing that growth as a major achievement. As noted supra, the railroad industry as a whole has achieved a compound rate of growth of 6% in intermodal traffic since 1980, growth is especially strong during the first part 2003, and both BNSF and UP forecast continued strong growth.²⁵ Additionally, the railroad industry places a strong emphasis on serving this traffic as both BNSF and UP give intermodal traffic their highest operating

²⁵ See the UBS Warburg report and the Railroads’ own traffic forecasts.

priority, except for passenger service (for which Amtrak enjoys a statutory priority under 49 U.S.C. § 24308(c)).²⁶

It is thus somewhat puzzling that BNSF and UP would go to such lengths to denigrate AEPCO's inclusion of this traffic in the ACE's traffic group.²⁷ In any event, the Railroads' claims that such traffic is too marginal to support a SARR fail on several levels.

First, just because intermodal traffic may be "marginal" and/or exempted from rate regulation in general does not mean that the particular traffic that passes over the ACE's route is, in fact, marginal.²⁸ Some of the intermodal or exempt traffic may, indeed, be of marginal profitability, but other movements within the category may be quite

²⁶ See AEPCO Rebuttal electronic workpapers "bnsf_train priority.pdf" and "up_train priority.pdf."

²⁷ The Railroads' comments bring to mind the following portion of the monologue at the end of Annie Hall:

There's an old joke. Two elderly women are at a Catskills mountain resort, and one of them says, "Boy, the food at this place is really terrible." The other one says, "Yeah, I know, and such small portions."

²⁸ In considering whether to exempt specific types of traffic from regulation, the Board and its predecessor normally rely on average R/VC ratios, and then quickly note that shippers are free to seek revocation in any individual instances of abuse. Given the costs of proceeding before the Board (and the likelihood that the carriers will engage in burdensome discovery and potential retaliation), shippers have been understandably reluctant to seek revocation. Moreover, in traffic exemption proceedings, the carriers are always quick to note the pro-exemption language in 49 U.S.C. § 10502 and its predecessor, and they further explain that the absence of regulatory constraint will facilitate their efforts to expand the market segment. Accordingly, the fact that traffic may be exempt hardly establishes that the traffic is of marginal profitability.

profitable. For example, in 2001, BNSF moved { } intermodal units on premium intermodal trains that traversed the ACE Defiance-Vaughn line at rates between { } mills per ton mile. See AEPCO Rebuttal electronic workpaper “BNSF-Z-{ }m.xls.”

Accordingly, saying that traffic is exempt says nothing about its suitability for supporting a SARR. Particular movements of exempt or other marginal traffic might individually make only a small contribution to the SARR’s viability, but such contributions may, in the aggregate, result in an enormous contribution, particularly where there is a large volume of such traffic, as is the case on the BNSF and UP lines replaced by the ACE. As noted in the Coal Rate Guidelines themselves, economies of density are of enormous importance to SAC analysis, just as they are important to real-world railroading, as evidenced by the priority that BNSF and UP place on growing their intermodal traffic.

Indeed, most coal movements occur under contracts that are also not subject to the Board’s jurisdiction, yet those contract movements (mainly competitive movements of Power River Basin coal from origins served by both BNSF and UP) have formed the backbone of nearly all previous SAC presentations. Furthermore, those exempt contract movements in theory benefit from the same percentage reduction as does the non-exempt

issue traffic (as would the intermodal and other traffic included in the ACE's traffic group).²⁹

Moreover, the Railroads' own information indicates that intermodal traffic still yields margins that are quite significant. The article cited by UP indicates that the intermodal margins are generally in the range of one-third to two-thirds of that of coal, the industry's most profitable commodity:

We estimate that coal likely carries margins in excess of 30 percent in many instances, given the segment's unit-train characteristics and limited handling requirements. On the other hand, intermodal carries one of the lowest average margins — in the 10 percent to 20 percent range.³⁰

Even averaging margins half as high (or lower) as coal would still enable intermodal traffic to make a substantial contribution to a SARR, especially when high densities are involved.³¹

²⁹ Insofar as some of the ACE's traffic does move at truly marginal levels (which BNSF and UP have not established, as discussed *infra*), it may be appropriate to reconsider whether that marginal traffic should benefit from the same percentage reduction as the issue and other traffic that is more profitable. The Board might reasonably conclude that such traffic already benefits sufficiently from competition and decide to allocate more of the SAC savings to the captive traffic.

³⁰ Flower, "Container volume is growing, but railroads' intermodal profit margins are marginal at best," ProgressiveRailroading.com (June 18, 2003), http://www.progressiverailroading.com/dyn-content.html?item_id=20427&ticket=00008829921057088150. The article is cited in UP SAC Reply at III-A-15, and included in UP SAC Reply electronic workpapers at "Intermodal Margins Article.pdf."

³¹ Additionally, the 30% margin claimed for coal plainly appears to rest on something other than a variable cost analysis. While the article does not explain that cost
(continued...)

The available information indicates that the rates that BNSF and UP charge for intermodal traffic are actually quite high, especially as compared to coal. In particular, the December 2000 study of rail rates prepared by the Board's Office of Economics, Environmental Analysis, and Administration³² indicates, at p. 15, that coal is by far the lowest-rated commodity for the western carriers (meaning BNSF and UP). For 1999 (the last year covered by the study), the revenue per ton-mile yield for coal was 11 mills per ton-mile,³³ whereas the next lowest yielding commodity, farm products, averaged a yield of 20.6 mills.³⁴ In contrast, BNSF's and UP's average yield for the non-coal traffic handled by the ACE is, as shown on AEPCO Rebuttal Exhibit III-A-9, { } mills, which is { } more than their average coal yield.³⁵ Moreover, BNSF's average yield for auto

³¹(...continued)
analysis, it seems likely that the same cost analysis applied to the intermodal traffic. Accordingly, if the average mark-up on coal movements were, e.g., 70%, then intermodal traffic might average a 35% mark-up.

³² The study can be found at [http://www.stb.dot.gov/econdata.nsf/ddcd1d0e9ffd326985256605005f697b/c98b085d36e19ac9852569b50056b4f2/\\$FILE/RI.Pdf](http://www.stb.dot.gov/econdata.nsf/ddcd1d0e9ffd326985256605005f697b/c98b085d36e19ac9852569b50056b4f2/$FILE/RI.Pdf) and is included in AEPCO's Rebuttal Workpapers at pp. 135-157.

³³ As shown on AEPCO Rebuttal Exhibit III-A-9, the coal moving over the ACE's route yields BNSF and UP an average of { } mills per ton-mile ({ } mills for the issue traffic) for the full movement. The relatively high yield is attributable to the fact that these coal movements are relatively short and face little competition.

³⁴The Flower article cites the supposedly low yield of intermodal movements, but the comparison is to the "average carload move." In fact, coal yields are normally substantially below average, or at least the average implied by Mr. Flower.

³⁵ The Board does not require carriers to report their system intermodal traffic on a
(continued...)

traffic passing over the ACE's route more than { } the yield for intermodal traffic, nearly { } mills, and UP's automotive yield is almost { } mills.

In addition, the generally accepted view, as reflected in the Flower article and the UBS Warburg report, is that intermodal traffic is very time sensitive and that intermodal yields could be considerably higher if the carriers were capable of providing a higher quality service in terms of speed and consistency. As discussed in Part III-C, infra, the ACE's service is at least comparable to that provided by BNSF and UP, and in most cases is substantially superior, particularly in the handling of non-coal, time-sensitive traffic.³⁶ The ACE should thus arguably receive a premium for its higher quality service to the cross-over traffic.

The BNSF and UP SAC Reply submissions are devoid of any analysis that purports to be representative of the costs associated with servicing intermodal or other non-coal traffic. Instead, the only analysis that is presented consists of three movements that are costed by John C. Klick on behalf of BNSF at BNSF SAC Reply III.A-50, Table III.A-3 and BNSF electronic workpaper "bnrv 2001 examples for costing.zip." While the three movements were taken in sequence, BNSF makes no suggestion that the movements were randomly selected or are in any way representative. Instead, they appear to have

³⁵(...continued)
mills per ton-mile basis.

³⁶ See also AEPCO's Rebuttal electronic workpapers "Transit Time Comparison.xls" and "ACE Non-coal Transit Times.xls."

been hand-picked, at least in part to illustrate differing permutations for drayage responsibilities and railcar ownership (as well as different car types,³⁷ although Mr. Klick ignores the differences in car types, as well as the differences in car ownership, in his costing analysis, as noted infra).

Mr. Klick claims that his examples reveal very modest mark-ups to variable costs on the three movements ranging from 4.9% to 15%. These mark-ups are considerably below those indicated in the Flower article (again assuming that Mr. Flower was addressing variable costs and not some higher cost measure). Mr. Klick also purports to show that application of the MMP method to the three example movements unduly rewards the overhead ACE at the expense of the residual BNSF.³⁸

³⁷ The first shipment involves a type “S” car, the second a type “Q” car, and the third a type “P” car. The UMLER pages of Official Railway Equipment Register (January 2002) (included in AEPCO Rebuttal Workpapers at pp.158-172) explains the different characteristics of these cars. S cars are stack cars that have 2-5 articulated well units per car, each well of which can carry two containers in a double stack, meaning that the cars can carry up to 10 containers. In contrast, Q and P are single level. Q cars are lighter weight, low profile (or spine) cars that are articulated and contain up to five wells, each of which can carry one container. P cars are conventional intermodal flat cars that can carry up to two intermodal trailers in a single level configuration.

³⁸ Even under Mr. Klick’s analysis, application of the MMP method still leaves the residual BNSF with a recovery of 97.5% to 112.6% of its variable costs, and a considerable return in excess of its directly variable costs, which is more than sufficient to induce BNSF to continue to handle the traffic. “As a general rule, it is better for a railroad to carry any traffic that covers its own (attributable) costs and makes any contribution (no matter how slight) to joint and common costs.” Rate Guidelines -- Non-Coal Proceedings, 1 S.T.B. 1004, 1016 (1996), appeal dismissed sub nom. Assoc. of American Railroads v. S.T.B., 146 F.3d 942 (D.C. Cir. 1998).

BNSF and Mr. Klick offer no or little description of how the three movements were costed. In fact, as explained in accompanying Exhibit III-A-10 prepared by AEPCO witness William W. Whitehurst, Mr. Klick utilized the Phase III URCS, which is a highly generalized approach that ignores most of the specific characteristics of a movement, such as cycle time.³⁹ The Board has clearly recognized that the URCS costing of intermodal movements produces suspect results, precisely because the resulting R/VC figures are unrealistically low:

The assumptions applied by URCS as to how intermodal traffic is handled by the railroads are derived from a special study conducted in the late 1960s, when TOFC/COFC operations were still in the early stages of development

Accordingly, the URCS assumptions with respect to intermodal traffic are outdated and do not reflect the efficiency of current intermodal operations. The most dramatic evidence of this development lies in the fact that, under current costing procedures, 67% of the TOFC/COFC and 99% of the RoadRailer traffic in 1995 appears to have variable costs that exceed revenues. Intuitively, these figures cannot be right, because the railroads have continued to market intermodal service aggressively and are investing heavily in upgrading their intermodal facilities and services. Such actions are inconsistent with traffic that is marginal or money-losing.

³⁹ As explained by Mr. Whitehurst, Mr. Klick did not reflect any apparent differences in the car types or ownership. In particular, for each of the three movements (despite their different car types and car ownership), Mr. Klick used an intermodal private owner freight car rental rate of \$0.17948 per mile, which is the URCS default for the west region, and an intermodal tare weight of 33.4 tons, which is not the URCS default and is not derived in his workpapers.

Ex Parte No. 431 (Sub-No. 2), Review of the General Purpose Costing System, 2 S.T.B. 659, 662-63 (1997) (emphasis added). While the Board made some subsequent changes to how URCS treats intermodal movements in its December 1997 decision in the Ex Parte No. 431 (Sub-No. 2) proceeding, the costing remains inherently suspect, as confirmed by the results of Mr. Klick's analysis on even a through movement basis.

Mr. Whitehurst explains in Exhibit III-A-10 that URCS lumps the three intermodal car types together, thereby obliterating significant differences in their carrying capacity, tare weight, and freight car rental rates, and thus productive efficiency. Indeed, since 1997, the number of S (double-stack) cars, the most economical of the three types (and the type shown on the cover of BNSF's 2002 Annual Report to Shareholders), has increased by 50%, such that they now account for almost one-half, rather than one-third, of the number of all intermodal cars, and 80% of BNSF's self-owned fleet of intermodal cars. Mr. Whitehurst further notes that URCS treats both intermodal administrative and intermodal terminal maintenance functions as 100% variable, even though the otherwise applicable general BNSF variability factors for these functions are 85% and 58.3%, respectively.

Mr. Whitehurst's analysis demonstrates the significant effect of adjusting for just these three apparent shortcomings in the Phase III URCS, that is, using the private owner freight car rental rates for a weighted-average of three and five-well S cars (the

most common type)⁴⁰ and utilizing the refined URCS variability percentages. Mr. Whitehurst's refinements reduce the variable costs of the three movements by 29%, 11%, and 15%, respectively, resulting in through movement R/VCs of 155.7%, 145.3%, and 123.7%, respectively. Furthermore, the analysis shows that application of the MMP method leaves the residual BNSF with divisions on the three movements that yield R/VCs of 148.1%, 141.5%, and 113.6%, respectively, which are only modestly lower than the BNSF through-movement R/VC ratios. The resulting R/VC ratios are also much more in line with the margins claimed in the Flower article.

Accordingly, the three examples cited by Mr. Klick, properly considered, provide no support for BNSF's and UP's contentions. To the contrary, the examples do much to explain (1) why BNSF (and UP) are intent on growing their intermodal traffic, and (2) how AEPCO can properly base its SARR on a relatively large volume of intermodal and other cross-over traffic.

Two further observations are in order. First, the refined costing analysis employed by Mr. Whitehurst still reflects the Phase III URCS, which is a highly generalized costing methodology. In particular, it does not reflect in any way the operating priority that BNSF and UP assign to intermodal traffic. That operating priority translates into faster movement times, which should result in reductions in a number of

⁴⁰ While Mr. Klick noted that the three examples involved a mixture of car ownership, he appeared to cost them all as private cars, utilizing the unexplained tare weight and intermodal freight car private line rates noted supra.

time-based costs including locomotive and railcar capital costs, crew costs, and fuel costs (due to shorter dwell times). Nonetheless, the examples fail to support the Railroads' contentions.⁴¹ Furthermore, the Phase III URCS costs do not reflect such matters as the relative densities along the BNSF and UP mainlines (including the segments not displaced by the ACE), the much higher road property costs of the ACE flowing from the fact that its lines are recently constructed (as compared to the residual incumbents' lines that were built long ago and have been subject to substantial depreciation), the relative economics of specific types of intermodal freight cars,⁴² and the lower embedded capital costs of the residual incumbents (as contrasted with the ACE, whose embedded cost of capital is essentially equivalent to the industry's current cost of capital). Additionally, even under Mr. Klick's version of the analysis, all three movements yield a substantial return over "attributable costs," that is, directly variable costs, as explained infra.

Second, while the revised analysis of the three examples is sufficient to rebut Mr. Klick, the three examples (which were presumably hand-picked for the reasons noted supra) constitute an extremely limited test sample, particularly since Mr. Klick does not even claim that the three movements were randomly selected. In order to prepare such an analysis, AEPCO asked its consultants to take a 30-movement random sample of

⁴¹ To the extent that the Railroads contend that the intermodal traffic is really marginal, it would be appropriate to consider their management costing on which they purport to rely for business purposes, as opposed to their regulatory costing.

⁴² The articulated stack cars have become the most common type despite their higher cost, which reflects their higher efficiency.

movements by each type (intermodal, auto, and manifest/other) and carrier and perform a costing analysis. That analysis is described in the next section of III-A and is also discussed in detail in Mr. Whitehurst's Exhibit III-A-10. For present purposes, it is sufficient to show that the random selection yields the following average R/VC ratios:⁴³

Table III-A-11 Results of R/VC Analysis of Randomly-Selected Movements			
Traffic Category	Average R/VC for the Through Movement	Average R/VC for the Residual Incumbent	Average R/VC for the ACE's Segment
BNSF			
Intermodal	{		}
Auto	{		}
Manifest and Other	{		}
UP			
Intermodal	Insufficient Data	Insufficient Data	Insufficient Data
Auto	{		}
Manifest and Other	{		}
Source: AEPCO Rebuttal Exhibit III-A-10. Note: As discussed <u>infra</u> , UP provided insufficient data to permit identification of intermodal trailer type, thus precluding more refined analysis.			

Accordingly, the available information indicates that the intermodal traffic is not marginal at all, and is fully capable of sustaining a SARR, while providing the residual incumbents with revenues that exceeds their directly variable (attributable) costs.

⁴³ As explained infra, the costing does not reflect any refinement of the URCS intermodal terminal cost variability factors or distinctions among intermodal freight car rental rates by car type.

ii. Use of the MMP Method for Allocating Divisions on Cross-over Traffic

In addition to attacking AEPCO's general inclusion of intermodal and other exempt traffic in the ACE's traffic base, BNSF and UP present a wide range of would-be, but defective, theoretical and factual criticisms of AEPCO's use of the MMP method for allocating revenues or divisions on that traffic. BNSF SAC Reply at III.A-20 to 37; UP SAC Reply at III-A-10 to 16. There is some overlap among the Railroads' various criticisms, and there is thus some unavoidable duplication in AEPCO's response.

(a). Use of the MMP Method is Well-Established

At the outset, it is important to note that use of the MMP method to allocate revenues on cross-over traffic between the SARR and the incumbent is well-established. Nevada Power II (Bituminous Coal -- Hiawatha, UT to Moapa, NV, 10 I.C.C.2d 259, 268 (1994)) (using a straight mileage allocation); McCarty Farms, Inc. v. Burlington Northern, Inc., 2 S.T.B. 460, 472 (1997) (modified mileage block prorate adopted at BNSF's suggestion); FMC at 27-29 & n.62 (finding the modified mileage block prorate method "is the best procedure for allocating revenues to carriers where market-based divisions are not available"); Wisconsin at 24, TMPA at 31; PPL Montana at 7-8 & n.14. Accordingly, in arguing for some other approach (or in claiming there can be no permissible approach to cross-over divisions at all), Defendants should face a heavy burden. Ex Parte No. 347 (Sub-No. 3), General Procedures for Presenting Evidence in Stand-Alone Cost Rate Cases,

(STB served March 12, 2001) (limiting parties' ability to relitigate previously decided matters).

(b). Defendants' "Production" of Division Data

The Railroads seek to distinguish this case from the Board's prior precedents on the grounds that they did produce information on their market divisions. The Railroads' assertion is correct, but only to a very limited extent.

UP did produce some market information on its divisions with BNSF as part of a revised traffic file on December 5, 2002 (UP SAC Reply at III-A-11 & n.54), shortly before the discovery cut-off date of December 16, 2002.⁴⁴ While UP produced a large volume of information ({ revenue records), the information is of limited relevance. Only { of the records were interline movements containing revenues for UP's portion of the move and in total, and only in {

} movements did UP serve as the overhead carrier, meaning that only in those cases is it possible to test how the MMP method applies to the actual divisions of an overhead carrier. Furthermore, the { } movements all involve manifest, and not intermodal, movements. Consequently, the data is of little or no value for testing the application of the MMP method to intermodal traffic, which is the focus of the Railroads' MMP challenge. Nonetheless, as discussed infra, the data does show that UP's average

⁴⁴ AEPCO Rebuttal electronic workpaper "AEPCO2001_CCF.mdb" contains the revised UP traffic file as well as analysis queries used to identify the interline overhead movements that AEPCO analyzed, as discussed infra.

divisions on the manifest movements exceed those under the MMP method by a significant amount { }.

In contrast, BNSF did produce some information ({ } pages of hard-copy) that, as discussed infra, does contain information on { } intermodal movements that confirms the conservatism of the MMP method for estimating overhead divisions.⁴⁵ However, BNSF's production occurred on January 30, 2003, about six weeks after the December 16, 2002 close of discovery, and barely a week before opening evidence was due on February 7, 2003. AEPCO's inability to make use of the information at the time should thus be readily understandable.

The Railroads' very limited (UP) and/or belated (BNSF) production presents a significant threshold issue as to whether the information should be deemed properly produced at all. In particular, if shippers are to be held to an increasingly strict, if not severe, standard with respect to their opening evidence, Duke Energy Corp. v. CSXT, supra, it is difficult to discern how or why railroad defendants should benefit from a more lax standard with respect to their discovery responses, particularly as those responses form the predicate for much of the shipper's opening evidence (and even more so in view of the carriers' claims that AEPCO failed to make a prima facie showing as to coverage of off-SARR costs on cross-over intermodal movements).

⁴⁵ The relevant pages are included in AEPCO Rebuttal Workpapers at pp. 177-239.

Moreover, in this case, the carriers do not suggest that their market information on divisions provides any support for their arguments against the MMP.⁴⁶ To the contrary, their position is that market-based information is fundamentally irrelevant to how divisions should be allocated (because, as explained infra, they believe that any allocation is arbitrary). Accordingly, under their logic, they should not be required to produce the information in the first place. Their failure to rely on the information thus demonstrates the extent to which their position is at odds with the established precedent.

The following discussion assumes arguendo that the carriers have overcome the threshold requirements for challenging the MMP method, notwithstanding the shortcomings in their production of market division data and their failure to rely upon, or even present any analysis, of that data.

(c). Theoretical Attack on the MMP Method

The Railroads, principally BNSF through witness Janusz Ordoover and his declaration (BNSF SAC Reply Exhibit III.A-1), claim not only that the MMP method is defective, but that any other approach to allocation of cross-over revenues would also be inherently arbitrary, such that cross-over traffic should be banned outright from SAC cases, or, at the very least, significant restrictions on the use of cross-over traffic should be imposed.

⁴⁶ As discussed infra, the information that they produced is actually very supportive of use of the MMP method.

In response to BNSF Witness Ordoover, AEPCO has attached as Rebuttal Exhibit III-A-11 a Declaration prepared by Dr. George H. Borts of Brown University. Unlike BNSF's treatment of Dr. Ordoover statement, AEPCO will not attempt in the following text to repeat verbatim Dr. Borts's statement, but AEPCO will make reference to Dr. Borts's key points. The Board and its staff are urged to review Dr. Borts's statement as well as the following argument.

The crux of Dr. Ordoover's position appears to be that: (1) divisions for cross-over traffic must be determined under SAC principles since any other principles are inadequate (that is, either irrational or not sufficiently determinative) for making an economically sound allocation (for the same reasons that SAC theory was developed, that is, the difficulty of allocating joint and common costs); yet (2) SAC cannot be properly applied to cross-over traffic because the mere fact that cross-over traffic is involved indicates that some relevant costs are being excluded from the analysis; and (3) determining the appropriate division for cross-over traffic thus presents a fatal Catch-22 that can be solved only by banning cross-over traffic altogether or, as a fallback, imposing limits (the equivalent of quotas) on the permissible level of cross-over traffic (which limits AEPCO would surely exceed).

AEPCO disagrees with Dr. Ordoover's position on a number of levels.

First, being able to include cross-over traffic in a SARR is extremely desirable, and ultimately essential, under principles of contestable markets and stand-alone

theory. If cross-over traffic is precluded and the SARR is instead forced to build out to serve the ultimate origin and destination of all the traffic that it handles, the shipper's SARR would be required to include facilities that do not serve the shipper, which means that the captive shipper would likely be forced to cross-subsidize other shippers, thereby defeating the essential purpose of SAC and its utility as a means of determining maximum reasonable rates. Coal Rate Guidelines, 1 I.C.C. at 528 ("An important feature of CMP is that a captive shipper need not bear the costs of any facilities or services from which it derives no[] benefit."); Borts at 2-5.

Requiring the SARR to provide additional facilities to serve the intermodal and other cross-over traffic would be especially inappropriate here in that AEPCO was precluded by the Board, at the Railroads' insistence, in the December 2001 and August 2002 decisions, from building its New Mexico SARR out to serve the PRB, even though some PRB coal moves on the ACE. It would be especially invidious to require a captive shipper to absorb the costs associated with facilities that the shipper does not utilize, while preventing the shipper from receiving the benefits associated with similar facilities elsewhere. The insistence that the SARR absorb the costs of some facilities and services in one instance, but not be able to include the benefits from providing those facilities and services in another, cannot be reconciled.

Second, to prevent the SARR from handling cross-over traffic, or to impose limits (particularly arbitrary quotas) on such traffic, would be to impose an impermissible

entry barrier. As explained by Dr. Borts, a contestable market permits a firm to enter a market without replicating the full system of the incumbent, and the entrant can rationally decide which services to self-supply and which to acquire from others. Moreover, that opportunity exists for the incumbents in the real world, as evidenced by BNSF's conveyance of its line segment between Rincon and Deming to the Southwestern Railroad and BNSF's acquisition of trackage rights over UP's Tucumcari line, including the segment between Vaughn and El Paso. Other real-world examples of railroads that served predominately as overhead carriers include the former Denver and Rio Grande Western Railroad Company, now part of UP, and Montana Rail Link. Accordingly, to prevent the SARR from utilizing cross-over traffic would be to impose a limitation that does not exist in real world railroading on the very segments and services that the ACE would replace. See Borts at 6-11.

Significantly, the Association of American Railroads developed a "simplified stand-alone cost" ("SSAC") approach for use in small rate cases that attempted to do what the Railroads have in mind here, that is, require cross-over traffic to cover an excessive measure of off-SARR costs before that traffic is allowed to contribute to the SARR costs for handling the issue traffic. The Board rejected the AAR's SSAC approach because it was fundamentally inconsistent with the CMP-SAC and "sound railroad economic pricing principles," in that to allow a contribution for cross-over traffic, SSAC required not merely that the cross-over traffic "cover[]" not only its own attributable costs

but also a full pro rata share of the joint and common (unattributable) costs of every other line segment used by that traffic.” Rate Guidelines -- Non-Coal Proceedings, 1 S.T.B. 1004, 1015-16 (1996) (citation omitted”).⁴⁷ SSAC, like the Railroads here, sought to impose a burden on the SARR that interline traffic does not face in the real world and that thus constitutes an entry barrier that is impermissible under SAC theory. The Railroads’ contentions are no more appropriate now than they were then.

Third, Dr. Ordovery’s assertion that there is no single, economically-correct division or division method that the SARR and the residual incumbent would necessarily agree upon (deliberately) misses the point. It is often -- indeed, usually -- the case that a buyer would be willing to pay a higher price (at least in the absence of readily available alternatives) and the seller would be willing to accept a lower price (absent a limited quantity of goods and an abundance of other buyers willing to pay more), yet parties are willing to and do agree on a commercially reasonable price under such circumstances.

⁴⁷ Non-Coal Rate Guidelines rejected the AAR’s SSAC model because it unduly restricted the contribution from cross-over traffic on a high-density mainline, thereby yielding “anomalous results,” 1 S.T.B. at 1016, as indicated in the excerpt quoted in BNSF SAC Reply at I-29. BNSF claims that AEPCO’s efforts to base its SARR largely on exempt traffic yields similarly “anomalous results.” But, as explained elsewhere, the Railroads have not established either (1) that the exempt traffic is devoid of significant margins, particularly at the high densities present in the ACE, or (2) that the MMP method leaves the residual incumbents with an insufficient division on their portion of the cross-over traffic. The carriers thus have not shown how the ACE’s results are anomalous at all. Instead, what the carriers have done is simply recycle arguments (particularly regarding efficient component pricing, as discussed infra) that the Board and its predecessor have repeatedly rejected.

And so it is with divisions either in the real world or between a SARR and a residual incumbent. Each party will insist on a certain minimum (its directly variable cost), and neither party will pay more than its cheapest alternative (which effectively does not exist due to sunk costs and entry/exit barriers). The fact that there may not be a single correct answer hardly demonstrates that there is not a commercially reasonable answer or that there should be no permissible answer at all.

The question is then not whether the MMP method provides an economically “perfect” answer to the question of how to allocate revenues between the SARR and the residual incumbent; the question is whether it provides a sound approximation of what the parties might reasonably agree to in a competitive environment, e.g., one without retaliation or intransigence by the displaced incumbent.⁴⁸ As demonstrated next, the MMP method does provide an answer that is economically very rational.

Dr. Ordover’s contentions are hardly the first time that the Board or its predecessor have been asked to abandon a sound, feasible, and commercially reasonable

⁴⁸ Dr. Ordover’s hypothetical concerning what the residual incumbent would require to be made “whole” following the SARR’s entry is simply a slight variant of the “efficient component pricing method” that allows the SARR to interchange traffic with the residual incumbent only if the arrangement made the residual incumbent better off than if the SARR did not exist. This approach was squarely rejected in Nevada Power II, as well as in McCarty Farms, where the Board explained that “it would be inconsistent with the nature and purpose of a SAC analysis to treat the SARR as a competitor of the incumbent railroad rather than its replacement.” 2 S.T.B. at 472. The SARR is permitted (and even required, under the December 2001 and August 2002 decisions) to include only those facilities that will be utilized by the issue traffic.

methodology on the grounds that it is not absolutely precise or is subject to some theoretical impurity. However, the Board and the ICC have consistently recognized that their cost calculations need to be practicable and that considerations of ideological purity should not run roughshod over common sense. The Board and the ICC have thus long -- and repeatedly -- recognized "that precision in rail costing is a desirable goal, 'but the best should not be the enemy of the good [and we should not allow] the infeasible perfect to oust the feasible good.'" Ex Parte No. 589, Calculation of Variable Costs in Rate Complaint Proceedings Involving Non-Class I Railroads, (STB served April 22, 2002) (proposing use of regional URCS for small carriers), at 6 (alteration in original) (quoting Pennsylvania v. ICC, 535 F.2d 91, 96 (D.C. Cir.), cert. denied, 429 U.S. 834 (1976)); Non-Coal Rate Guidelines, 1 S.T.B. at 1024 n.53 (adopting generalized R/VC benchmarks for determining rate reasonableness in cases where CMP analysis is not feasible); Edison Electric Institute v. I.C.C., 969 F.2d 1221, 1227 (D.C. Cir. 1992) (upholding ICC's decision not to include a "full" business cycle adjustment in the RCAF productivity adjustment). In this instance as well, the Board should not abandon a sound and reasonable method, especially when doing so would strip the SAC test of most of its basic utility.

(d). Soundness of the MMP Method

In contrast to the Railroads' criticisms, the MMP method has a number of features that make it well-suited for determining divisions between a SARR and a residual incumbent on cross-over traffic.

First, the MMP method is relatively straightforward and easy to apply. It does not depend on various factual or theoretical complexities. Accordingly, it is not readily subject to manipulation (notwithstanding the Railroads' rhetoric to the contrary).

Second, the MMP is neutral in that it can be consistently applied whether the SARR is the originating carrier, the destination carrier, or a bridge carrier, and is unlikely to systematically favor the shipper or carrier(s) when applied to a range of situations. Also, the method can be applied consistently to through movements that involve only one or a larger number of incumbents or connecting carriers.

Third, use of MMP has been accepted for another purpose, namely, costing of the waybill sample. The MMP method was not first devised for use in SAC cases, but was instead adopted from its use in a similar context, that is, allocating revenues on joint movements for purposes of conducting generalized R/VC analysis.

Fourth, notwithstanding the Railroads' claims (in this case⁴⁹) that the MMP method is arbitrary, the MMP method actually stands as a reasonable surrogate for directly

⁴⁹ BNSF originally proposed MMP as a substitute for a straight mileage prorate in McCarty Farms.

variable costs ("DVC"), which is the appropriate, and long-accepted, standard for determining cross-subsidy, and is also the minimum that a carrier would rationally require to accept traffic:

As long as a rate covers DVC [directly variable cost], cross-subsidy will not be necessary and predatory pricing will not be taking place. We believe that the formula we are adopting will allow us to determine the costs that directly vary with the service rendered. Cross-subsidy and predatory pricing occur only when the carrier services the shipper at noncompensatory rates. The formula we have proposed should ensure the compensatory nature of the rates.

Ex Parte 355, Cost Standards for Railroad Rates, 364 I.C.C. 898, 904 (1981); Non-Coal Rate Guidelines, 1 S.T.B. at 1016.

The ICC defined DVC as "the line-haul cost of the lading, applicable switching costs, and station clerical costs." 364 I.C.C. at 899. Divisions under MMP vary directly in accordance with distance, and extra mileage blocks for loading and unloading bear some relationship to terminal costs, that is, switching and station clerical costs, as does awarding a mileage block for movements that may be less than one hundred miles. The mileage block is thus a very rational choice as a feasible surrogate for DVC.

AEPCO readily recognizes that terminal costs will vary by movement, as will line haul costs, according to speed, density, terrain, type of movement, and territory, etc. There may thus be instances where the MMP method does not enable a party to cover

its DVC.⁵⁰ But such instances are likely to be rare, and the Railroads have not made any suggestion that the ACE presents any such instances. Instead, the most that they have alleged is that in three instances where the R/VC is not that large to begin with, application of imprecise Phase III URCS costs results in reduced R/VC ratios for the residual incumbent, in one instance slightly below 100% of variable costs. In other words, the Railroads have not suggested for a moment that they would be unwilling to handle such traffic as residual incumbents.

AEPCO also recognizes that carriers would certainly like to earn more than DVC, and if all they earn on all their movements is their DVC, they will not be able to sustain even the desirable portions of their systems or avoid bankruptcy. However, the MMP method is used to allocate the through rate, and not merely to assure DVC recovery. The carrier (be it the residual incumbent or the SARR) stands to receive more than its DVC and generally even more (sometimes much more) than 100% of its variable cost, depending on the traffic's demand and the carrier's efficiency. Mr. Whitehurst's analysis demonstrates that the residual incumbents' average recovery exceeds 100% of variable costs. Only in a few instances, generally where the through movement revenues already equate to less than 100% of variable costs, does the residual incumbent less than 100% of

⁵⁰ If such a situation did arise, the appropriate approach would be to determine if an additional mileage block, or portion thereof, should be awarded for, e.g., unusually high terminal costs. The Railroads have avoided making any such showing here, although they unquestionably have far superior access to data regarding terminal costs and intermodal rates.

variable costs. The MMP method provides a reasonable basis for making a neutral division between two parties, one that would likely occur where the carriers are mutually dependent and the incumbent is precluded from engaging in retaliation against its partial replacement, the SARR entrant.

The fifth factor supporting use of the MMP method is that it provides a reasonable approximation of how divisions are determined in the real world for intermodal traffic, as AEPCO explained in its Opening Evidence. AEPCO relied on the testimony of Mr. John Toren, who has 30 years' experience in railroad sales and marketing, including service as the Vice President-Sales & Marketing for Intermodal and Consumer Products for the Chicago and North Western Railway ("CNW") prior to its acquisition by UP in mid-1995, and then as regional sales manager for SP before retiring shortly after the UP/SP merger was consummated. Mr. Toren's Statement of Qualifications is set forth at pp. IV-16 to 17 of AEPCO's Opening Evidence. Additionally, Mr. Toren is supporting AEPCO's Rebuttal Evidence on divisions.

The Railroads do not seriously dispute the general substance of Mr. Toren's testimony that the MMP method provides a reasonable approximation of the expected results of normal commercial negotiations between carriers on intermodal movements. Despite their characterizations of his testimony as vague (BNSF SAC Reply at III.A-47) and conclusory (UP SAC Reply at III-A-13), it should be clear that Mr. Toren's broad marketing experience provides him with a substantial background in intermodal rates and

associated costs and that he thus has ample experience to characterize the results of the MMP method as providing a commercially reasonable result.⁵¹ Most certainly, the carriers make no effort to rely on their own division agreements (for, as explained infra, that information, which was not reasonably available to AEPCO for use in its Opening Evidence, is strongly supportive of the reasonableness of the MMP method). Instead, they choose to claim, through the three examples presented by BNSF, that the MMP method supposedly leaves the residual BNSF with an insufficient return, although the analysis demonstrates no such thing. Indeed, AEPCO's analysis, presented infra, of a broader and randomly selected sample shows that the residual carriers are left with an adequate return on all segments of traffic and that the MMP method appears to understate the overhead divisions that UP and BNSF achieve in the real world.

Before turning to those other analyses, a few additional points are in order. First, the Railroads criticize AEPCO for having submitted testimony only from an intermodal specialist, and not from a railroad marketing official experienced in automobile movements. BNSF SAC Reply at III.A-47. In fact, prior to becoming Vice President-Sales & Marketing-Intermodal and Customer Service at CNW, Mr. Toren served as Vice

⁵¹ UP's claim that Mr. Toren asserted that the terminal costs are small for intermodal traffic (UP SAC Reply at III-A-13 to 14) distorts his testimony. Mr. Toren's testimony discussed the relationship of the divisions to the associated costs of providing the intermodal service. Mr. Toren's statement was that the ACE's movements are relatively long, and the additional mileage block (plus the fact that the residual incumbents are generally not left with short movements) provides a figure sufficient to cover the terminal costs (which are not absorbed by the carrier in all instances).

President-Sales at CNW, with broad responsibility for marketing, including automotive transportation services. Mr. Toren confirms that the MMP method provides a very reasonable surrogate for divisions for automobile movements as well as for intermodal movements.

Second, UP challenges the MMP method for giving insufficient recognition to the off-SARR investments that UP has made to handle intermodal traffic in locations such as Chicago. UP SAC Reply at III-A-13 & n.60. AEPCO would suggest that such new facilities are being built in anticipation of future traffic and that, in any event, the Railroads' investment in such facilities refutes any suggestion that the traffic is as marginal as the Railroads claim. Additionally, AEPCO notes that the ACE's entire construction is paid for with current dollars (and at the railroad industry's current cost of capital), whereas most of BNSF's and UP's systems were built long ago, at lower capital costs, and have been subject to substantial depreciation. Accordingly, the ACE's investment per route and track mile is over double that of BNSF and UP, and that disparity would need to be considered insofar as the carriers allege that the MMP method yields an unfairness in divisions.⁵²

⁵² As shown in AEPCO Rebuttal electronic workpaper "Inv Per Mile.xls," the ACE's net investment per route mile and track mile are \$2.02 and \$1.13 million respectively. The respective figures for BNSF (\$0.83 and \$0.50 million) and UP (\$0.85 and \$0.50 million) are less than half of those of the ACE.

Third, it bears emphasis that the ACE has not appropriated all of the high-density segments of the BNSF and UP mainlines or left the residual incumbents with only low-density feeder lines. See, e.g., Nevada Power II, 10 I.C.C.2d at 281 (Chairman McDonald, concurring) (noting that “mileage-based divisions would not be appropriate approximations of market-based divisions for a long-haul, high density SARR, using efficient unit trains, that interlined with a number of short-haul, light density branch lines that distributed traffic a few cars at a time”). To the contrary, the ACE occupies only those relatively short segments that are needed to transport the issue traffic efficiently,⁵³ and the residual incumbents continue to receive the economies inherent in the remainder of their high-density mainlines.

Additionally, while AEPCO has no reason to doubt that BNSF and UP route some of their intermodal and other cross-over traffic over lower-density portions of their system, AEPCO also expects that some of that routing is by choice, rather than necessity, and would not occur but for the fact that some of those segments are already built and in operation. One of the key characteristics of intermodal traffic is that it is trucked⁵⁴ before and/or after it is moved by rail. Accordingly, there is likely a range of locations to which it

⁵³ The ACE also absorbs the costs of BNSF’s Defiance Spur, which (a) has very high construction costs due to the difficult earthwork (grading) conditions near the McKinley Mine, (b) low traffic density, and (c) a limited life span in that shipments are expected to cease by 2010.

⁵⁴ Some intermodal traffic (generally double-stack traffic) is also moved by barge or ship. Double-stack terminals are not likely to have low traffic densities.

could be shipped by rail before or after moving by truck. While shippers undoubtedly prefer (at least in general) to have the freight move as far as possible by rail, they most likely would continue to ship via rail if the final (or first) trucking segment were extended modestly, so that lower-density rail segments could be eliminated. Since the rail segments are already in existence, and probably serve other traffic that does not move over the ACE, it presumably makes sense for BNSF and UP to route the trains as they do, but it is a very different thing to say that the ACE or AEPCO should be required to assume any of the associated costs.

(e). **Correlation Between the MMP Method and Actual Divisions**

As noted supra, the Railroads did produce some information on their market divisions. The Railroads did not address the substance of that data, presumably because it strongly indicates that the MMP method significantly understates divisions on overhead traffic.

UP's data, as noted supra, contained approximately { } revenue movement records, but overhead divisions could be determined for only { } manifest movements. AEPCO Rebuttal Exhibit III-A-12 and electronic workpaper "Exhibit III-A-12.xls" show that UP's actual overhead divisions averaged { } of the total through movement revenues, where the divisions under the MMP method would have amounted to only { } of the total through movement revenues. In other words, actual overhead divisions exceeded those under the MMP method by { } percentage points or { }%.

In contrast, BNSF belatedly produced some market divisions information on intermodal movements. BNSF's information indicates that the MMP method substantially understates overhead divisions.

Specifically, BNSF produced { } hard-copy pages of 2003 pricing authorities for intermodal movements. { } of those pages contained revenue divisions by carrier for approximately { } interline movements, and { } of those movements involved an overhead carrier, that is, permitted analysis to determine the MMP method's reasonableness as a surrogate for calculating commercial divisions on overhead intermodal movements.⁵⁵

At AEPCO's request, its witness Thomas D. Crowley conducted an analysis of the BNSF movements, as explained in AEPCO Rebuttal Exhibit III-A-13 and electronic workpaper "Exhibit III-A-13.xls." His analysis showed that BNSF's average overhead divisions on the { } movements was { }, whereas the MMP method would have yielded overhead divisions on those movements of only { }. In other words, actual overhead divisions exceeded MMP overhead divisions by { } percentage points or { }.

Mr. Crowley next prepared a linear regression analysis, as described in AEPCO Rebuttal Exhibit III-A-14, of the actual BNSF overhead divisions data to

⁵⁵ The relevant pricing authorities are included in AEPCO's Rebuttal workpapers at pp. 177-239.

determine if there was a statistical relationship that could be applied to yield divisions for ACE/BNSF cross-over intermodal movements. His analysis revealed that the linear equation he derived from the data had a R-square value of 0.91 and a p-value of 3.2E-37, indicating a statistically very strong fit, in other words, the regression explained 91% of the difference in divisions for the { } samples.

Mr. Crowley then applied that linear regression to a randomly drawn sample of 30 ACE/BNSF cross-over intermodal movements. Application of the linear regression derived from the BNSF actual overhead divisions data to the 30-movement ACE/BNSF intermodal sample yielded divisions for the ACE that were substantially larger than those determined under the MMP method, as shown in the following table:

Table III-A-12 Comparison of Overhead Divisions on ACE 30-Movement Sample of BNSF Intermodal Movements Calculated Under (1) Linear Regression Derived from Actual BNSF Data and (2) the MMP Method	
Average Through Movement Revenues	{ }
Average Division Produced Under Linear Regression	{ }
Average Division Produced Under MMP Method	{ }
Increase in by Average Division Under Linear Regression as Compared to MMP Method	{ }
Source: Exhibit III-A-14, p. 5 and AEPCO Rebuttal Electronic workpaper "Exhibit III-A-14 p5.xls."	

Accordingly, the Railroads' own data confirms the commercial reasonableness of using the MMP method to allocate revenue divisions on the cross-over

traffic and that, if anything, the MMP method actually understates the divisions that the ACE might reasonably expect to receive (even without consideration of its superior service). Moreover, because, as explained by Mr. Toren, the MMP method is a commercially reasonable surrogate, it should more than satisfy any requirement that a shipper make a prima facie showing as to the reasonableness of its proposed revenue divisions, assuming arguendo that any such requirement exists.⁵⁶

(f). **Use of the MMP Method Leaves the Residual Incumbents with Desirable Divisions Relative to their Variable Costs on Cross-over Movements.**

As noted supra, BNSF's and UP's primarily factual argument appears to be that use of the MMP method for allocating revenues on cross-over traffic leaves the residual incumbents with divisions that are undesirable relative to their variable costs of handling the traffic. They further indicate that the only reason that the ACE can use intermodal and other exempt traffic as its revenue base is because AEPCO has cherry-picked the high revenues, while leaving the residual incumbents to perform the expensive terminal activities.

⁵⁶As AEPCO explained its in Reply to the April 18 Petition, AEPCO does not believe that any prima facie showing is required under Board precedent. Notwithstanding the Board's recent statement in TMPA (which postdated opening evidence in this proceeding) at 31 n.74, that it has not adopted a single preferred procedure for determining revenue divisions on cross-over traffic, the MMP method is plainly the default approach, particularly where production of division information occurs so belatedly. Moreover, the carriers have ready access to information concerning off-SARR costs, and shippers should not be placed in the position of having to anticipate what cost information the carriers might choose to present on reply.

The preceding discussion serves to refute the Railroads' primary theses generally. As noted, the ACE's segments are relatively short, meaning that the traffic still moves over relatively long, high-density segments of the residual incumbents, and the additional mileage blocks for originating and terminating the movements serve to provide an adequate opportunity for the residual incumbents to recoup their costs, particularly considering the ample yields on the intermodal traffic.

Furthermore, the Railroads provide essentially no empirical support for their assertions. They do present information on three BNSF intermodal movements, but BNSF and Mr. Klick make no claim that the movements were randomly selected. Instead, they appear to have been hand-picked to offer a range of characteristics (although key elements of that diversity are ignored in BNSF's costing) and/or results that favor BNSF. Even so, Mr. Klick's costing fails to demonstrate that the ACE appropriates all of the available margins, as the residual BNSF's division falls below 100% of variable costs only in a single instance, and there by only a small amount (2.5%).⁵⁷ Additionally, AEPCO has explained that the variable costing employed by Mr. Klick does not reflect well-founded refinements that reveal a more accurate and realistic R/VC result for both the incumbents and the residual incumbents, and that the relevant consideration should be coverage of DVC and not variable costs. In short, the Railroads' own empirical evidence, such as it is, supports the reasonableness of the outcome of the MMP method.

⁵⁷ Also, the R/VC on the total through movement was only 104.9%.

Nonetheless, AEPCO has, on rebuttal, analyzed a broader -- and randomly selected -- universe of cross-over movements to determine the reasonableness of the application of the MMP method. The analysis is described in the accompanying AEPCO Rebuttal Exhibit III-A-10, which was prepared by Mr. Whitehurst. Mr. Whitehurst explains that he analyzed 30 randomly selected separate sample movements from BNSF and UP for each of three categories (intermodal, automobile, and manifest/other) to determine the R/VC ratios on the incumbents and on the residual incumbents. However, as Mr. Whitehurst explains, it was not possible to prepare a meaningful analysis for the sample of UP intermodal movements because UP did not produce data sufficient to identify the type or ownership of intermodal car which, as explained previously in Mr. Whitehurst's review of Mr. Klick's costing, has a substantial bearing on the resulting variable costs. Significantly, Mr. Whitehurst did not apply any adjustments to the URCS intermodal terminal cost factors or to car rental rates, although Mr. Whitehurst did reflect the actual tare weight of the BNSF intermodal cars. The average results of that analysis are depicted on Table III-A-11 at p. 44, supra, and are redepicted below for the purposes of convenience:

Table III-A-13 Results of R/VC Analysis of Randomly-Selected Movements			
Traffic Category	Average R/VC for the Through Movement	Average R/VC for the Residual Incumbent	Average R/VC for the ACE's Segment
BNSF			
Intermodal	{		}
Auto	{		}
Manifest and Other	{		}
UP			
Intermodal	Insufficient Data	Insufficient Data	Insufficient Data
Auto	{		}
Manifest and Other	{		}
Source: AEPCO Rebuttal Exhibit III-A-10.			

The foregoing analysis thoroughly rebuts the Railroads' assertions. It demonstrates first, as noted supra, that the traffic provides returns on a full movement basis that can hardly be dismissed as minimal, particularly for auto traffic. While the average mark-ups are below the jurisdictional threshold, the mark-ups still average nearly { } for the BNSF intermodal traffic, nearly { }% for the BNSF auto traffic, over { } for the UP auto traffic, and nearly { } for both BNSF and UP for the other categories of traffic. As explained by Mr. Whitehurst, a number of the individual movements do appear to exceed the jurisdictional threshold utilizing the Phase III URCS costing (some by substantial amounts, i.e., each category has at least one movement that has an R/VC ratio of at least { }), notwithstanding the exempt nature of the traffic.

Second, the average mark-ups for the residual incumbents are only slightly reduced from those for the full through movements (i.e., before the insertion of the ACE as an overhead carrier). For no individual movement is the R/VC ratio of the residual incumbent more than 6% less than that of the full incumbent. While the average R/VCs are higher for the residual incumbent, they are still below the jurisdictional threshold, except for the UP auto traffic, where the through movement and residual incumbent R/VCs are both above { }. In other words, the MMP does not become a vehicle for manipulation in terms of allowing the SARR to cherry-pick the revenues, while leaving the residual incumbent with just the costly portions of the movement.⁵⁸ AEPCO believes that the tempered outcome is attributable to the fact that the residual incumbents continue to enjoy relatively long hauls (and the fact that the terminal operations are really not as costly as suggested by the carriers, especially compared to the relatively high rates charged for these long-haul intermodal movements).

Third, while BNSF and UP would undoubtedly prefer to achieve higher R/VCs, the average returns still exceed 100% of variable costs, and DVC by a much larger margin. The traffic thus covers its “attributable” costs, however defined, and there is

⁵⁸ Exhibit III-A-9, prepared by Mr. Crowley, compares the revenues on a mills per ton-mile basis for the through movement, the ACE, and the residual incumbents. Application of the MMP method shows higher mills for the ACE (an average of { }) relative to the residual incumbents, which can only result from the mileage blocks. Much of the difference in the R/VC ratios is thus attributable to differences in the revenues and not just variable costs.

every reason to think that the carriers would wish to haul this traffic in conjunction with the ACE.

Fourth, some of the R/VC ratios for individual movements are below 100% of variable costs by significant amounts ({ } percentage points). These ratios are so low as to suggest continuing problems with the URCS methodology, data problems, or unusual considerations such as possibly backhauls.⁵⁹

Additionally, it should be noted that the variable costing for the ACE's segment is based on the Phase III URCS costs for the incumbent carrier, and not that of the ACE itself. Among other things, the ACE's net investment per route and track mile are, as noted supra, over double that of BNSF and UP. Accordingly, if one were to calculate divisions on the basis of relative costs, as opposed to distances and provision of terminal functions, the result might well be an allocation more, not less, favorable to the ACE. Moreover, the divisions do not reflect any premium for the ACE for the superior service it renders relative to the incumbents.

(g). The MMP Method's Results Are Reasonable as Applied to the ACE

The preceding analysis demonstrates that the MMP method yields reasonable divisions in the case of the ACE. Specifically, the resulting divisions are commercially reasonable as applied to the residual incumbents, and leave the residual incumbents with

⁵⁹ Wherever the residual incumbent R/VC is below 100% for an individual movement, the through movement R/VC is also below 100%.

adequate coverage of their variable costs as well as much more than adequate incentive to handle the cross-over traffic. Moreover, the MMP method does not effectuate an ends-oriented manipulation of the available revenues in that the R/VC ratios for the ACE's segment are overall not substantially above those for the full movement, and are also not inappropriate given the inherent efficiency of the ACE's high-density lines.

The results under the MMP method thus cannot be said to be arbitrary, as claimed by the Railroads. Instead, they provide a commercially reasonable result, which is the appropriate objective in allocating revenues on cross-over traffic.

As noted, it might be possible to improve upon the MMP method in a particular instance, but the Railroads have eschewed any effort to do so. Moreover, the Railroads have not shown how the results under the MMP method are in any way inconsistent with their market divisions. Indeed, the Railroads have avoided any reliance on their market divisions, no doubt because those market divisions are, as demonstrated supra, very supportive of the results produced by the MMP method.

Under the circumstances, the MMP method must be found to constitute the best evidence of record. The Railroads have not offered anything else, other than the assumption that the method is somehow arbitrary, when the MMP method is instead conceptually sound, feasible and neutral in application, and supported by actual commercial results. Use of the MMP method must thus be accepted.

d. Other – Rate Forecasts

i. Coal Revenues

On Opening, AEPCO developed its forecast of the ACE's coal revenues in Exhibit III-A-6. As the Railroads offered no alternative, AEPCO's approach must be deemed the best evidence of record.

AEPCO notes that its forecast is based on an analysis of contracts and assumes continuation of the contract-based escalation (or at least its correlation to inflation forecasts) following expiration of the contracts. In contrast, in the recent TMPA decision the Board opted for use of what it characterized as regional transportation rate forecasts prepared by the Energy Information Administration ("EIA") of the Department of Energy.

AEPCO believes that reliance on the EIA forecasts is subject to at least two conceptual faults. First, AEPCO's understanding is that the EIA prepares only a single national coal transportation forecast, which it then applies to origin region coal forecasts to determine an origin delivered cost for use in simulating the effects of economic dispatch. See Watkins, "Forecasting Annual Energy Outlook Coal Transportation Rates," Issues in Midterm Analysis and Forecasting (EIA 1997), <http://tonto.eia.doe.gov/FTPROOT/forecasting/060797.pdf>, at 75. Accordingly, the EIA transportation forecast is not at all region-specific, e.g., it combines changes in both eastern and western coal transportation rates so as to approximate the Producer Price Index for coal transportation. The forecast is thus not suitable for determining escalation for a specific region.

Second, the EIA forecast assumes both that the rail industry will continue to experience productivity gains and that the rail industry will pass these productivity gains through to coal shippers. Id. Accordingly, use of the EIA forecast would be inconsistent with adjusting the SARR's future costs on a basis that excluded productivity gains.⁶⁰

ii. Non-Coal Revenues

On Opening, AEPCO developed its forecast of the ACE's non-coal revenues in Exhibit III-A-5. As the Railroads offered no alternative, AEPCO's approach must be deemed the best evidence of record.

AEPCO has, however, updated its forecast in Exhibit III-A-15 to reflect the elimination of the upward revenue adjustment it made on Opening. Details regarding these calculations are provided in Rebuttal electronic workpaper file "ACE Non-Coal Traffic and Revenue Forecast-Rebuttal.xls."

AEPCO reiterates that its rate forecasts are entirely consistent with (if not understated when considered against) the Defendants' recent pronouncements in which they have publicly declared an intention to increase their rates for both coal and non-coal traffic. See, e.g., "Rail Rates Rising for Some Coal Shippers," Coal Transportation Report, January 27, 2003 set forth in AEPCO Op. Workpapers Vol. 7, pp. 03316-03318.

⁶⁰As explained in Part III-G, infra, AEPCO believes that there are good reasons to expect that the ACE, as a least-cost, most-efficient carrier, would experience productivity gains at least equivalent to those of the Class I railroad industry as a whole.

**III-B Stand-Alone
Railroad System**

III. B. STAND-ALONE RAILROAD SYSTEM

In Part III-B of its Opening Evidence, AEPCO presented a stand-alone railroad system for the Apache, Cochise & Eastern Railroad, or ACE, extending 786.01 route-miles from the McKinley and Lee Ranch Mines in northwestern New Mexico to Cochise, AZ. The ACE system replicates BNSF's east-west mainline between Defiance and Vaughn, NM (as well as BNSF's Defiance Branch serving McKinley Mine), uses existing BNSF trackage rights over UP's north-south line between Vaughn and El Paso, TX, and replicates UP's east-west mainline between El Paso and Cochise via Deming, NM.

AEPCO's experts developed track configurations and traffic-control systems for the two east-west portions of the ACE system that virtually replicate the existing BNSF and UP facilities. These experts also developed ACE yard and other facilities needed to interchange cross-over traffic with the residual incumbents, fuel and service locomotives, repair cars, perform required car inspections and maintenance-of-way, and house the ACE's line operations, maintenance and supervisory personnel. The ACE system was designed to accommodate a traffic group that included, in addition to a relatively small volume of coal traffic, what AEPCO believed to be (1) all of BNSF's 2001 non-coal overhead freight traffic moving over its main line between Defiance and Vaughn, and (2) all of UP's 2001 non-coal overhead freight traffic moving over its main line between El Paso and Cochise.

As described in Part III-A, supra, the Defendants have challenged the ACE's traffic group and revenues, but their only major criticism is that there is no basis for the upward revenue adjustment made by AEPCO in attempting to reconcile the information contained in the Defendants' traffic/revenue files and train/car movement records provided in discovery. AEPCO has accepted this criticism for Rebuttal purposes, and reduced the ACE's revenues to reflect the "unadjusted" revenue level for its intended traffic group from the traffic and revenue files, which the Defendants appear to believe is appropriate.

However, inasmuch as AEPCO has identified the trains that actually carried the ACE's intended traffic in the 2001 peak-year, it has not changed the ACE's configuration, number of locomotives and cars, or number of employees. In other words, it has not reduced either the ACE's capital costs or its annual operating expenses from the levels described on Opening – even though the reduced revenue would drive reduced traffic volume that surely would result in reductions in such costs as well as increase the ACE's peak-year capacity. This conservative approach ensures that the ACE's design – which the Defendants have not challenged in any event – is adequate to enable it to handle its intended traffic group. The approach also avoids a possible charge that AEPCO has made substantial changes to its SARR on Rebuttal, of the kind the Board in other recent rail rate cases has deemed improper at this evidentiary stage.

As also noted in Part III-A, supra, the Defendants were well-aware from AEPCO's Opening Evidence of the trains the ACE operates in overhead service during the 2001 peak year, and they could have presented evidence challenging the adequacy of the ACE configuration and facilities to accommodate these trains. They chose not to do so, instead hanging their collective hats on their alleged inability to discern the precise contours of ACE's traffic group and revenues. The Defendants having presented no evidence with respect to the ACE's track configuration and facilities, AEPCO's detailed evidence on these matters stands undisputed and must be accepted by the Board.

BNSF and UP have challenged two related, conceptual aspects of the ACE stand-alone railroad system developed by AEPCO's experts on Opening. These are (1) the re-routing of the issue and certain other coal traffic from the Belen-Rincon-Deming route presently used by the incumbents to a route via Vaughn and El Paso, and (2) the ACE's use of BNSF's existing trackage rights over UP's line between Vaughn and El Paso rather than constructing a line between those points (or between Belen and Rincon). AEPCO addresses the Defendants' arguments on these issues below.¹

¹ The Defendants also assert that the route AEPCO chose for its SARR results in increased costs related to the handling of local BNSF traffic at Belen Yard and changes in BNSF and UP crew districts resulting from the insertion of the ACE as an overhead carrier for non-coal cross-over traffic. AEPCO addresses these issues in Part III-C, infra.

1. The Vaughn-El Paso Reroute

AEPCO has configured the ACE to use a different route than the one presently used by BNSF and UP to transport the issue coal traffic and the traffic of two other coal shippers: Tucson Electric Power Company (“TEP”) coal traffic originated by BNSF at McKinley and Lee Ranch Mines in New Mexico and terminated by UP at TEP’s Irvington generating station near Tucson, AZ ({ } tons in 2001), and coal traffic originated by BNSF at York Canyon Mine in New Mexico and terminated by UP at a California Portland Cement plant at Rillito, AZ ({ } tons in 2001).² All of the “re-routed” coal traffic, including AEPCO’s, amounts to barely one percent of the ACE’s total traffic volume in the 2001 peak year. See AEPCO Op. Exhibits III-A-5 and III-A-6.

The route presently used by the Defendants for most of this traffic follows the BNSF mainline serving the New Mexico mine origins eastward to Belen, NM, then the BNSF/Southwestern Railroad (“SWRR”) line from Belen southward to Deming via Rincon, NM, and then UP’s mainline west westward to Cochise. The ACE route proceeds along the same east-west mainlines, but uses UP’s north-south line between Vaughn and El Paso rather than BNSF’s Belen-Rincon-Deming line (the ACE will use existing BNSF trackage rights over UP’s Vaughn-El Paso line rather than constructing a

² York Canyon Mine has recently closed and AEPCO has not included any California Portland Cement coal traffic in the ACE’s traffic group for years after 2002.

line of its own). The ACE route via Vaughn and El Paso is 222 miles longer than the Defendants' route via Belen, Rincon and Deming.³

The Defendants assert that the route via Vaughn and El Paso is inefficient compared with the route via Belen, Rincon and Deming, due primarily to the additional mileage involved. UP, in particular, asserts that because of these inefficiencies it would not agree to permit an interline move for the issue coal traffic via the Vaughn-El Paso route. UP SAC Reply at I-17 to 18 and III-B-1. UP also asserts that because "AEPCO's proposed [SARR] rerouting could not be implemented in the real world," it is inappropriate to use it in the stand-alone world. UP April 18 Petition at 21⁴ and UP SAC Reply at I-18.

In terms of whether it is appropriate for AEPCO's SARR to use the Vaughn-El Paso route, the question is not whether it would be "efficient" or "inefficient" (from a cost and a service standpoint) for the Defendants to use that route to provide joint or interline service for the issue traffic in the real world, or whether both carriers would or would not agree to use that route. Rather, the question is whether it is efficient for the SARR to use such a route to provide single-line service in the hypothetical stand-alone world, in the overall context of grouping traffic and designing facilities in a manner that

³ See AEPCO Op. at III-C-8 and Op. Workpapers Vol. 8, p. 03547, as corrected by AEPCO's Additional Errata to its Opening Evidence filed March 20, 2003.

⁴ UP's April 18 Petition is included in its SAC Reply as Exhibit I-1. AEPCO filed a Reply to UP's April 18 Petition on May 8, 2003. The Reply is included as AEPCO's Rebuttal Exhibit I-4.

maximizes economies of density. Relevant aspects of this question include whether the SARR can provide service using the longer route that meets the needs of the shippers whose traffic is involved, and whether the SARR's costs include all relevant costs resulting from the longer route (including increases in the affected shippers' costs).

The Coal Rate Guidelines explicitly state that a SARR's physical facilities should be designed to minimize construction and operating costs and maximize the carriage of profitable traffic, and they recognize the desirability of grouping the issue traffic with other traffic in order to maximize a SARR's production economies.

Guidelines, 1 I.C.C.2d at 543-44. The Guidelines also explicitly recognize that to achieve maximum production economies the shipper may select a different and longer route than the one actually used to transport the issue traffic:

In selecting the route of a SAC railroad, for instance, an overriding factor may be the effort to lower costs by taking advantage of economies of density. Generally, a stand-alone railroad would attempt to fully utilize plant capacity, adding other profitable traffic in order to reduce the average cost of operation. Thus, the stand-alone railroad may not represent the shortest route for the captive shipper, but the one with the highest traffic densities.

Id. (emphasis added). AEPCO designed the ACE with precisely these factors in mind.

Using the longer route for the issue traffic via Vaughn and El Paso maximizes traffic densities and utilizes available plant capacity more efficiently, and using BNSF's existing trackage rights between Vaughn and El Paso minimizes construction costs. Indeed, in its decision in this proceeding served August 20, 2002 ("August 2002 Decision"), the Board

has already accepted in principle the use of the Vaughn-El Paso route, provided AEPCO did not request the present Belen-Rincon-Deming routing (which it did not). August 2002 Decision at 6; AEPCO Op. at III-B-1 n.1; see also the discussion starting at p. III-B-15, infra .

The Board's acceptance of the alternative route is consistent with SAC principles. If one were starting from a "clean sheet" in designing a new railroad to serve the issue traffic, one would not use a Belen-Deming route because to do so would not maximize the railroad's traffic densities and production economies. The origin mines are located near a high-density mainline, and so is the destination power plant. Any railroad starting from scratch would want to take advantage of the increased traffic densities available by using the longer route via Vaughn and El Paso – and indeed, the SAC principles embodied in the Coal Rate Guidelines encourage a shipper to incorporate such densities in designing a SARR. To mandate anything else is to require the shipper to design a system that is neither least-cost nor most-efficient, and thus to subsidize existing inefficiencies.

To be sure, AEPCO's SAC analysis must account for all of the relevant costs entailed in its traffic and route selections, and the SARR route must meet the transportation needs of the traffic in its group by, e.g., providing service that is equivalent to the existing service for that traffic. TMPA (Decision served March 24, 2003) at 16, 21;

Bituminous Coal—Hiawatha, UT to Moapa, NV, 10 I.C.C.2d 259, 273 (1994) (“Nevada Power II”).⁵ AEPCO’s evidence meets these requirements.

a. Costs of Handling Coal Traffic via the Longer Route

First, AEPCO has accounted for all of the operating and road property investment costs the ACE directly incurs to transport the issue coal traffic and the TEP Irvington coal traffic via Vaughn and El Paso rather than via Belen-Rincon-Deming. These include, for example, locomotive capital and maintenance costs, crew costs, other operating costs including fuel costs,⁶ and facilities construction costs. The development of these costs is shown in Parts III-B, C, D and F of AEPCO’s Opening Evidence and accompanying workpapers.

⁵ See also McCarty Farms, Inc. v. Burlington Northern, Inc., 2 S.T.B. 460, 469 (1997) (a SARR may meet the shipper’s existing service requirements in a manner that is different from the incumbent carrier’s service).

⁶ At p. III-B-1 of its SAC Reply, UP asserts that the longer route via Vaughn and El Paso would “increase fuel consumption by at least 57%.” In support of this assertion UP cites its Reply electronic workpaper “TPS Runs.pdf.” Based on a verified statement by Dale W. Salzman accompanying UP’s April 18 Petition, it appears this number is based on some modeling of BNSF/UP’s operations on the current and proposed routes using UP’s Train Performance Simulator (“TPS”) model. However, UP did not provide the underlying computerized model to the Board (or to AEPCO), so it is impossible to verify the reasonableness of the TPS model’s assumptions or its results. The Board has recently rejected the results of using computerized models to assess the adequacy of a particular track configuration, train running times, and other operating parameters when the model itself was not provided to the Board or to the other party. See TMPA at 68, 74. For the same reason, the Board should reject the results of the TPS model here.

b. Service/Transit Times

Second, AEPCO's Opening Evidence shows that the trains in issue (which comprise a very small part of the ACE's traffic group) achieve round-trip transit times that are faster than those achieved by the Defendants in the real world, notwithstanding the additional distance. This evidence was submitted as part of AEPCO's string diagram analysis of the ACE's operations during the peak the ACE's peak traffic year (2001).⁷ As shown in electronic workpaper files "Timesex.xls" and "Timesl.xls" submitted with AEPCO's Third Errata to its Opening Evidence, filed April 7, 2003, the two Lee Ranch-Apache trains moving over the ACE via Vaughn and El Paso during the peak period have an average round trip transit time of 45 hours and 43 minutes. These same two trains had an actual average round trip cycle time of { }, operating on BNSF/UP via the Belen-Rincon-Deming route.⁸

It should also be noted that both the ACE 2001 cycle times developed by AEPCO for the re-routed Apache coal trains and the actual BNSF/UP cycle times for these trains are slower than the cycle times developed by UP Witness Salzman using the

⁷ BNSF's SAC Reply contains a brief and very general critique of AEPCO's string diagram model (at III-C-1). AEPCO responds to BNSF's critique in Part III-C-1 of this Rebuttal Narrative, infra.

⁸ See AEPCO Rebuttal electronic workpaper file "peak_coal.xls." The average actual BNSF/UP round trip transit time for Lee Ranch-to-Apache trains was { } (AEPCO Rebuttal electronic workpaper file "2001 Cycle Time.xls"). No trains moved between McKinley Mine and the Apache plant in 2001.

undocumented TPS model, as reported in Exhibits 1 and 2 to his verified statement accompanying UP's April 18 Petition.⁹ This is a further reason why the undocumented TPS model results presented by UP should not be given any credence by the Board.

BNSF and UP assert that re-routing the Apache and Irvington coal traffic (which comprises less than one percent of the ACE's total traffic volume)¹⁰ would "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." BNSF SAC Reply at I-15; UP SAC Reply at III-B-1. However, neither

⁹ Mr. Salzman's TPS model runs using the present routing via Belen-Rincon-Deming are particularly suspect because they show round trip running times that are slightly more than one-half of the actual running times experienced by the Apache and Irvington trains. As noted earlier, the actual 2001 average round trip cycle time between Lee Ranch and Cochise is { }. By comparison, Mr. Salzman's TPS model calculates a cycle time of { }. (See Exhibit No. 1 to Mr. Salzman's V.S. accompanying UP's April 19 Petition; {

}.) The apparent reason for the disparity is that the TPS model improperly assumes that trains will always operate at the maximum possible speed and does not account for delays associated with train meets, train passes, etc.

¹⁰ AEPCO notes that UP's evidence on cycle times, fuel consumption, and shipper costs for re-routed coal traffic relates only to the Apache and Irvington movements, which are unit-train movements in private cars. The California Portland Cement traffic is a small movement of industrial coal in less-than-trainload shipments that moves in manifest and local trains. UP April 18 Petition, Salzman V.S. at 4 n.3. UP has not presented any evidence showing that the ACE reroute would adversely affect the movement of this traffic.

Defendant has provided any facts to document this speculative and unsupported statement.¹¹ AEPCO's Opening Evidence, on the other hand, modeled the operation of all ACE trains, including the overhead intermodal, automotive, and manifest trains, between Defiance-Vaughn and Vaughn-El Paso. This evidence shows that all of the lines involved have ample capacity to handle the re-routed coal trains and provide improved average transit times for the more time-sensitive trains.¹² In particular, AEPCO's Opening Evidence (as corrected and supplemented by AEPCO's Third Errata thereto filed on April 7, 2003) included string diagram model runs for all trains operating over UP's Cochise-El Paso and El Paso-Vaughn line segments during the peak seven-day period in 2001 for these particular segments. These runs show that the few re-routed coal trains involved – less than one per day in each direction – can easily be accommodated without interfering with (or interference from) the other traffic moving over these lines.¹³

¹¹ As noted earlier, the Railroads did not submit the computerized capacity model apparently used to determine cycle times for the rerouted coal trains. Apparently they did not attempt to calculate transit times for non-coal trains moving over the ACE route.

¹² On the latter point, see the discussion at pp. III-C-6 to 7, infra.

¹³ UP's April 18 Petition contains speculative assertions concerning cost increases that might result from the alleged operational inefficiency of the Vaughn/El Paso re-route. Id. at 19 and Salzman V.S. at 4-6. These assertions are unsupported by any facts, and AEPCO has shown that all of the ACE's (and relevant shipper) costs have been accounted for and that train cycle times are unaffected by the re-route. Thus, this is not a situation where the complainant has failed to "fully account for the ramifications of requiring the residual carrier to alter its handling of the [re-routed] traffic." TMPA at 22.

The Defendants' arguments concerning interference with time-sensitive traffic by re-routed coal trains are further belied by the facts concerning the TEP/Irvington movements. In the 2001 peak year, the ACE handles a total of only { } tons of coal destined to the Irvington Plant. Only a small portion of this traffic ({ }) was originated by BNSF, and thus would involve an ACE re-route via Vaughn/El Paso.¹⁴ The vast majority of the Irvington traffic ({ } tons in 2001) originates at { }.¹⁵ This cross-over { } coal traffic is interchanged to the ACE at El Paso – which means UP will continue to transport this traffic via its Vaughn-El Paso line, and the ACE will replace UP in moving the traffic from El Paso to Cochise. In other words, the ACE is not re-routing this { } coal, and UP already has to fit it in with time-sensitive intermodal and automotive trains. This situation will not be exacerbated in the least by the new ACE route, as the ACE will handle this traffic *only* between El Paso and Cochise.

c. Inclusion of Additional Costs Incurred by Affected Shippers

The final “efficiency” argument raised by Defendants is that two of the shippers whose coal traffic is involved in the re-route (AEPCO and TEP) would face

¹⁴ This small volume – amounting to only seven trains per *year* – demonstrates the contrived nature of the Railroads' efficiency/cost arguments. The impacts of rerouting TEP/Irvington traffic obviously are *de minimus*.

¹⁵ See AEPCO Op. Exhibit III-A-6, p. 1.

“significantly increased” costs for the private cars they use in these movements as a result of the addition of 222 miles to the length-of-haul in each direction. UP argues that because of those increased costs (and increased train cycle times, a subject addressed previously), these shippers would not accept a routing via Vaughn and El Paso. UP April 18 Petition at 18, 20-21. However, the increase in car costs is *de minimus*, amounting to only { } in 2001. See AEPCO Rebuttal electronic workpaper file “Private Car Maint.xls” for the calculation of this amount.

AEPCO certainly would be willing to bear these costs in return for the lower freight rate resulting from its consultants’ SAC analysis. However, to avoid any dispute on this issue, AEPCO has assumed on Rebuttal that the ACE would directly reimburse AEPCO and TEP for their additional car costs, thus increasing the SARR’s annual operating expenses by that amount. These costs equal { } per car-mile in 2001. The net result is to increase SAC by \$0.0005 per ton. See AEPCO Rebuttal electronic workpaper file “Private Car Maint.xls.”

In summary, AEPCO has demonstrated that the new SARR route for a small volume of coal traffic is feasible and efficient from the standpoint of overall SARR production economies, and results in service to the two affected shippers that is at least as good as the service presently provided by the incumbent carriers. AEPCO has also shown that it has accounted for all relevant costs resulting from the new route in the SARR’s annual operating expenses and in the SAC results from running the DCF model.

2. Use of BNSF Trackage Rights Between Vaughn and El Paso

In addition to asserting that the ACE route via Vaughn/El Paso is inefficient compared with a route via Belen/Rincon/Deming, the Defendants also assert that it is improper for the ACE to use BNSF's existing trackage rights to move the AEPCO coal trains over the UP line between Vaughn and El Paso rather than constructing a line of its own between these points. The Railroads' principal argument here is that it is inappropriate to "establish SAC costs by reference to trackage rights payments" in a situation involving a challenge to a joint rate, where "[t]he costs to defendants of owning a line connecting the BNSF and UP main lines are unavoidable in providing the issue traffic service." BNSF SAC Reply at I-15, I-18. The Defendants also assert that because they would not agree to use the "inefficient" Vaughn-El Paso in providing joint service to AEPCO in the real world, BNSF (and, thus, the ACE) cannot use its trackage rights over UP between Vaughn and El Paso to transport the issue coal traffic. UP SAC Reply at I-18.

a. Under the August 2002 Decision, the ACE is Not Required to Bear the Cost of Constructing a North-South Line

It is certainly true, as the Defendants state, that the ACE must be capable of providing service from the origins to the destination between which the complaint traffic moves. However, as AEPCO pointed out in its Reply to UP's April 18 Petition at pp. 35-39, this does not require construction of a north-south line to connect the defendants' east-west lines used to move the issue traffic so long as one of the defendants has entered

into a cost-sharing arrangement to permit another carrier (which may or may not be a co-defendant) to operate over the north-south line. Such arrangements are present here. BNSF has trackage rights over UP's Vaughn-El Paso line that permit it to move overhead coal traffic; the ACE has the ability under well-established SAC principles to step into BNSF's shoes under the terms of the applicable joint facility agreement;¹⁶ and Defendants have not pointed to anything in that agreement that prevents the ACE, *as a replacement for BNSF*, from transporting the issue and the TEP/Irvington coal traffic between Vaughn and El Paso using these trackage rights.

The Board has already held in this case that AEPCO's SARR may utilize cost-sharing arrangements that BNSF and UP have in place between themselves to move joint Complaint traffic. August 2002 Decision at 7. The Defendants attempt to avoid the implications of this holding by arguing that it was limited to the SARR's use of UP trackage rights over BNSF lines in evaluating the reasonableness of single-line UP Colorado rates (which were in issue in this case prior to AEPCO's settlement with UP). However, the Board's holding clearly was not so limited. After discussing (and approving) the SARR's potential use of BNSF facilities over which UP has trackage rights to handle single-line UP traffic from Colorado origins, the Board went on to hold

¹⁶ See Westmoreland Coal Sales Co. v. Denver R.G.W. R. Co., 5 I.C.C.2d 1067, 1105 (1988); Nevada Power I, 6 I.C.C.2d at 57; Nevada Power II, 10 I.C.C.2d at 303 n.55; West Texas Utilities Co. v. Burlington Northern R.R., 1 S.T.B. 638, 673 (1996); Wisconsin, at 69; TMPA at 15 n.21 and 67 n.106.

that the same principles “apply with equal force to SARRs designed to test the BNSF-UP rates from the PRB and New Mexico origins.” Id. The Board’s only caveats were that the SARR “may not hypothesize non-existent revenue or cost-sharing arrangements” and that only the traffic and revenues of the carrier whose portion of the route is being replicated may be included in the SARR’s traffic group. Id.

BNSF and UP omit any mention of the applicability of the Board’s “cost-sharing” discussion to their joint service, notwithstanding the Board’s explicit sanction of it. Moreover, BNSF and UP have not denied that they have cost-sharing arrangements in place between themselves under which BNSF is entitled to move overhead coal traffic between Vaughn and El Paso. Under the August 2002 Decision and these facts, there should be no question of AEPCO’s ability to use BNSF’s trackage rights over UP’s Vaughn to El Paso line to move the issue coal traffic. To hold otherwise would be to impose an entry barrier, as the Board has held in authorizing a SARR’s use of an incumbent’s trackage rights over a third party carrier rather than constructing a parallel line. See, e.g., Nevada Power I, 6 I.C.C.2d 1, 54 (1989).¹⁷

The situation here is thus entirely different than the one involved in the 1983 PEPCO case,¹⁸ which the Defendants cite in support of their position that the ACE must construct a north-south line rather than using BNSF’s trackage rights. See BNSF

¹⁷ Trackage rights agreements are frequently entered to enable one carrier (the tenant) to abandon a parallel, duplicate facility.

¹⁸ Potomac Electric Power Co. v. Conrail, 367 I.C.C. 532 (1983).

SAC Reply at I-15. In PEPCO, the shipper-complainant tried to extend the defendant-incumbent's (Conrail's) existing trackage rights over an Amtrak line that constituted a small portion of the SARR's route to cover the entire SARR system, meaning that the SARR would not have to construct any lines at all. The ICC rejected this approach for two reasons: (i) there was no evidence that Conrail would be willing to make trackage rights available to PEPCO's SARR to operate over other lines at the same price at which Amtrak gave Conrail trackage rights over a limited line segment, and (ii) the evidence showed that the Amtrak trackage rights fee was based on its marginal cost of providing the service and therefore would be unlikely to be fully compensatory if substituted for SAC construction costs. 367 I.C.C. at 552-53.

In other words, the ICC refused to use a trackage rental fee for the entire SARR involved in PEPCO, rather than the cost of constructing (or purchasing) the necessary rail lines, because of the lack of existing cost-sharing arrangements for the proposed service that were likely to be compensatory to the incumbent. Here, to the contrary, cost-sharing arrangements between BNSF and UP are already in place for a relatively small portion (29%) of the overall SARR system, on known terms including a known price that the ICC approved for various reciprocal exchanges of trackage rights in the BN/Santa Fe merger case.¹⁹ Under governing law (including the August 2002

¹⁹ Burlington Northern Inc., et al. – Control and Merger – Santa Fe Pacific Corporation, et al., 10 I.C.C.2d 661, 768-773 (1995).

Decision) the ACE is entitled to step into BNSF's shoes under the applicable joint facility agreement under the same terms that would apply to BNSF's operations.²⁰

BNSF also cites a footnote to the ICC's final 1985 Coal Rate Guidelines decision in support of its argument that the SAC constraint requires a SARR to bear the full economic costs of constructing the defendant's rail lines rather than using trackage rights. BNSF SAC Reply at I-16 to 17. However, the footnote in question (1 I.C.C.2d at 543 n.60) essentially tracks the PEPCO holding which was issued two years earlier: "a SAC presentation based on [hypothesized] trackage rights over the very facilities to which the rate at issue applies is not useful, since the SAC determination would be no different from the ultimate issue in the case." In other words, the cited footnote confirms that a SARR cannot replicate the incumbents' service as a whole using trackage rights. But this is not what AEPCO proposes to do here. It proposes to use existing cost-sharing arrangements between two carriers for a limited portion of the SARR's lines, on terms that are explicitly set forth in the applicable joint facility agreement. This is consistent both with the numerous ICC/STB decisions holding that a SARR may use an incumbent's trackage rights over a third party rail carrier in serving the issue traffic, *and* with the Board's August 2003 decision in this case applying this principle to cost-sharing

²⁰ This joint facility agreement is included in AEPCO's Op. Workpapers Vol. 9, pp. 04218-04236. The ACE will provide the same service using these trackage rights that BNSF could provide. See AEPCO Op. Narrative at III-A-6 n.5. It will pay UP the same level of compensation for using the joint facility that BNSF would pay under this agreement. See AEPCO Op. Narrative at III-D-71 and associated electronic workpaper.

arrangements between incumbents that participate in a joint route. Again, any other outcome would constitute an entry barrier.

The Defendants also argue that because they provide joint service over lines that one or the other of them had to construct, the ACE cannot avoid the ownership costs entailed in providing that service. This argument is unavailing, because the ACE is not avoiding relevant and appropriate ownership costs.²¹

BNSF argues that trackage rights fees may not cover the owner's full costs, and may be set at a level that only covers "directly attributable" costs rather than covering the landlord's "attributable and unattributable costs" of the line. BNSF SAC Reply at I-16. Indeed, this appears to have been the situation in the 1983 PEPCO case. However, unlike the defendant in that case, the Defendants here have not even alleged – much less presented evidence demonstrating – that the fees paid by BNSF to UP to operate over the Vaughn-El Paso line segment fail to cover all relevant costs including ownership costs.²²

²¹ Trackage rights fees paid by a tenant, such as those payable by BNSF to UP for BNSF's use of the Vaughn-El Paso line segment, customarily include a factor to compensate the owner for a return of and on its investment in the line being used (based on relative usage). As AEPCO demonstrates in the text below and in Exhibit III-B-3, UP's relevant ownership costs are covered by the trackage rights fees applicable under the joint facility agreement applicable to the Vaughn-El Paso line segment.

²² In fact, the ICC's discussion of trackage rights fees in its decision approving the BN/Santa Fe merger indicates that the principal concern of various shippers was that the fees were too high (although the discussion was in the context of situations where another carrier was being granted trackage rights over a BNSF line, rather than the reciprocal situation in issue here). The ICC approved the fees, which included an interest rental component, as being consistent with the compensation method established in the SSW (continued...)

If this were in fact the case, AEPCO has every confidence that the Defendants would have come forward with evidence so showing. Their failure to do so entitles AEPCO to a presumption that the trackage rights user fees (which the ACE will pay) fully compensate UP for its relevant ownership costs for this line segment.

To lay to rest any doubts as to whether the trackage rights fees payable by BNSF (and thus the ACE) to operate over UP between Vaughn and El Paso are fully compensatory to UP, AEPCO requested Mr. William Whitehurst of W.W. Whitehurst & Associates, Inc. to evaluate the extent to which the fees cover UP's relevant costs incurred in providing the trackage rights. Mr. Whitehurst's analysis is set forth in AEPCO's Rebuttal Exhibit III-B-3. He concludes that the trackage rights fees cover UP's attributable and unattributable costs, including a return on UP's investment in the facilities, and thus satisfy the criteria demanded by BNSF at page I-16 of its SAC Reply.

b. Whether Defendants Would Agree to a Joint Vaughn-El Paso Route in the Real World is Irrelevant in Determining the SARR's Ability to Use BNSF's Trackage Rights

The Defendant's final argument is that they cannot be required to use an "inefficient" joint route via Vaughn/El Paso in the real world. UP, in particular, asserts that it would not agree to shift AEPCO's coal traffic to the more circuitous route via El Paso, and that because BNSF does not have the right to countermand UP's choice of

²² (...continued)
Compensation cases. 10 I.C.C.2d at 704, 768-771.

Deming as the point of interchange for the joint-line coal traffic that AEPCO proposes to reroute, BNSF (and, by extension, AEPCO's SARR) lacks the ability to use BNSF's Vaughn-El Paso trackage rights to move this traffic. UP SAC Reply at I-18.

In essence, the Railroads' argument is that because BNSF cannot presently use its Vaughn-El Paso trackage rights to move the issue joint traffic in the real world (due to UP's non-consent), the ACE cannot step into BNSF's shoes under the trackage rights agreement to move that traffic – i.e., there is no cost-sharing arrangement between BNSF and UP that the ACE could use to move the traffic. This attempt to avoid the Board's holding in the August 2002 Decision fails as a matter of both law and logic.²³

As AEPCO pointed out in its Reply to UP's April 18 Petition at 34-35, real-world relationships between carriers in terms of establishing joint rates and routes are irrelevant to the stand-alone world. The ACE must replicate the Defendants' joint service as a whole in transporting the issue traffic, but under well-established SAC principles it need not do so in the same manner as the Defendants. Coal Rate Guidelines, 1 I.C.C.2d at 543-44; August 2002 Decision at 5 (approving in concept a SARR route for the issue joint coal traffic via Vaughn and El Paso rather than via Belen-Rincon-Deming).

Like all SARRs, the ACE provides single-line service for the issue traffic. In the stand-alone world, there is no joint service, and thus no need for agreement among

²³ The only restriction in the August 2002 Decision related to whether the shipper (AEPCO) had imposed a restriction that precluded the rerouting. AEPCO plainly did not.

carriers on the parameters of a joint route such as the appropriate interchange point. BNSF's inability to force UP to agree to change the interchange point for the issue traffic from Deming to Vaughn in the real world (and thus to use its Vaughn-El Paso trackage rights to move this traffic) is irrelevant for SAC purposes. There is no question that, with no need to consider joint rate and route issues, the ACE can step into BNSF's shoes under the presently applicable BNSF/UP joint facility agreement. The only relevant question is whether that agreement permits BNSF (and thus the ACE) to transport coal traffic between Vaughn and El Paso. As AEPCO noted earlier, the agreement by its terms unquestionably permits this and neither UP nor BNSF has claimed otherwise.

In short, there is an available cost-sharing arrangement between BNSF and UP providing for BNSF transportation of coal and other traffic between Vaughn and El Paso using UP's line between those points. The arrangement is fully compensatory to UP. Consistent with the August 2002 Decision and other decisions approving a SARR's use of an incumbent's trackage rights rather than constructing a line that replicates the joint facility, the ACE is entitled to avail itself of this cost-sharing arrangement to move the issue traffic over the Vaughn-El Paso segment of its route.

III-C Operating Plan

III. C. OPERATING PLAN

In their Reply Evidence the Defendants do not challenge any of the specific parameters of the Operating Plan for the ACE designed by AEPCO's experienced rail operations expert, Frederic W. Yocum, Jr. Rather, they assert a position similar to the one they took with respect to the ACE's track and yard configuration (discussed in Part III-B, supra): "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." UP SAC Reply at III-C-1; see also BNSF SAC Reply at III-C-2.

This assertion is misleading, and patently intended to bootstrap the Defendants' position that the Board should either dismiss the complaint or require AEPCO to re-file new opening evidence. In fact, the ACE Operating Plan is based on known 2001 train movements over its various line segments, as identified from computerized train movement records produced by BNSF and UP in discovery, and these train movements remain the same as presented on Opening notwithstanding AEPCO's elimination of the ACE revenue adjustments on Rebuttal (see Part III-A, supra). The Defendants could have assessed the adequacy of AEPCO's Operating Plan to accommodate these trains efficiently and in accordance with customer requirements. To the very large extent the Operating Plan developed by AEPCO is not addressed by the Defendants, the Board should accept it as a feasible, viable plan for the ACE.

Notwithstanding their calculated decision to punt on most aspects of the ACE Operating Plan, the Defendants do criticize three, selected aspects of the Plan. Only one of these criticisms relates to the Operating Plan itself; this is BNSF's brief critique of the string diagram model used to develop certain operating statistics used in the DCF model. See BNSF SAC Reply at III-C-1. The other two criticisms are peripheral to the ACE Operating Plan itself, in that they relate to alleged increases in the residual Defendants' costs resulting from the ACE's handling of non-coal cross-over traffic in overhead service between Defiance and Vaughn and between El Paso and Cochise. AEPCO addresses each of these matters below.

1. AEPCO's String Diagram Analysis

AEPCO's Witness Thomas D. Crowley and his firm used a computerized string diagram model to confirm that the ACE track and yard configuration (as developed by AEPCO's operations expert, Mr. Yocum) provided the railroad with capacity to accommodate its peak-period traffic group,¹ and to develop various operating statistics used in calculating the ACE's annual operating-expense inputs to the DCF model.

¹ As AEPCO pointed out in its Opening Evidence, this exercise was unnecessary in that (1) the ACE track configuration either replicated or improved upon the existing BNSF and track configurations for their main lines between Defiance and Vaughn and between El Paso and Cochise, respectively; (2) the ACE peak-year (2001) traffic did not include local freight trains and Amtrak passenger trains that operated over these lines; and (3) BNSF and UP were able to accommodate all of the trains that actually operated over these lines in 2001 including local freight and passenger trains that the ACE does not operate. See AEPCO Op. Narrative at III-C-6 to 7 and III-C-19 to 20.

The Defendants devoted less than one paragraph of their SAC reply evidence to a few very general criticisms of AEPCO's string diagram model. See BNSF SAC Reply at III-C-1 (UP did not mention the string model in its SAC Reply). BNSF's first criticism is that the string diagram model used by AEPCO's experts in this proceeding "is merely the latest iteration of a string program that the Board has already rejected" in TMPA. Id. This obvious attempt to tar AEPCO's string analysis by association to the string analysis performed by the complainant in the TMPA case is inappropriate given the lack of any detailed analysis and must be rejected.

In fact, the string diagram model presented by AEPCO's consultants in this case contains numerous refinements to the version presented in TMPA. Several perceived flaws in the TMPA version of the model (including the algorithms used for curvature, acceleration and braking) have been identified and fixed in this case.² The model is better documented than the model used in TMPA, and the instructions for its use

² After AEPCO's Opening Evidence was filed, AEPCO's experts discovered a continuing problem with the way the string model identified grades and curvature on the ACE route. This problem was corrected (as was the output from applying the model) in AEPCO's Third Errata to its Opening Evidence filed April 7, 2003. Id. at 3-4. The revised model was submitted with the Third Errata in electronic workpaper "string_ACE_Errata.zip;" the revised grade and curvature input/output files were included in electronic files "Final_grades_AEPCO.xls" and "grades.dbf." These corrections eliminated the kind of input data errors in the string program's grade/curve database described by BNSF in its Motion for Leave to File Surrebuttal Evidence and accompanying verified statements in Docket No. 42057, Public Service Company of Colorado d/b/a Xcel Energy v. Burlington Northern and Santa Fe Railway Co. (Public Version filed June 6, 2003).

are more detailed than those provided to the Board in TMPA. See AEPCO Op. Exhibit III-C-3 and the electronic workpapers referred to therein.³ Indeed, neither BNSF nor UP purports to identify any specific shortcomings in the documentation or instructions, and any claimed flaws in the algorithms have been addressed. In short, there is no absolutely no basis on *this* record for the Board to reject the unrebutted results of applying the current version of the string diagram model (as revised in AEPCO's Third Errata) to assess the ACE's capacity and determine various ACE operating statistics. (AEPCO's Rebuttal DCF analysis reflects the changes to the operating expenses resulting from the Third Errata corrections.)⁴

BNSF also states that AEPCO did not modify the string program to account for the fact that, unlike the TMPA situation, most of the traffic on AEPCO's SARR involves commodities other than coal. BNSF has apparently broached this point in an attempt to misdirect the Board away from the clear answer provided by AEPCO's string diagram analysis: the ACE network has ample capacity to handle the forecasted traffic

³ The string diagram model itself is set forth in AEPCO Op. electronic workpaper file "string-ace.zip." The detailed instructions for using the model are provided in AEPCO Op. electronic workpaper file "readme-AEPCO.xls."

⁴ BNSF has not alleged that the train transit and cycle times produced by the string diagram model are inaccurate, or that the ACE's track configuration is unsatisfactory to accommodate its peak-period traffic group. Neither BNSF nor UP presented any modeling evidence of their own to show what the ACE's projected train cycle times would be (as opposed to what *BNSF/UP's* cycle times might be if they routed AEPCO's coal trains via Vaughn/El Paso instead of via Belen/Rincon/Deming, which is irrelevant). See the discussion at pp. III-B-9-10, supra.

volumes, and to do so while providing equal or better service than that currently provided by the incumbent carriers.

The fact that AEPCO's string diagram model does not apply different speed assumptions for different traffic types is irrelevant to the ACE's operation since all non-coal traffic moves in overhead service. (The model does account for the length and trailing weight of each train in calculating operating speeds, including acceleration and deceleration.) The ACE is not required to schedule slow moving local trains that make frequent stops along the railroad's main lines, but rather is required to move only complete trains in straightaway, overhead service between interchange points at Defiance and Vaughn, and at El Paso and Cochise. Given the fluid nature of the ACE operation, and its abundant capacity, prioritizing trains for dispatch based on an arbitrary allocation method is not necessary.

BNSF also faults the string program for assuming that all cars on a train are either empty or loaded, and for not making provision for non-coal trains that carry both loaded and empty cars. BNSF's criticisms are misdirected. The string diagram model takes into consideration the number of loaded and empty cars on each train, and their weight, when calculating hour- and mile-based service units. See AEPCO Opening electronic workpaper file "Peakweek_AEPCO.xls," worksheet "final week," columns (Y) and (Z), which provide, respectively, the loaded cars ("CARS" variable in the string diagram model) and total cars ("TCARS" variable in the string diagram model) on each

train included in the string diagram model, and electronic workpaper file “aepco_string.prg” which contains the string-diagram model and utilizes the CARS and TCARS variables throughout. Only during the acceleration subroutine does the model consider the trains as either carrying all loaded or empty cars. However, this classification (all loaded or empty) has nothing to do with the cars, but is simply a convenient way to distinguish a train’s direction of movement (i.e., eastbound ACE trains are designated as “loaded” and westbound ACE trains are designated as “empty”). This designation is necessary to reflect the fact that the ACE affords priority to eastbound (“loaded”) trains.

Contrary to BNSF’s implication, the true test of the system is not whether the string diagram model provides different priorities and speed limits to different train types,⁵ but rather whether the stand-alone railroad provide at least the same level of service for the traffic traversing the system. As shown in Table III-C-5 below, the ACE is providing faster service for overhead non-coal traffic traversing the stand-alone system.

⁵ BNSF states that the string program applies the same transit times for all trains traversing the SARR (BNSF SAC Reply at III.C-1). This is incorrect. Transit times are not applied to trains in the string diagram model, but are rather the product of running each individual trains through the model. Factors including, but not limited to, train weights, the number of trains operating on the stand-alone system, and network grades, curves and speed restrictions all serve to dictate transit times for each train in the model.

Table III-C-5
Comparison of BNSF/UP Peak Week
Transit Times and ACE Transit Times

<u>On Junction</u>	<u>Off Junction</u>	<u>Peak Week Average Transit Times (Hours: Minutes)</u>	
		<u>UP/BNSF</u>	<u>ACE</u>
(1)	(2)	(3)	(4)
1. Cochise, AZ	El Paso, TX	{ }	8:07
2. El Paso, TX	Cochise, AZ	{ }	5:24
3. Vaughn, NM	Defiance, NM	{ }	6.49
4. Defiance, NM	Vaughn, NM	{ }	7.14

Source: Rebuttal electronic workpaper files "Transit Time Comparison.xls" and "DCF Non-Coal Transit Times.xls."

It makes no difference as to whether the ACE provides higher priorities to some trains and lower priorities to others as long as it is providing comparable service to what the incumbents currently provide. Clearly, the ACE is meeting this goal, and in most cases, surpassing it by a large factor ({ } for westbound UP trains, { } for eastbound BNSF trains, and { } for westbound BNSF trains).

2. Effects of the ACE's Operations on the Residual Incumbents' Costs

The Defendants assert that the ACE's operations, particularly with respect to the non-coal cross-over (overhead) traffic which constitutes the vast majority of its traffic, would require changes in their operations and impose substantial cost increases on them as residual incumbents. They argue that a SARR such as the ACE is responsible for

and thus should bear the additional costs “imposed” on the residual incumbents as a result of operational changes caused by the SARR’s methods of operations. BNSF SAC Reply at III-C-2 to 3. In this case, the alleged additional costs result from the ACE’s overhead operations between Defiance and Vaughn, which could impact BNSF’s local operations based at Belen Yard as well as its crew districts, and from the ACE’s overhead operations between El Paso and Cochise which could impact UP’s crew districts and assignments.

The Defendants’ position that a SARR should bear all cost increases that a residual incumbent might incur as a result of the SARR’s handling of cross-over traffic is utterly inconsistent with SAC principles and precedent, and represents yet another attempt to undermine those principles in an effort to eviscerate the usefulness of the SAC test for determining rate-reasonableness. Never before has a defendant in a rail rate case asserted, and never has the Board or the ICC held, that the residual incumbent’s remaining operations on the lines replicated by a SARR must be accounted for, except where traffic is being re-routed over the residual incumbent.⁶ The Board should reject the

⁶ The only precedent cited by the Railroads in support of their position that the SARR should bear any costs attributable to operational changes on the residual incumbent resulting from the SARR’s inclusion of cross-over traffic is TMPA (Decision served March 24, 2003, at 22). However, the TMPA holding is limited on its face to traffic that is rerouted on the residual incumbent’s lines. The only rerouted traffic involved in the instant case is the issue traffic and a small amount of other coal traffic, and even for that traffic the re-route is entirely on the ACE’s lines. None of the ACE non-coal overhead traffic (which is the subject of the Defendants’ Part III-C cost discussion) is being re-routed either on or off the SARR.

Defendants' attempt here to require the complainant to delve into operations that do not need to be accounted for in the stand-alone world.

It has long been established that a shipper may select appropriate traffic carried by the defendant-incumbent for inclusion in its traffic group, and that no restrictions should be placed on the traffic that may potentially be included in a stand-alone group. Coal Rate Guidelines, 1 I.C.C.2d at 544. Like AEPCO here, shippers in prior rate cases have selected specific subsets of the incumbent's traffic while excluding other traffic moving over the lines used by the issue traffic. See, e.g., West Texas Utilities Co. v. Burlington Northern R.R. Co., 1 S.T.B. 638, 657 (1996) ("WTU") (SARR traffic group limited to coal traffic); Arizona Public Service Co. v. Atchison, Topeka and Santa Fe Ry. Co., 2 S.T.B. 367, 381 (1997) ("APS") (SARR included only coal traffic); TMPA at 15-16 (SARR included only coal traffic). While the Board has not deemed it necessary to discuss in detail the ramifications of including some, but not all, of the incumbent's traffic, it certainly has not frowned on the practice. In fact, as the Board stated in both WTU (at 657) and APS (at 381), "the complaining shipper can ["may" in APS] select any subset of available traffic to determine the least cost at which that subset of traffic could be served independently of other traffic." (Emphasis added.) It would make little sense to allow the complaining shipper to select "any subset of available traffic" if the shipper were still required to consider the costs of the unselected traffic in its SAC analysis.

STB and ICC precedent also makes clear that the SARR serves as a replacement for, and not a competitor of, the incumbent. See Nevada Power II, 10 I.C.C.2d at 267 (“we view the entrant as if it were a replacement for that segment of the rail system whose services the entrant would be offering”). The incumbent essentially ceases to exist for SAC purposes, although it may (or may not) continue to carry other traffic not handled by the SARR between the same points, without interfering with the SARR’s operations. Similarly, as a replacement for the incumbent for the traffic the shipper has selected, the SARR does not have to take into account the incumbent’s operations with respect to the traffic it has rejected. To hold otherwise would be analogous to holding that a SARR cannot build its line in a narrow space between a cliff and a river without leaving space for the residual incumbent to put its own line. Such a holding would be plainly contrary to the Board’s stand-alone methodology.

The principle espoused by the Defendants is also entirely inconsistent with their claim, adopted by the Board earlier in this proceeding, that AEPCO’s SARR can only have facilities that serve the issue traffic. In its decision served December 31, 2001 (“December 2001 Decision”), at 5-6, the Board held that because of cross-subsidy concerns, revenues from non-issue traffic should not be relied upon to pay for portions of a SAC system over which that non-issue traffic would not move.⁷ Otherwise, AEPCO would welcome (for example) the opportunity to have its SARR build lines that extend to

⁷ The Board reiterated this holding in its August 2002 Decision, at 3.

Clovis, NM and Winslow, AZ, which are the next crew-change points on BNSF's east-west main line outside the ACE system, in order to capture additional revenue mileage blocks.⁸ However, this involves constructing facilities that do not serve the issue traffic, and thus would appear to run afoul of the Board's December 2001 Decision and August 2002 Decision.

In short, the Defendants would have the ACE perform services and/or incur costs that do not benefit the ACE. They are asking the Board to adopt a worst-of-all-possible-worlds approach: the least-cost, most-efficient SARR must incur off-SARR costs, but can receive no benefits (i.e., revenues) that result from incurring those costs. Forcing the ACE to incur costs for handling traffic that it has, entirely properly, elected not to serve also imposes an impermissible entry barrier.

The foregoing discussion should be enough to dispose of the Defendants' claim that the ACE should bear costs that the residual incumbents would allegedly incur on the lines being replicated as a result of AEPCO's inclusion of overhead cross-over traffic in the ACE's traffic group. However, out of an abundance of caution, AEPCO addresses below the specifics of the cost increases asserted by the Defendants.

⁸ This would avoid the need for rearranging BNSF's crew districts and crew assignments, as well as any possible need to evaluate resulting cost changes, as a result of the elimination of the Belen crew-change point for the ACE's overhead traffic. See the discussion at pp. III-C-18 to 24, infra.

a. BNSF Local Operations Involving Belen Yard

BNSF asserts that Belen is an important yard and crew-change point on its east-west main line, and that the ACE's failure to stop at Belen in transporting overhead traffic between Defiance and Vaughn "would require that BNSF establish new and costly operations and build new yards at Vaughn and Defiance to serve shippers . . . whose service is now supported through operations at Belen." BNSF SAC Reply at III-C-4.

As AEPCO demonstrated above, SAC principles do not require the ACE to accommodate BNSF's operations on the line being replicated with respect to BNSF traffic using this line that is not included in the ACE's traffic group. The SARR does not have to include all of BNSF's traffic, nor does it have to replicate BNSF's existing operations. In the real world (as opposed to the stand-alone world), BNSF will still have a yard at Belen, and it can still handle local traffic that is not included in the ACE traffic group out of Belen although such traffic is irrelevant for SAC purposes. This includes the few cars from the ACE/BNSF overhead trains that are presently dropped off or picked up at Belen for movement to/from Phoenix.⁹

⁹ These cars originate or terminate at points east of Vaughn. (Cars traveling north or south from or to Belen are not part of the ACE's traffic group.) They are presently switched between through trains and Phoenix local trains at Belen. The ACE will exchange the through trains containing these cars with BNSF at Defiance, and once they leave the ACE they disappear for SAC purposes other than calculating MMB divisions. BNSF has not challenged AEPCO's establishment of Defiance as an interchange point for cross-over traffic, and the Board has never been concerned with how the residual incumbent handles non-rerouted cross-over traffic beyond the interchange point.

It should also be noted that the ACE will replace BNSF with respect to virtually all of the overhead freight traffic presently moving through Belen, or an average of { } trains per day during 2001 (the ACE's peak traffic year). The ACE will perform the car-inspection function for all of these trains at Vaughn; BNSF presently inspects these trains at Belen.¹⁰ Assuming, arguendo, that it were appropriate to consider BNSF's operations as residual incumbent over a line being replicated by a SARR, it should be obvious that BNSF's costs would be reduced in many respects. BNSF would not need such a large yard at Belen to conduct car inspections and perform related bad-order switching, and its Mechanical Department personnel needs at Belen would be drastically reduced because the ACE is assuming the obligation to inspect the vast majority of the cars that move through Belen. The need to balance possible cost increases with possible cost decreases, and the difficulty of measuring them, is yet another reason why the Board should not change its established policy by delving into changes in the residual incumbents' operations and costs related to traffic that the shipper elected not to include in the SARR's traffic group.

While the ACE should not be required to take into account changes in the residual BNSF's costs occasioned by AEPCO's particular traffic selections, BNSF has raised an additional issue as to whether AEPCO may include revenue from traffic that enters or leaves the ACE's route at Belen and thus must be switched into or out of ACE

¹⁰ See AEPCO Op. at III-C-23 to 24.

trains at Belen or some other location. As BNSF points out, the ACE does not provide any switching service at Belen but operates through trains that either pass through Belen without stopping or are interchanged with BNSF there.

This ACE revenue issue has been resolved in two ways. First, when cars are either removed from or added to a through train at Belen by BNSF, AEPCO included the lower of the on-SARR or off-SARR car count for that train.¹¹ This ensures that the revenue for the cars that are removed or added at Belen in the real world are not attributed to the ACE, which performs no switching services at Belen.

Second, as described in Part III-A, supra, on Rebuttal AEPCO has eliminated all upward adjustments to the revenues for cars included in the ACE traffic group as reflected in the BNSF traffic tapes. This means that, whenever AEPCO could not find a match for the cars shown on the traffic tapes that moved overhead between Vaughn and Defiance in the BNSF train movement files, only the revenue for these cars as shown in the traffic tapes is now included. Thus, if a car destined to or from Albuquerque or El Paso was removed from or added to a train at Belen, it was treated as though it were not handled by the ACE at all for revenue purposes.

¹¹ BNSF acknowledges this at pp. III.C-10 to 12 of its SAC Reply. This treatment means that the residual BNSF would have to accommodate these cars on other trains or operate some short local trains (8 cars in the example described at p. III.C-11 of BNSF's SAC Reply). Again, however, how the residual BNSF handles traffic the shipper has excluded from the SARR traffic group is no more a concern in the stand-alone world than how the residual incumbent can continue to have a line in a narrow canyon through which the SARR's line passes.

AEPCO has not, however, adjusted either the train counts or sizes for purposes of determining the capacity of the ACE's track and yard configuration and developing the ACE operating expenses, even though downward adjustments obviously would occur as a result of AEPCO's revenue reductions. AEPCO has taken this very conservative approach in order to avoid making what the Defendants doubtless would characterize as a substantial and improper change in the SARR operations on Rebuttal.¹²

Another operational "problem" raised by BNSF is that it has no yard facilities at Defiance and would need a yard there to handle some ACE cars that would otherwise be removed from or added to through trains at Belen. As an example, BNSF states that all intermodal and manifest traffic coming from the east and bound for Phoenix is set out of through trains at Belen Yard. These cars are then assembled into a daily train that operates between Belen and Phoenix. (BNSF SAC Reply at III.C-6.) Because these

¹² The approach is also conservative because the number of cars (and the amount of revenue) AEPCO has eliminated is likely to be overstated. Some of the cars that are removed from a through train at Belen get added to another through (or local) train at Belen. For example, as a result of car inspections, bad-ordered cars that are removed from one westbound through train are repaired and later inserted into another westbound through train. As BNSF acknowledges, Belen Yard is a major 1,000-mile inspection point on a busy transcontinental main line. { } daily through trains moved through Belen during the ACE's 2001 peak traffic period. Cars are bad-ordered every day at Belen and switched out of through trains, and repaired cars are switched into different through trains than the ones they arrived in. These cars almost certainly are included in BNSF's Belen switching counts, but because they continue to move on through trains after being repaired they do not actually need to be removed from the ACE's traffic group or revenue. (The ACE is taking over the car-inspection function for all of these trains and will perform them at its Vaughn yard.)

cars are shown as moving between Vaughn and Defiance on BNSF's traffic tapes, AEPCO included them in determining the ACE's revenue, and assumed that the ACE would handle these cars in overhead service and deliver them to BNSF at Defiance. This is consistent with SAC theory, as how BNSF moves these cars is no more a concern under the Board's precedents than how the residual incumbent moves any traffic that is not selected for inclusion in the SARR traffic group.

Even if one were to remove the revenue from the cars destined to and from Phoenix under the theory that they do not actually move on BNSF trains that operate between Vaughn and Defiance (a fact that could not be ascertained from reviewing the BNSF traffic tapes), the effect on the SAC calculation is *de minimus*, as the revenue reduction for the 2001 peak year amounts to { }.¹³ AEPCO has included a second alternative DCF calculation in the Part III-H Rebuttal electronic workpapers that shows the results of excluding the revenue attributable to the Phoenix traffic.

b. Crew Districts and Related Costs

BNSF asserts that insertion of the ACE as an overhead carrier for non-coal cross-over traffic between Defiance and Vaughn would require BNSF to adjust its crew districts and crew assignments, because neither Defiance nor Vaughn is presently a BNSF crew change point. BNSF SAC Reply at III-C-14 to 18. UP, similarly, asserts that insertion of the ACE as an overhead carrier between El Paso and Cochise would require

¹³ See AEPCO Rebuttal electronic workpaper file “Exhibit III-A-9.xls.”

UP to adjust its El Paso-Tucson crew district because Cochise is not presently a UP crew change point for non-issue traffic. UP SAC Reply at III-C-1 to 3. Both carriers contend that the ACE should be required to pay for any resulting increases in crew costs and for new crew facilities at Defiance, Vaughn and Cochise. Once again, the Defendants are improperly attempting to impose off-SARR costs related to the residual incumbent's handling of crossover traffic – costs that have never before been considered to be a SARR's responsibility in the absence of off-SARR rerouting – on the SARR.¹⁴

By definition, cross-over traffic involves the creation of new, hypothetical interchanges between the hypothetical SARR and the residual incumbent. In prior SAC rate cases it often has been the case that interchange points proposed by the shipper and accepted by the railroad (and the Board) were not located at one of the incumbent's existing crew-change points. For example, in the TMPA case (in which BNSF was also a defendant), the shipper proposed and BNSF accepted new interchange points for crossover traffic at, among other points, Donkey Creek, Bridger Junction and Moba, WY. TMPA (Decision served March 4, 2003, at 15). AEPCO's Witness Yocum is familiar with these locations, and he indicates that none of the locations is presently a BNSF crew-change point. Yet, the Board's decision contains no discussion of any additional costs

¹⁴ As AEPCO noted at p. III-C-10 to 11, supra, the ACE would benefit from extending its lines to the next BNSFD and UP crew-change points beyond the present limits of its east-west lines, as this would result in additional revenue mileage blocks. However, AEPCO is certain that the Defendants would have objected to any such extensions because they would not serve the issue traffic.

that the residual BNSF might incur because of having to change crews at these new interchange points. Nor do the Board's or the ICC's decisions in any other rate cases involving cross-over traffic contain any discussion of such an issue.

Assuming *arguendo* that it is somehow appropriate to consider the effects of establishing new interchange points for cross-over traffic on the residual incumbent's crew districts and costs, neither BNSF nor UP would be likely to incur any significant cost increases as a result of the insertion of the ACE as an overhead carrier between Defiance and Vaughn and between El Paso and Cochise. In fact, as shown below, both carriers are likely to experience substantial net savings in crew-related costs because they would be able to utilize their train crews more efficiently.

i. BNSF Crew Districts and Costs

BNSF's evidence indicates that the Vaughn-Defiance line segment includes parts of two crew districts. One district extends between Clovis, NM and Belen (a distance of 240 miles), and the other extends from Belen to Winslow, AZ (a distance of 271 miles). Crews handling through trains in both districts operate in straightaway service, which means they require two tours of duty to make a round trip between (for example) Clovis and Belen and return. Insertion of the ACE as an overhead carrier will effectively add a third crew district to the territory between Clovis and Winslow: the ACE crew district between Vaughn and Defiance. BNSF will continue to have two crew districts for the trains exchanged with the ACE at Vaughn and Defiance, but they will be

much shorter districts – i.e., between Clovis and Vaughn (131 miles) and between Defiance and Winslow (118 miles). See BNSF SAC Reply at III.C-15 to 16 (which include schematics of the present and ACE-related crew districts).

The fact that the territory between Clovis and Winslow would have three crew districts rather than two as a result of the ACE's insertion as an overhead carrier between Vaughn and Defiance does not necessarily make the overall operations less efficient than they are today. The trains involved are all run-through trains, so no special handling is required at the interchange/crew change points. And, as BNSF itself concedes (id. at III.C-15 to 16), the most likely scenario is that BNSF would operate the Clovis-Vaughn and Winslow-Belen districts as turnaround districts, rather than straightaway districts.

With turnaround service, a BNSF crew based at Clovis would move a train from Clovis to Vaughn, and then move another train from Vaughn back to Clovis during the same tour of duty. Similarly, a Winslow-based crew would move a train from Winslow to Defiance and then move another train from Defiance back to Winslow during the same tour of duty. Although a train that operates between Clovis and Winslow would make two stops to change crews if the ACE is inserted as an overhead carrier (at Vaughn and Defiance), rather than one (at Belen) under BNSF's current operation, the total number of crews required to move the train between Clovis and Winslow effectively

remains two (½ a BNSF crew between Clovis and Vaughn, one ACE crew between Vaughn and Defiance, and ½ a BNSF crew between Defiance and Winslow).

There is more than ample cross-over traffic moving in the corridor between Clovis and Winslow to support efficient BNSF turnaround crew districts. The through traffic that is interchanged with the ACE at Vaughn and Defiance averages { } trains a day during the 2001 peak year, or { } in each direction.¹⁵ Thus the intervals between trains moving in each direction will be short, and BNSF crews will not have to spend long periods of time waiting at the turn terminals (Vaughn and Defiance) for trains moving back to their home terminal.

As demonstrated below, the ACE's hypothetical entry would enable BNSF to realize substantial savings in crew-related costs by changing to a turnaround crew operation. BNSF completely ignores these savings in claiming that the re-arrangement of crew districts occasioned by the ACE's entrance would cause its operations to become less efficient.

For example, BNSF would save more than \$3.7 million alone in annual crew lodging and taxi costs at the away-from-home terminal for its crews by operating crews in turnaround service. Table III-C-6 below summarizes the annual lodging and taxi costs that BNSF incurs for its present straightaway Winslow-Belen and Clovis-Belen

¹⁵ See AEPCO's Third Errata to its Opening Evidence filed April 7, 2003 and accompanying workpaper page AEP 05695.

crew districts (Line 3). The ACE's insertion as an overhead carrier means that, instead of operating straightaway crews (100% of which have to rest prior to their return trip to their home terminal), BNSF would use turnaround crews 89% to 90% of the time (depending on the crew district) – that is, the crews would have to rest before returning to their home terminal (or be taxied back to their home terminal) only 10% to 11% of the time.¹⁶ This results in a dramatic drop in BNSF's annual lodging and taxi costs, as shown on Line 6 of Table III-C-6.

¹⁶ BNSF turnaround crews would have to be overnighed at Defiance or Vaughn (or returned to their home terminal) 10% to 11% of the time because {
}. For example, as shown on page 3 of AEPCO Op. Exhibit III-C-1, {
} through trains traversed the BNSF straightaway crew district between Clovis and Belen (and therefore, after insertion of the ACE, the BNSF turnaround crew district between Clovis and Vaughn) in 2001. {
} This means that 11 % of the time, after a Clovis-based crew arrives at Vaughn, {
}.

Table III-C-6
BNSF Annual Savings In Lodging And Taxi Costs
From Interchanging With ACE At Vaughn & Defiance

<u>Crew District/Operator</u> (1)	<u>One-Way Miles</u> (2)	<u>Cost per Train of overnighiting the Crew ^{1/}</u> (3)	<u>2001 Trains</u> (4)	<u>Percent of Time Crews Are Overnighted ^{2/}</u> (5)	<u>Estimated 2001 Cost ^{3/}</u> (6)
<u>Current Operation</u>					
1. Clovis-Belen/BNSF	240	{ }	{ }	100%	{ }
2. Belen-Winslow/BNSF	271	{ }	{ }	100%	{ }
3. Total BNSF Costs					\$4,204,861
<u>ACE Operations</u>					
4. Clovis - Vaughn/BNSF	131	{ }	{ }	11%	{ }
5. Defiance- Winslow/BNSF	118	{ }	{ }	10%	{ }
6. Total BNSF Costs					\$441,240
7. BNSF savings from Interchanging with ACE ^{4/}					<u>\$3,763,621</u>

^{1/} \$46.40 (estimate of crew overnight and taxi expenses per crew member included in AEPCO's Opening Evidence) x 2 (two persons per crew).

^{2/} Percentage of time BNSF train crews must rest before returning to home terminal with another train due to { }. See AEPCO Op. Exhibit III-C-1, pages 1 and 3.

^{3/} Column (3) x Column (4) x Column (5).

^{4/} Line 3 - Line 6.

BNSF would realize even greater net savings in crew wages by operating turnaround crews because of higher crew utilization, since fewer total employees are required. The savings result from an imbalance between eastbound and westbound trains. In a straightaway operation, the crews of the unbalanced trains must be taxied back to their home terminal, for which they receive a day's pay without having handled a train.

The total crew-wage savings equal at least \$15 million, before considering fringe benefits and overheads. The details underlying this calculation are provided in Table III-C-7 below.

Table III-C-7 <u>Estimated BNSF Annual Crew Savings From Interchanging with ACE at Vaughn & Defiance</u>						
<u>BNSF Crew District</u> (1)	<u>Miles Per Day In Basic Daily Rate</u> (2)	<u>Miles Paid For</u> (3)	<u>Cost per Crew per Day ^{1/}</u> (4)	<u>2001 Trains Handled By BNSF Crews</u> (5)	<u>Percent of Time Trains Imbalanced</u> (6)	<u>Crew Cost 2001 ^{5/}</u> (7)
<u>Current Operation</u>						
1. Clovis-Belen	{ }	{ }	{ }	{ } ^{2/}	11%	{ }
2. Belen-Winslow	{ }	{ }	{ }	{ } ^{3/}	10%	{ }
3. Total BNSF Crew Costs	xxx	xxx	xxx	xxx	xxx	\$29,305,407
<u>ACE Operations</u>						
4. Clovis - Vaughn - Clovis	{ }	{ }	{ }	{ } ^{4/}	11%	{ }
5. Winslow - Defiance - Winslow	{ }	{ }	{ }	{ } ^{4/}	10%	{ }
6. Total BNSF Crew Costs	xxx	xxx	xxx	xxx	xxx	\$14,270,131
7. BNSF Annual Crew Savings from Interchanging with ACE at Vaughn & Defiance (Line 3 - Line 6)	xxx	xxx	xxx	xxx	xxx	\$15,035,276
^{1/} Col. (3) - Col. (2) x { } (over-mileage rate without additives) + { } (basic crew day's pay without additives). ^{2/} In 2001, { } trains traversed this crew district. { } — }. This means that 11% of the time a crew must be taxed back to its home terminal, for which it presumably receives a day's pay. ^{3/} In 2001, { } trains traversed this crew district. { } — }. This means that 10% of the time a crew must be taxed back to its home terminal, for which it receives a day's pay. ^{4/} 2001 trains (Lines 1 or 2) divided by 2 because the trains are handled by turn crews. ^{5/} Col (4) x Col (5) x (1 + Col (6)).						

AEPCO acknowledges that BNSF crews that deliver trains to Vaughn and Defiance would have to be accommodated while they wait for the next train back to their home terminal. At most, this could require the construction of additional crew-change facilities at Vaughn and Defiance to accommodate BNSF crews awaiting a return train.¹⁷ However, the additional costs involved pale in comparison to the \$18.8 million in total net annual savings (shown in Tables III-C-6 and 7) resulting from the fact that insertion of the ACE as an overhead carrier enables BNSF to use turnaround crews. Since AEPCO has not included the BNSF savings in its DCF analysis, AEPCO has also not included any costs for additional crew facilities at Vaughn and Defiance in restating its DCF analysis on Rebuttal.

ii. UP Crew Districts and Costs

UP also claims that the insertion of the ACE as an overhead carrier between Cochise and El Paso would require UP to rearrange its train crews which would be costly and inefficient. UP SAC Reply at III-C-2. However, as with BNSF, the ACE's presence would actually enable UP to improve the efficiency of its crews, with a resulting substantial reduction in UP's crew costs in the Tucson-El Paso corridor.

UP presently operates a single straightaway crew district for trains operating between Tucson, AZ, and El Paso, TX, via Cochise (with the home terminal at

¹⁷ Details concerning these crew facilities are provided in Part III-F, infra.

Tucson). This crew district is 310 miles long. UP SAC Reply at III-C-1. One of the present UP crew-change points, El Paso, will continue to be a UP (and an ACE) crew-change point after insertion of the ACE as an overhead carrier between El Paso and Cochise. UP's crewing at El Paso for ACE trains moving east of El Paso thus will not be affected by ACE's presence.

The ACE's insertion means that rather than having a long, 310-mile crew district between Tucson and El Paso, UP will have a short, 74-mile crew district between Tucson and Cochise for through traffic interchanged with the ACE at Cochise. Id. at III-C-1 to 2 and Map Tab 4. Although UP could rearrange its present crew districts east and west of Tucson, the most likely option (as UP acknowledges) would be to operate crews between Tucson-Cochise-Tucson in turnaround service. The round-trip distance for Tucson-based turnaround crews (148 miles) is less than half the distance presently covered by straightaway crews operating between Tucson and El Paso (310 miles), and there is a substantial volume of daily ACE interchange traffic moving between Tucson and Cochise to support turnaround service by crews within a single tour of duty. During the ACE's 2001 peak traffic year, the through traffic that is interchanged between the ACE and UP Cochise averages { } trains a day,¹⁸ or { } daily trains in each direction (which equates to { }). This is an ample train frequency to enable

¹⁸ See AEPCO's Third Errata to its Opening Evidence filed April 7, 2003, at 4 and accompanying workpaper page AEP 05696.

most Tucson-based UP turnaround crews to complete a round trip within a single tour of duty.

UP's conversion from straightaway crews operating between Tucson and El Paso to Tucson-based turnaround crews as a result of the insertion of the ACE as an overhead carrier between Cochise and El Paso results in a net saving to UP of \$1.2 million in annual crew lodging and taxi costs at the away-from-home terminal for its crews. Table III-C-8 below summarizes the annual lodging and taxi costs that UP incurs for its El Paso-Tucson crew district (Line 1). As shown on Line 2 of the table, UP's annual lodging and taxi costs drop dramatically as a result of the change to turnaround crews occasioned by the ACE's overhead operations between El Paso and Cochise because, 95% of the time, UP turnaround crews are able to complete a round trip between Tucson-Cochise-Tucson within a single tour of duty and do not need to rest at Cochise prior to the return trip.

Table III-C-8
UP Annual Savings In Lodging And Taxi Costs From Interchange With ACE at Cochise

<u>Crew District/Operator</u> (1)	<u>One-Way Miles</u> (2)	<u>Cost per Train of Overnighting the Crew ^{1/}</u> (3)	<u>2001 Trains</u> (4)	<u>Percent of Time Crews Are Overnighted ^{2/}</u> (5)	<u>Estimated 2001 Cost ^{3/}</u> (6)
<u>Current Operation</u>					
1. Tucson - El Paso/UP	310	{ }	{ }	100%	\$1,260,131
<u>ACE Operations</u>					
2. Tucson - Cochise /UP	74	{ }	{ }	5%	<u>\$63,007</u>
3. UP savings from Interchanging with ACE ^{4/}					\$1,197,124

^{1/} { } (estimate of crew overnight and taxi expenses per crew member included in AEPCO's Opening Evidence) x 2 (two persons per crew).

^{2/} Percentage of time UP train crews must rest before returning to home terminal with another train. See AEPCO Op. Exhibit III-C-1, page 4.

^{3/} Column (3) x Column (4) x Column (5).

^{4/} Line 1 - Line 2.

UP would also realize large net savings in crew wages by operating turnaround crews between Tucson-Cochise-Tucson rather than straightaway crews between Tucson and El Paso because {
 }. The UP crew-wage savings equal at least \$7.7 million.¹⁹ The details underlying this calculation are provided in Table III-C-9 below.

¹⁹ Again, these savings are understated because they do not reflect any additives (fringe benefits and overheads) to the crew wages shown.

Table III-C-9						
<u>Estimated UP Annual Crew Savings From Interchanging with ACE at Cochise</u>						
<u>UP Crew District</u> (1)	<u>Miles Per Day In Basic Daily Rate</u> (2)	<u>Miles Paid For</u> (3)	<u>Cost per Crew per Day ^{1/}</u> (4)	<u>2001 Trains Handled By UP Crews</u> (5)	<u>Percent of Time Trains Imbalanced</u> (6)	<u>Crew Cost 2001^{4/}</u> (7)
<u>Current Operation</u>						
1. El Paso - Tucson	{ }	{ }	{ }	{ } ^{2/}	5%	\$10,105,465
<u>ACE Operations</u>						
2. Cochise - Tucson - Cochise	{ }	{ }	{ }	{ } ^{3/}	5%	\$2,431,302
3. UP Annual Crew Savings From Interchanging with ACE at Cochise						\$7,674,163
^{1/} Col. (3) - Col. (2) x { } (over-mileage rate without additives) + { } (basic crew day's pay without additives). ^{2/} In 2001, { } trains traversed this crew district. { } This means that 5% of the time a crew must be taxed back to its home terminal, for which it receives a day's pay. ^{3/} 2001 trains (Line 1) divided by 2 because the trains are handled by turn crews. ^{4/} Col (4) x Col (5) x (1 + Col (6)).						

UP Tucson-based crews that deliver trains to Cochise would have to be accommodated while they wait for the next train back to Tucson. As with the BNSF turnaround crews discussed earlier, AEPCO has assumed that a separate crew-change facility would have to be constructed to accommodate UP turn crews awaiting a train for the return trip to Tucson. Details are provided in Part III-F, infra. As with BNSF, the additional costs for the additional crew facility involved pale in comparison to the nearly \$8.9 million in total net annual savings resulting from UP's use of turnaround crews, as shown in Tables III-C-8 and III-C-9. Again, since AEPCO has not included the UP

savings in its DCF analysis, AEPCO has also not included any costs for the additional crew facility at Cochise in restating its DCF analysis on Rebuttal.

* * *

The foregoing analysis of BNSF's and UP's crew costs indicates that, rather than introducing inefficiencies and increased costs in the residual incumbent's operations as a result of the inclusion of overhead cross-over traffic in the ACE's traffic group, the ACE's presence would enable both carriers to improve their operations and reduce costs.²⁰ The analysis demonstrates the problems with the Railroads' contention that the Board should start delving into the effects of inclusion of cross-over traffic on the residual incumbents' operations – something the Board has never before done where, as here, the cross-over traffic is not being rerouted.

²⁰ The cost reductions provide further support for the reasonableness of assigning revenue divisions for the overhead traffic using the MMP methodology.

III-D Operating Expenses

III. D. OPERATING EXPENSES

In purported reliance on their inability to discern the precise contours of AEPCO's traffic group for the ACE, the Defendants both chose not to present any substantive evidence in response to AEPCO's Opening Evidence on the ACE's annual operating expenses. For the same reasons the Defendants could have addressed AEPCO's Operating Plan for the ACE, as described on page III-C-1, supra, they could also have addressed the SARR's operating expenses. Having chosen not to do so, AEPCO's Opening Evidence on operating expenses stands un rebutted and must be accepted by the Board.

The only quasi-substantive statement made by either Defendant with respect to SARR operating expenses is the following passage on page III-D-1 of UP's SAC Reply:

As discussed in the April 18 Petition and in Section III.B above, the configuration AEPCO has chosen for the ACE 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.

AEPCO demonstrated in Part III-B of this Rebuttal Narrative, supra, that the ACE route via Vaughn and El Paso is in fact an efficient route for its traffic group as a whole, and that the cycle times for the few affected coal trains are not adversely affected by using this route even though it is longer than the Belen-Rincon-Deming route used by BNSF and UP to transport these trains. Id. at III-B-9. In addition, AEPCO included all of the

ACE's costs for handling this coal traffic via the longer route in its Opening SARR operating-expense calculations.

In Part III-B AEPCO also acknowledged that the two affected shippers who supply the cars for the re-routed coal movements, AEPCO and Tucson Electric Power Company ("TEP"), would incur increased mileage-related car costs as a result of the re-route. AEPCO's Witness Crowley has calculated the magnitude of these additional costs. They amount to a total of { } in the 2001 peak year.¹ Although AEPCO does not believe the ACE would need to reimburse either it or TEP for these costs given the magnitude of the rate reduction resulting from the DCF analysis, to be conservative Mr. Crowley has included them in the ACE's annual operating expenses for purposes of the Rebuttal SAC calculations presented in Part III-H, infra, and AEPCO Rebuttal Exhibits III-H-3 and 4. The effect of including these additional expenses is *de minimus* (\$0.0005 per ton).

Both BNSF and UP asserted in Part III-C of their SAC Replies that insertion of the ACE as an overhead carrier for non-coal traffic moving between Defiance and Vaughn and between El Paso and Cochise would require the Railroads to re-arrange their crew districts, resulting in additional operating costs that should be the ACE's responsibility. In Part III-C-2, supra, AEPCO demonstrated that in fact the ACE's presence would enable both carriers to reduce their net crew-related costs. Assuming it

¹ See AEPCO Rebuttal electronic workpaper file "Private Car Maint.xls."

were appropriate to consider changes in the residual incumbents' costs resulting from a complainant's inclusion of cross-over traffic in its SARR traffic group that does not involve a change in route – which it is not – AEPCO has shown that any increased costs the residual BNSF and UP would incur are more than offset by the savings in crew costs. Therefore, even under the Defendants' theory, there is no reason to require the ACE to absorb any elements of increased costs that the Defendants might incur (and which they have not quantified in any event).

**III-E Non-Road Property
Investment**

III. E. NON-ROAD PROPERTY INVESTMENT

Equipment lease costs were covered in Part III-D of AEPCO's Opening Evidence. The Defendants did not submit any substantive reply evidence for Part III-E so there is nothing in this Subpart for AEPCO to rebut.

**III-F Road Property
Investment**

III. F. ROAD PROPERTY INVESTMENT

Neither BNSF nor UP presented any evidence on road property investment costs in their SAC Replies. Instead, both carriers rested on their flawed premise that they cannot present a detailed response to AEPCO's SAC evidence due to alleged deficiencies in AEPCO's development of its stand-alone traffic group and revenues. For the reasons discussed in parts III-B, C and D, supra, this premise is false. It is particularly false in the area of road property investment costs, as possible changes in the ACE's configuration would not affect unit costs, bridge and culvert design, etc. These are items the Railroads could easily have responded to in their Reply filings. The Railroads' failure to file any reply evidence for Part III-F should result in the Board's acceptance of AEPCO's road property investment costs as the best evidence of record.

AEPCO addresses several additional items below. The first relates to changes in buildings and facilities that would be needed under the assumption (which AEPCO does not accept) that the ACE would be required, at its expense, to make facilities available to the residual BNSF and UP at Defiance, Vaughn and Cochise to rest train crews that handle trains containing overhead cross-over traffic. See Part III-C-2-b, supra. The second relates to public improvements (primarily grade crossings and separations). The third relates to the calculation of costs for contingencies under the Board's recent TMPA decision.

1. Buildings & Facilities¹

a. Crew Change Facilities and Yard Offices

In Part III-C-2-b, supra, AEPCO addresses in detail the Railroads' arguments about the effects of the ACE's operations as an overhead carrier for non-coal cross-over traffic on the residual incumbents' crew districts. In particular, AEPCO demonstrates that both Railroads should achieve substantial savings (\$15.8 million in the case of BNSF and \$8.9 million in the case of UP) by re-designing their crew districts to operate with turnaround crews rather than straightaway crews. As shown in this section, these savings eclipse the additional cost of expanding the ACE's crew facilities at Defiance, Vaughn and El Paso (the turnaround points) to accommodate BNSF and UP crews.

At Cochise, a Medium Sized Crew Change building with a capacity of 60 persons would be needed.² This 1,298 square-foot building could easily accommodate 22 two-person crews which is the total number of daily UP crews that could require temporary accommodation at Cochise. (These crews would operate in turnaround service out of Tucson, and could have to wait several hours at Cochise for a train to take back to Tucson.) The total additional cost for this separate building and its site construction is

¹ See Part III-F-7 of AEPCO's Opening Evidence.

² The designs for the Medium Size Crew Change building are detailed in AEPCO's Opening Workpapers Vol. 11, pp. 05020-05021.

\$122,183.75. See AEPCO Rebuttal electronic workpaper file “bldgcst2.xls” (changes are highlighted in the spreadsheet).

Two Large Sized Crew Change buildings with a capacity of 100 persons would be needed, one each at Vaughn and Defiance, which are the “turn” points for BNSF turnaround crews based at Clovis, NM and Winslow, AZ.³ These 1,819 square-foot buildings will be more than sufficient to accommodate the 37 two-person crews that will need to wait for a return train to their home terminal at each of these two locations on a daily basis. The total additional cost for these separate buildings and their site construction is \$337,217.60. See AEPCO Rebuttal electronic workpaper file “bldgcst2.xls.”

The one-time building costs described above pale in comparison to the annual savings that UP and BNSF would realize by re-arranging their crew assignments to reflect the ACE’s operations as an overhead carrier between Vaughn and Defiance and between Cochise and El Paso.

2. Public Improvements

In Part III-F-8 of its Opening Evidence, AEPCO pointed out that the ACE would not need to construct most public improvements, such as highway crossings,

³ The specific design for the Large Sized Crew Change buildings is not separately detailed in AEPCO’s Opening Evidence, but is derived by adding additional locker room space (Opening Workpapers Vol. 11, pp. 05017-05018) to the Small crew change facility design. See AEPCO Opening Workpapers Vol. 11, pp. 05018-05020.

because the incumbent carriers preceded the roads in the ACE territory (with one minor exception). See AEPCO Op. at III-F-41 to 42 and 69 to 70. The Railroads have not submitted any evidence to the contrary; nor have they submitted any evidence showing that they paid for any of these crossings.

In TMPA, the Board accepted an argument made by BNSF that its predecessor railroads did in fact incur crossing costs based on the ICC Engineering Reports, which allegedly showed that BNSF incurred the cost of installing the facility. Id. (Decision served March 24, 2003) at 153-54. However, as AEPCO noted in its Opening Evidence in this case, the rules governing the formulation of the Engineering Reports allowed a railroad to include the cost of constructing a crossing even when the railroad's contribution to the construction cost was minimal or non-existent. See AEPCO Op. at III-F-69.

It is simply not possible to determine from the Engineering Reports themselves whether a railroad actually paid for the cost of constructing at-grade or grade-separated crossings. The express purpose of the Engineering Reports was to develop the replacement cost of railroad structures at the time of the survey. Texas Midland Railroad, 75 I.C.C. 1, 115 (1918). The Reports have never purported to determine whether a railroad originally paid for a crossing. Given that the Engineering Reports make no determination as to who bore the original cost of public improvements, and the Railroads have submitted no evidence whatsoever on this issue, the Board should adhere to its well-

established position that the later entrant pays for the improvement. See TMPA at 134; Wisconsin at 92; West Texas Utilities, 1 S.T.B. at 672, 709.

3. Contingencies

In Part III-F-11 of its Opening Evidence, AEPCO calculated the cost of contingencies based on the construction subtotal (excluding land) multiplied by the contingency percentage (i.e., construction subtotal x contingency percentage = total contingencies). See AEPCO Op. electronic workpaper file “IIIFTTotal.xls,” cell F83. AEPCO’s approach is consistent with the Board’s decisions in cases such as Wisconsin and FMC, where the Board has held that contingencies (and engineering) are “derivative expenses, calculated as a percentage of the total construction costs (excluding land).” Wisconsin at 30; FMC at 40.

However, despite the Board’s acknowledgment of the proper calculation method, it has come to AEPCO’s attention that the Board has not in fact been calculating contingencies as described above. Rather it appears from the Board’s publicly-reported calculations that it has been adding engineering costs to the construction subtotal (excluding land) before determining contingencies. In other words, the Board has calculated costs for contingencies as (construction subtotal + engineering fees) x contingency percentage = total contingencies. See, e.g., TMPA at 111; Wisconsin at 75.

This method of calculating costs for contingencies is inconsistent with the Board’s own decisions and, according to AEPCO’s engineering witness Harvey Stone,

with practice in the construction industry. Accordingly, AEPCO urges the Board to ensure that contingencies (in what ever percentage the Board deems appropriate⁴) are determined only on the basis of the construction subtotal (excluding land), before adding a factor for engineering costs.

⁴ In TMPA (at 158) the Board used a 10 percent contingency factor, which is consistent with the percentage additive for contingencies in prior rate cases. In its Opening Evidence in this proceeding AEPCO acknowledged that the Board has used a 10 percent factor in prior cases, but explained in detail why a factor of 8 percent is more appropriate here. Id. at III-F-81 to 84. AEPCO is mindful of the Board's admonition that parties should not revisit issues that have been settled in prior rate cases, but this admonition has certainly not been heeded by railroad defendants who have recently succeeded in convincing the Board to do away with settled precedent involving issues such as use of the SFGT formula to calculate movement-specific roadway maintenance costs. AEPCO submits that the reasons it has adduced for accepting a lower contingency factor than 10 percent are worthy of similar consideration.

**III-G Discounted Cash
Flow Analysis**

III. G. DISCOUNTED CASH FLOW ANALYSIS

As explained in its Opening Evidence, AEPCO has chosen to proceed under the stand-alone cost ("SAC") prong of the Constrained Market Pricing ("CMP") methodology of the Coal Rate Guidelines to determine the rate level necessary for AEPCO to receive service from a least-cost, efficient replacement of the incumbent railroad.

Under CMP/SAC theory, the hypothetical stand-alone entity, typically a stand-alone railroad ("SARR"), provides a surrogate for competition that constrains the incumbent's rates. A critical element is that the SARR is designed and operated in an economically rational fashion, without barriers to entry or exit, so as to render the service needed to meet the requirements of its selected customers on a least-cost, most-efficient basis:

A SAC analysis seeks to determine the lowest cost at which a hypothetical, optimally efficient carrier could provide the service at issue free from any costs associated with inefficiencies or cross-subsidization of other traffic. A stand-alone railroad (SARR) is hypothesized that could serve the traffic if the rail industry were free of barriers to entry or exit. (It is such barriers that can make it possible for railroads to engage in monopoly pricing absent regulatory constraint.) Under the SAC constraint, the rate at issue cannot be higher than what the SARR would need to charge to serve the complaining shipper while fully covering all of its costs, including a reasonable return.

Wisconsin at 12.

Under SAC theory, the SARR need not replicate the incumbents' existing routes or operations. Instead, AEPCO is free to select the traffic group and configure and operate the SARR so that it serves the issue and non-issue traffic on a least-cost basis, even if the SARR's services and operations differ substantially from, and achieve efficiencies unrealized by, the incumbents. Coal Rate Guidelines, 1 I.C.C.2d at 543-44. So long as all associated costs are properly incorporated, the route,¹ service, scope, commodity mix, and all other elements of the SARR may be optimized to reduce the resulting cost.

It is thus particularly odd that the Railroads would criticize AEPCO for not duplicating more of the incumbent operations (e.g., the Belen-Deming line, switching operations at Belen, replicating BNSF's and UP's crew change locations, etc.), when the ACE duplicates the incumbents' track configuration, operating practices (particularly with respect to powering trains), and traffic (to the extent that AEPCO has been able to capture it by matching train and traffic records) to an unprecedented extent. Nonetheless, AEPCO has achieved major economies, as well as substantial service improvements, by rerouting the issue traffic (as contemplated under the Board's August 2002 Decision, at 6), excluding certain traffic (such as Amtrak trains and non-coal local traffic), utilizing more innovative engineering (such as the use of steel ties and the use of 25-foot centers on double-track segments that facilitate efficient operation on one track while the other

¹ Cf. the Board's August 2002 Decision, at 6.

track is undergoing maintenance), and incorporating more efficient and effective staffing levels and compensation arrangements. The ACE includes only facilities that are used to serve the issue traffic, and the issue traffic is thus spared the burden of cross-subsidizing other portions of the incumbents' systems, thus implementing the principles of contestable markets and CMP.

Consistent with WTU, APS, FMC, Wisconsin, and TMPA, AEPCO has calculated the ACE's costs using a 20-year Discounted Cash Flow ("DCF") model that takes into account the cost of capital, inflation rates, and applicable tax rates (discussed below) as well as other factors (discussed elsewhere in AEPCO's SAC evidence).

1. Cost of Capital

The Railroads' Reply Evidence did not contest the cost of capital showing that AEPCO made in its Opening Evidence. Accordingly, AEPCO is relying on the same calculations on Rebuttal, that is, a 10.74% cost of capital is incorporated in the calculations summarized in Part III-H, infra. See also AEPCO Opening Exhibit III-H-1.

AEPCO notes, however, that the Board's decision in Ex Parte No.558 (Sub-No. 6), Railroad Cost of Capital -- 2002, (STB served June 19, 2003), shows a significant (0.4 percentage points or nearly 4%) decrease from the 2001 after-tax cost of capital.

2. Inflation Indices

The Railroads also did not contest the showing as to forecasted inflation indices that AEPCO presented in its Opening Evidence. Therefore, AEPCO has continued using the same figures that it presented on Opening.

AEPCO notes that in TMPA, the Board deviated from its past practice and, with little explanation, opted to adjust future railroad operating expenses by the RCAF-U rather than the RCAF-A, on the grounds that “we find it unrealistic to assume [] that projected industry-wide productivity adjustments would result primarily from the transportation of coal.” TMPA at 161.² AEPCO disagrees with the Board’s reasoning because, as the Board explained in Wisconsin at 106, productivity improvements result in large part from outside vendors that service the railroad industry, and the SARR’s ongoing replacement of assets provides the SARR with ample opportunity to benefit from those improvements. In any event, coal forms only about 9% of the ACE’s traffic revenue base, and since its other traffic reflects a much broader base, there is substantial reason to think that the traffic would be able to benefit from productivity improvements, particularly given the least-cost, most-efficient nature of a SARR.

² TMPA also appeared to fault the shipper for not being able to predict the specific sources of productivity improvements. The criticism seems specious since the RCAF productivity adjustment measures, by design, total factor productivity. Regardless, future sources of productivity are likely to include more efficient locomotives, improvements in railcars, superior materials and maintenance practices, improvement in locomotive and railcar utilization, and more effective use of computers and communications infrastructure.

3. Tax Liability

The Railroads did not challenge the tax liability calculations that AEPCO presented on Opening, and AEPCO is continuing to use the same figures on Rebuttal. See Opening Workpapers Vol. 11, pp. 05182-05194, and Exhibit III-H-1 at 16.

4. Capital Cost Recovery

The Railroads did not dispute the capital cost recovery mechanism that AEPCO presented on Opening, and AEPCO is utilizing the same calculations on Rebuttal.

**III-H Results of
SAC Analysis**

III. H. RESULTS OF SAC ANALYSIS

1. Results of SAC Analysis

The results of AEPCO's SAC calculations are set forth in AEPCO Rebuttal Exhibits III-H-3 and 4. The Railroads did not dispute any of the mechanics of the calculations that AEPCO presented on Opening, and AEPCO's calculations on Rebuttal are generally the same, apart from changes relating primarily to the traffic group. Accordingly, AEPCO will not repeat the discussion of the various individual items here. The discussion in AEPCO's Opening Evidence should be considered to the extent any explanation is desired.

2. Reparations

AEPCO presented the mechanics of the calculations of the maximum reasonable rate and reparations in its Opening Evidence, and the Railroads did not contest those elements in their Reply Evidence. Notwithstanding the removal of the revenue adjustment, which reduces the annual SARR revenues by approximately 18.15%, the elements are largely the same as presented in AEPCO's Opening Evidence. Accordingly, AEPCO will avoid repeating the earlier discussion and will instead focus on only those matters where there has been some change.

a. Maximum Rate Calculations

The maximum rate for the movement of coal from the subject New Mexico origins to AEPCO's Apache plant equals the greater of the jurisdictional threshold

calculation or stand-alone costs. Table III-H-5 compares BNSF/UP's rate levels (Column (3)) to the jurisdictional threshold calculation (Column (5)) and the stand-alone costs (Column (6)) for the "Base" case involving no revenue adjustment, and Column (7) for the Alternate ("Alt") case involving a revenue adjustment limited to just the zero revenue trains). The BNSF/UP rates per ton for the AEPCO movement are greater than both the jurisdictional threshold and stand-alone cost. Therefore, the maximum rate equals the greater of the jurisdictional threshold or stand-alone cost and is summarized in Column (8) of Table III-H-5 below for shipments in high capacity cars for 3Q02 through 1Q03 (there having been no issue movements in such cars before 3Q02):

TABLE III-H-5 Summary of Maximum Rate Calculations for Issue Traffic (3Q02 through 1Q03 -- High Capacity Cars)							
<u>Quarter</u>	<u>Mine</u>	<u>Rate per Ton</u>	<u>Var. Cost per Ton ^{1/}</u>	<u>Jur. Thr. per Ton ^{1/}</u>	<u>SAC Rate per Ton ^{2/}</u>		<u>Max. Rate per Ton ^{3/}</u>
					Base	Atl.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3Q02	Lee Ranch	\$9.23	{ }	\$5.85	\$5.53	\$5.03	\$5.85
	McKinley	9.23	{ }	6.53	5.53	5.03	6.53
4Q02	Lee Ranch	9.23	{ }	5.82	5.60	5.09	5.82
	McKinley	9.23	{ }	6.92	5.60	5.09	6.92
1Q03	Lee Ranch	9.41	{ }	6.06	5.67	5.16	6.06
	McKinley	9.41	{ }	6.97	5.67	5.16	6.97
Source: ^{1/} Exhibits II-A-44 through II-A-50. ^{2/} Exhibits III-H-3 and III-H-4. ^{3/} Greater of Columns (5), (6), or (7).							

The following table shows the equivalent calculations for shipments in low capacity cars for 1Q01 through 3Q02 (there having been no such issue movements after 3Q02):

TABLE III-H-6 Summary of Maximum Rate Calculations for Issue Traffic (1Q01 through 3Q02 -- Low Capacity Cars)							
<u>Quarter</u>	<u>Mine</u>	<u>Rate per Ton</u>	<u>Var. Cost per Ton ^{1/}</u>	<u>Jur. Thr. per Ton ^{1/}</u>	<u>SAC Rate per Ton ^{2/}</u>		<u>Max. Rate per Ton ^{3/}</u>
					Base	Atl.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1Q01	Lee Ranch	\$9.35	\$4.27	\$7.69	\$5.85	\$5.32	\$7.69
2Q01	Lee Ranch	9.35	3.86	6.95	5.82	5.29	6.95
3Q01	Lee Ranch	9.35	4.17	7.51	5.81	5.29	7.51
4Q01	Lee Ranch	9.35	{ }	6.98	5.79	5.27	6.98
1Q02	Lee Ranch	9.54	{ }	6.65	5.85	5.33	6.65
2Q02	Lee Ranch	9.54	{ }	6.91	5.77	5.25	6.91
	McKinley	9.54	{ }	7.79	5.77	5.25	7.79
3Q02	Lee Ranch	9.54	{ }	6.66	5.71	5.20	6.66
	McKinley	9.54	{ }	7.50	5.71	5.20	7.50
Source: ^{1/} Exhibits II-A-36 through II-A-43. ^{2/} Exhibits III-H-3 and III-H-4. ^{3/} Greater of Columns (5), (6), or (7).							

The maximum rates for AEPCO's movements (Column (8)) are greater than BNSF/UP's rates (Column (3)) and, therefore, reparations must be calculated.

b. Reparations Calculation

Under Coal Rate Guidelines and its progeny, SAC analysis identifies impermissible cross-subsidies as the amount by which the total revenues for the SARR traffic group exceed the total costs of serving that traffic group by itself.

As demonstrated in Parts III-A through H, the stand-alone analysis submitted by AEPCO shows that the traffic included in the stand-alone system is cross-subsidizing other BNSF and UP traffic. The total annual revenues actually received by BNSF/UP beginning on January 2, 2001, greatly exceed the stand-alone costs of serving such traffic. Table III-H-7 below summarizes the aggregate savings associated with constructing and operating the ACE, i.e., the amount that actual revenues exceed stand-alone costs for the 1Q01 through the 2Q03 time periods:

TABLE III-H-7 Aggregate Savings Of Constructing Operating and Maintaining ACE - 1Q01 through 2Q03 (Millions)							
Quarter	Aggregate Revenues ^{1/}		Aggregate Stand-Alone Costs ^{1/}	Aggregate Overpayments ^{2/}		Percentage Reduction ^{3/}	
	Base	Alt.		Base	Alt.	Base	Alt.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1Q01	\$124.6	\$136.9	\$77.9	\$46.7	\$59.0	37.5%	43.1%
2Q01	124.6	136.9	77.5	47.1	59.4	37.8	43.4
3Q01	124.6	136.9	77.4	47.2	59.5	37.9	43.4
4Q01	124.6	136.9	77.1	47.5	59.8	38.1	43.7
1Q02	124.3	136.7	76.4	47.9	60.3	38.6	44.1
2Q02	124.3	136.7	75.2	49.1	61.5	39.5	45.0
3Q02	124.3	136.7	74.5	49.8	62.2	40.2	45.5
4Q02	124.3	136.7	75.4	48.9	61.3	39.4	44.8
1Q03	124.7	137.2	75.1	49.6	62.1	39.8	45.2
2Q03	124.7	137.2	75.4	49.3	61.8	39.5	45.0
^{1/} Source: Exhibit III-H-3 and Exhibit III-H-4. ^{2/} Column (5) equals Column (2) minus Column(4), and Column (6) equals Column (3) minus Column (4). ^{3/} Columns (7) equals Column (5) divided by Column (2), and Column (8) equals Column (6) divided by Column (2).							

AEPCO has utilized the approach to calculating reparations under the greater of stand-alone costs or the jurisdictional threshold as presented on Opening. A summary of these calculations is shown in Column (2) of Table III-H-8 below for the period for January 2, 2001 through June 2, 2003:

TABLE III-H-8 Principal Amount of Reparations Due AEPCO through June 2, 2003	
<u>Quarter</u>	Reparations Based on Greater of <u>SAC or Jurisdictional Threshold^{1/}</u>
(1)	(2)
1Q01	\$323,587
2Q01	623,002
3Q01	491,777
4Q01	555,028
1Q02	849,748
2Q02	721,493
3Q02	768,765
4Q02	849,536
1Q03	431,520
2Q03 ^{2/}	729,370
Total	6,343,826
^{1/} Source: Exhibit III-H-5 and electronic workpaper "AEPCO Rebuttal Reparations.123." ^{2/} Shipments through June 2, 2003. Reparations for 2Q03 shipments calculated on the assumption that jurisdictional threshold from 1Q03 continues to apply.	

c. Interest on Reparations

On Opening, AEPCO addressed the issue of reparations and explained how the Board's regulations (49 C.F.R. § 1141.1) that currently specify that interest on reparations is to be awarded based on the coupon equivalent yield of the 91-day United

States Treasury bill (“T-Bill”) did not reflect the changes brought about by the ICC Termination Act of 1995 and that a higher interest rate should be utilized.

As the Railroads did not contest AEPCO’s assertions in their Reply Evidence, there is no need for AEPCO to address the matter further on Rebuttal, and AEPCO’s position, being unopposed, should be accepted.

d. Reimbursement for STB Filing Fee

On Opening, AEPCO also addressed the issue of reimbursement for its filing fee. As the Railroads did not contest AEPCO’s assertions in their Reply Evidence, there is no need for AEPCO to address the matter further on Rebuttal, and AEPCO’s position, being unopposed, should be accepted.

3. Effect of UP Settlement on BNSF Reparations

BNSF, but not UP,¹ argues that AEPCO should not receive any reparations to which AEPCO may be otherwise entitled because of { } created under the AEPCO/UP Settlement Agreement (the “Settlement Agreement”) for application against charges under the AEPCO/UP Term Sheet (the “Term Sheet”) (both items attached as BNSF SAC Exhibit I-1). BNSF SAC Reply at I-32 to 37 and III.H-1 to 3. BNSF reasons that (a) the Settlement Agreement furnishes AEPCO with a {

¹ UP’s refusal to join in BNSF’s arguments (UP SAC Reply at I-1) is readily understandable given how BNSF distorts the meaning and effect of the Settlement Agreement.

}.

AEPCO disagrees with BNSF's argument in essentially its entirety, including the claim that AEPCO's reparations cannot possibly exceed { }.²

AEPCO does agree with BNSF that AEPCO is not entitled to a "double recovery" on its reparations. However, ¶4 of the Settlement Agreement directly prevents such an outcome because {

} Consequently, the "double recovery" that lies at the heart of BNSF's contentions simply cannot occur under the Settlement Agreement.³

BNSF's contentions otherwise distort the plain meaning of the Settlement Agreement and its relationship to the Term Sheet. {

²Table III-H-8, supra, shows that AEPCO's reparations are over \$6.3 million for shipments through June 2, 2003, without interest.

³The December 2001 Decision denied AEPCO's motion to compel production of the BNSF/UP divisions agreement, and access to such information would otherwise have been subject to the Protective Order. Accordingly, the Settlement Agreement was negotiated in the absence of knowledge as to BNSF's and UP's respective shares of any reparations. However, based upon the general experience of AEPCO (meaning its lawyers and consultants), as well as its negotiations with UP, AEPCO certainly expects that the divisions agreements contains provisions allocating responsibility for any reparations. Knowledge of those specific provisions (which UP was not about to disclose) would likely have enabled AEPCO (and UP) to draft a more precise agreement as to the credit for reparations.

}

Moreover, relatively little of {

⁴ {

}

⁵ {

}

III-H-9

}

The Settlement Agreement itself does not attempt to allocate {
}. The Board should readily appreciate that
it was difficult enough for AEPCO and UP to agree on the terms of the two agreements
without having to agree on {
}. Moreover, even if the
AEPCO and UP had agreed on {
}, BNSF might have plausibly
viewed it with suspicion as being self-serving since the attribution would not affect
AEPCO's and UP's rights vis-a-vis each other. It is thus more appropriate to view the
agreements within their larger contexts.

Accordingly, it simply is not possible to {
} for the New Mexico shipments for which BNSF and
UP may be jointly liable. Nor is there any reason to do so. Instead, ¶4 of the Term Sheet
provides the complete and definitive treatment of the matter: {

}

BNSF's two principal authorities, Seafirst Cir. Ltd. Partnership v. Kargianis, Austin & Erickson, 866 P.2d 60 (Wash. App. 1994), and Board of Educ. v Zando, Martin & Milstead, Inc., 390 S.E.2d 796 (1990), involve situations where the obligors' obligation arose only from a joint obligation and not from any independent

⁶ {

}

obligation of any of the joint obligors.⁷ They are thus readily distinguishable in four material respects.

First, as noted, the Settlement Agreement is structured so that {

}, the same as if there

⁷BNSF SAC Reply at I-35 n.33 makes reference to Converse v. James, 974 P.2d 1051 (Haw. App. 1977), cert. denied, (Haw. 1999). The case involves a somewhat complicated set of facts in that one of the joint obligors entered into a separate unilateral obligation to the obligee. However, the case is ultimately contrary to BNSF's position in several respects. First, the settlement compensation provided by the joint/single obligor was plainly sufficient to satisfy both the single and the joint obligations, thereby extinguishing the joint obligor's liability, and establishing that any additional recovery by the obligee would be excessive (as well as invoke a forfeiture against the joint obligor). {

} Second, the issue was resolved not under common law, but under Hawaii's version of the Uniform Joint Obligations Act (UJOA). The court explained that the UJOA arose to address the harshness of results under the original common law rule that release of one of several joint obligors on a contract automatically released all other obligors. In fact, § 3 recognizes the common law exception for suretyship (discussed infra), and § 4 of the UJOA provides an exception to the original general common law rule (that release of one releases all) where the release expressly reserves the obligee's rights. {

} Finally, § 5 of the UJOA makes further exceptions to the general rule, even in the absence of an express reservation of rights, where one joint obligor is bound to pay in relation to his co-joint obligor, which is also the case with the BNSF/UP divisions agreement. In short, the outcome in Converse v. James was favorable to the co-obligor only because the obligee had received full value for both claims; otherwise, the decision recognizes a sharp departure from the original common law rule.

had been no settlement. The stated principle in BNSF's cited authorities against excessive recovery is thus satisfied without further intervention.

Second, {
}, UP was not dismissed from the New Mexico litigation, nor was there any withdrawal of the New Mexico complaint. Instead, UP remains a real party in the litigation, as evidenced by its April 18 Petition and separate SAC Reply. {
}

Third, until the Settlement Agreement and Term Sheet were executed, UP faced the prospect of {

}

Fourth, the undisclosed divisions agreement provides a means of allocating the reparations liability between the two carriers {

}. Ample authority demonstrates that such allocations are to be respected in the allocation of any settlement payment:

As between two obligors who are equally principal debtors, the discharge of one discharges the other as to half the debt, leaving him bound still to pay his own share. If by agreement among obligors their shares are not equal, and the obligee has reason to know this, the discharge of one leaves the others bound to pay their separate shares as agreed. This

is true whether the one discharged paid his full share or a lesser amount or nothing at all; as to that full share the others were his sureties and had a right to be exonerated and indemnified by him. Of course, if he paid or otherwise satisfied more than his agreed share, the others owe merely their shares of the balance to the obligee and owe to the discharged obligor their shares of the excess paid by him.

Corbin, 4 Corbin on Contracts, § 933 at p. 756 (1951) (republished as Vol. 9 of the Interim Ed. (2002) at p. 671); accord, Baldwin v. Ely, 193 A. 299,302 (Pa. Super. Ct. 1937) (“an unreleased obligor is entitled to a credit for the proportionate share or shares of those released”) (emphasis added; quoted in BNSF SAC Reply at I-36 n.34). Other authority likewise favors proportionate rather than pro tanto setoff. See, e.g., McDermott Inc. v. AmClyde & River Don Castings Ltd., 511 U.S. 202, 204, 219 (1994) (admiralty case involving joint tortfeasors); Associated Elec. Co-Op v. Mid-American Transportation, 931 F.2d 1266, 1271 (8th Cir. 1991) (similar effect); Uniform Comparative Fault Act, § 4, Restatement (Third) of Torts, § 16; Converse v. James and Uniform Joint Obligations Act, supra. Here, of course pro tanto setoff is not even practicable because {

}

BNSF cites § 936 of Corbin on Contracts as support for the pro tanto credit rule. However, BNSF omits any mention of the last paragraph of § 936, which, at p. 963, notes “an additional principle,” namely, the proportional liability/credit rule of § 933, which applies where there is suretyship relationship. Suretyship arises:

whereby one party engages to be answerable for debt, default, or miscarriage of another and arises when one is liable to pay debt or discharge obligation, and party is entitled to indemnity from person who should have made the payment in the first instance before surety was so compelled.

“Contract of Suretyship,” Black’s Law Dictionary 1611 (Rev. 4th ed. 1968). The division agreement creates precisely such a relationship. If one carrier were compelled to pay the full reparations, that carrier would be entitled to proportionate contribution for the other. Accordingly, any setoff should apply on a proportionate basis, meaning that BNSF is liable for only its share of the reparations, {
 }.

Accordingly, the Settlement Agreement does not bar AEPCO’s entitlement to reparations. Consequently, the Board should calculate the total reparations to which AEPCO is due (which is all that the Board can do with a through rate) and then BNSF can see to itself that it pays no more than its share.

**IV Witness Qualifications
and Verification**

IV. WITNESS QUALIFICATIONS AND VERIFICATION

This Part contains the Statement of Qualifications and Verifications of two additional witnesses who have not previously sponsored evidence on behalf of AEPCO in this proceeding. It also contains the Verifications of AEPCO's other witnesses, whose Statements of Qualifications appear in Part IV of AEPCO's Opening Narrative, with respect to the portions of AEPCO's Rebuttal Evidence (and the exhibits and workpapers referred to therein) for which they are responsible.

1. Thomas E. Johnson

Thomas E. Johnson is the President of T.E. Johnson and Associates, LTD, a consulting firm specializing in railroad incident and operations analysis and matters related to metallurgical engineering/failure analysis. His offices are located at 5301 Birchcrest Drive, Edina, MN 55436. The specific evidence Mr. Johnson is sponsoring includes the discussion of locomotive fuel consumption in Part II-A.

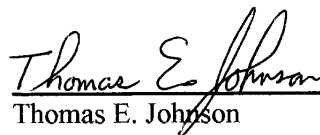
Mr. Johnson has a Bachelor of Science degree in Metallurgical Engineering from the University of Minnesota, and is a registered Professional Engineer in Pennsylvania. From 1981 through 1994, Mr. Johnson was employed by GE Transportation Systems in Erie, Pennsylvania ("GE"), a division of General Electric Corporation that manufactures and sells locomotives to the railroad industry. His positions at GE included Senior Metallurgist, Technical Leader-Component Design, Manager-Product Engineering, and Manager-Component Design and Product

Engineering. During his career at GE, Mr. Johnson became thoroughly familiar with the design and operation of diesel-electric locomotives, including both DC locomotives and AC locomotives which have become the standard for heavy-duty Class I rail service over the past decade. He is thoroughly familiar with the design and function of various devices used to monitor or measure locomotive performance, including, in particular, locomotive event recorders.

Mr. Johnson departed GE in 1994 and has been an independent consultant since 1997. His consulting specialties include the analysis of data from event recorders in a variety of contexts, including the reconstruction of train movements prior to rail/highway grade crossing accidents, and the evaluation of various aspects of a locomotive's performance including fuel consumption.

VERIFICATION

I, Thomas E. Johnson, verify under penalty of perjury that I have read the Rebuttal Evidence of the Arizona Electric Power Cooperative, Inc. in this proceeding that I have sponsored, as described in the foregoing Statement of Qualifications, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.


Thomas E. Johnson

Executed on: June 30, 2003

2. **William W. Whitehurst, Jr.**

William W. Whitehurst, Jr. is the President of W.W. Whitehurst & Associates, Inc., an economic consulting firm specializing in financial analyses, cost accounting, and other economic regulatory issues involving the railroad industry. His address is 12421 Happy Hollow Road, Cockeysville, MD 21030. The specific evidence Mr. Whitehurst is sponsoring relates to non-coal crossover traffic divisions and costs in Part III-A and Exhibit III-A-10, and the evaluation of the trackage rights fees received by UP for BNSF's (and the SARR's) operations over UP's line between Vaughn and El Paso in Part III-B and Exhibit III-B-3.

Mr. Whitehurst is a graduate of Princeton University with a Bachelor of Arts degree in Mathematics. He holds a Masters degree in Economics, with distinction, from Carnegie Institute of Technology (now Carnegie-Mellon University). While at Carnegie, in addition to fulfilling the requirements for a Master's degree in Economics, he studied industrial administration, operations research, statistics, and the cost principles of business enterprises. In addition, he has five years of experience in applied computer research at the National Security Agency.

Since 1963, Mr. Whitehurst has been continuously engaged in business as an economic and transportation consultant. For over three years, he was associated with McKinsey & Company, Inc., an international management consulting firm engaged in advising business enterprises and public agencies in resolving problems involving

economic policies, marketing, finance, and organizational structure. For twenty years, he was associated with L. E. Peabody & Associates, Inc., an economic consulting firm specializing in transportation issues, where he held the positions of partner and, after the firm's incorporation, Executive Vice President and President and Chairman of the Board. In mid-1986, Mr. Whitehurst left L.E. Peabody & Associates, Inc. and founded W.W. Whitehurst & Associates, Inc.

While at McKinsey & Company, Inc., Mr. Whitehurst specialized in transportation issues, serving public agencies, railroads, and rail equipment manufacturers. Since 1966, he has conducted studies, prepared reports, and testified for state governments and other public bodies, individual railroads, railroad associations, individual shippers, and shipper associations. He has analyzed rail operations and changes in railroad costs with changes in service. He has organized and directed detailed traffic analyses and traffic diversion studies to assess special handling characteristics of particular commodities. He has participated in negotiations and in litigation before various federal and state courts and regulatory bodies on matters related to the bases for, components of, and amount of trackage rights compensation applicable to various rail service and tenant-landlord relationships. He has also analyzed operations and costs related to rail activities in terminal areas.

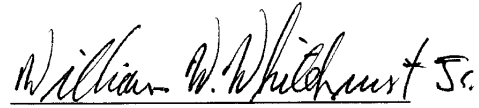
While engaged in economic and transportation studies, Mr. Whitehurst has spent considerable time in the operating and accounting departments of various railroads

and is familiar with operating and accounting methods and procedures used by railroads in the normal course of business. In addition, he has studied the restructuring of rail operations and accounting practices.

Mr. Whitehurst is a member of the Association for Investment Management and Research, and the American Railway Engineering Association.

VERIFICATION

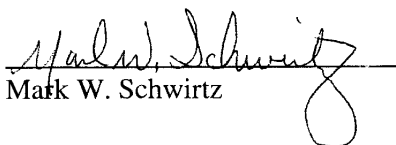
I, William W. Whitehurst, Jr., verify under penalty of perjury that I have read the Rebuttal Evidence of Arizona Electric Power Cooperative, Inc. in this proceeding that I have sponsored, as described in the foregoing Statement of Qualifications, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.


William W. Whitehurst, Jr.

Executed on June 26, 2003

VERIFICATION

I, Mark W. Schwartz, verify under penalty of perjury that I am the same Mark W. Schwartz whose Statement of Qualifications appears in Part IV of the Narrative portion of Arizona Electric Power Cooperative, Inc.'s Opening Evidence in this proceeding; that I am responsible for the portion of AEPCO's Rebuttal Evidence in this proceeding related to the Settlement Agreement and Term Sheet (Part III-H); that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

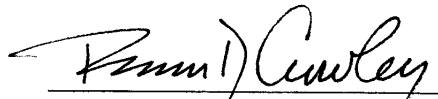

Mark W. Schwartz

Executed on: June 26, 2003

VERIFICATION

STATE OF VIRGINIA)
)
CITY OF ALEXANDRIA)

Thomas D. Crowley, being duly sworn, deposes and says that he is the same Thomas D. Crowley whose Statement of Qualification appears in Part IV of the Narrative portion of Arizona Electric Power Cooperative, Inc.'s Opening Evidence in this proceeding; that he is responsible for the portion of AEPCO's Rebuttal Evidence and related exhibits in this proceeding related to the stand-alone revenues (along with John T. Toren and William W. Whitehurst Jr.), the stand-alone traffic group, and traffic volumes (Part III-A); the portion of Part III-B related to train cycle times and costs for re-routed coal traffic; the calculation of BNSF and UP crew-cost savings (along with Frederic W. Yocum, Jr.) and the operation of the string diagram model (Part III-C); the stand-alone operating expenses (Part III-D); the discounted cash flow analysis (Part III-G); and the results of the SAC analysis and treatment of the Settlement Agreement (III-H); and that he knows the contents thereof and that the same are true as stated to the best of his knowledge, information and belief.


Thomas D. Crowley

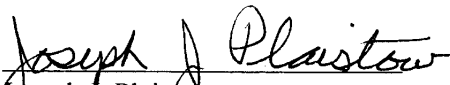
Sworn to and subscribed before me
this 30th Day of June, 2003.


Notary Public for the State of Virginia
My Commission Expires September 30, 2003.

VERIFICATION

STATE OF VIRGINIA)
)
CITY OF ALEXANDRIA)

Joseph J. Plaistow, being duly sworn, deposes and says that he is the same Joseph J. Plaistow whose Statement of Qualifications appears in Part IV of the Narrative portion of Arizona Electric Power Cooperative, Inc.'s Opening Evidence in this proceeding; that he is responsible for the portion of AEPCO's Rebuttal Evidence in this proceeding related to variable costs, designated as Rebuttal Narrative Part II-A; and that he knows the contents thereof, and that the same are true as stated to the best of his knowledge, information, and belief.



Joseph J. Plaistow

Sworn and Subscribed before me
this 25th Day of June, 2003.



Notary Public for the Commonwealth of Virginia

My Commission expires September 30, 2003.

VERIFICATION

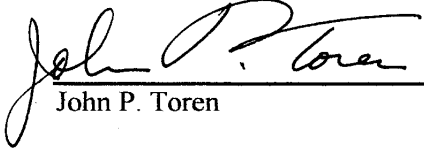
I, Dr. George H. Borts, verify under penalty of perjury that I am the same Dr. George H. Borts whose Statement of Qualifications appears in Part IV of the Narrative portion of Arizona Electric Power Cooperative, Inc.'s Opening Evidence in this proceeding; that I am responsible for the portion of AEPCO's Rebuttal Evidence in this proceeding related to the reasonableness of the Mileage Block Prorate Method and cross- over traffic issues in Part III-A; the portion of III-C regarding the SARR's alleged need to compensate the residual incumbents for off-SARR costs under stand alone cost theory; and stand-alone cost theory, discounted cash flow methodology, and Settlement Agreement valuation (Parts III-G and III-H); that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.


George H. Borts

Executed on: June 27, 2003

VERIFICATION

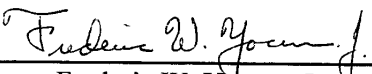
I, John P. Toren, verify under penalty of perjury that I am the same John P. Toren whose Statement of Qualifications appears in Part IV of the Narrative portion of Arizona Electric Power Cooperative, Inc.'s Opening Evidence in this proceeding; that I am responsible for the portion of AEPCO's Rebuttal Evidence in this proceeding related to the commercial reasonableness of the modified mileage block prorate methodology for determining divisions for non-coal cross-over traffic, contained in Part III-A; that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.


John P. Toren

Executed on: June 26, 2003

VERIFICATION

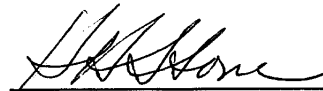
I, Frederic W. Yocum, Jr., verify under penalty of perjury that I am the same Frederic W. Yocum, Jr. whose Statement of Qualifications appears in Part IV of the Narrative portion of the Opening Evidence of Arizona Electric Power Cooperative, Inc. ("AEPCO") in this proceeding; that I am responsible for the factual portions of AEPCO's Rebuttal Evidence in this proceeding related to the stand-alone railroad system (Part III-B), operating plan (Part III-C) and operating expenses (Part III-D), except for the evidence in Part III-B relating to the compensation paid to UP for the ACE's use of BNSF's trackage rights between Vaughn and El Paso which is sponsored by AEPCO Witness Whitehurst and the evidence in Part III-C relating to AEPCO's string diagram model which is sponsored by AEPCO Witness Crowley; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.


Frederic W. Yocum, Jr

Executed on: June 23, 2003

VERIFICATION

I, Harvey H. Stone, verify under penalty of perjury that I am the same Harvey H. Stone whose Statement of Qualifications appears in Part IV of the Narrative portion of Arizona Electric Power Cooperative, Inc.'s Opening Evidence in this proceeding; that I am responsible for the portion of AEPCO's Rebuttal Evidence in this proceeding related to road property investment costs (Part III-F); that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

A handwritten signature in cursive script, appearing to read 'H. H. Stone', written over a horizontal line.

Harvey H. Stone, P.E.

Executed on: June 27, 2003