STB DOCKET NO. 42069

DUKE ENERGY CORPORATION v. NORFOLK SOUTHERN RAILWAY COMPANY

STB DOCKET NO. 42070

DUKE ENERGY CORPORATION v. CSX TRANSPORTATION, INC.

STB DOCKET NO. 42072

CAROLINA POWER & LIGHT COMPANY v. NORFOLK SOUTHERN RAILWAY COMPANY

Decided October 20, 2004

On reconsideration, the Board modifies its prior decisions in these three rail rate cases and finds that none of the challenged rates are shown to be unreasonable under the stand-alone cost test.

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BY THE BOARD:

These three proceedings (referred to collectively as the Eastern cases) have not been consolidated, as each case involves a separate record and the Board's decision in each of these cases was a product of the particular record in that case. However, there has been considerable overlap in the evidence and arguments presented by the parties in these cases, and the petitions for reconsideration present many common issues. Therefore, for administrative efficiency, we address all of the petitions in this combined decision.

OVERVIEW

Under the SAC test, the reasonableness of a defendant's rates are judged against what a hypothetical, optimally efficient stand-alone railroad (SARR), as posited by the complainant, would need to charge for providing the service at issue. In these cases, the parties provided extensive evidence on the costs to construct and operate rail lines and facilities in the mountainous areas of the Central Appalachian region. Using this information, the Board in each case estimated the revenues that each SARR would need to serve its traffic group. In each case, the Board then compared those revenue requirements to the revenues that the defendant carrier is expected to receive from that traffic.

Unfortunately, it has proven difficult to pin down tonnage and revenue forecasts for coal shipments out of the Central Appalachian region, and the most significant issue raised in the petitions for reconsideration involves those forecasts. The evidence on forecasts of likely (future) coal traffic can grow stale in the time it takes for these cases to progress from discovery through the evidentiary phase and then to a Board decision. Therefore, in these three cases, the Board decided to rely on what was (at the time) more recent (2003) coal forecasts of the Energy Information Agency (EIA), an arm of the Department of Energy charged with developing and publishing neutral energy data and forecasts. But coal shipments from this region appear to be more volatile than coal shipments in the West, as spot sales and the export coal market make up a substantial part of the demand for Central Appalachian coal. The EIA projections reflect this volatility, as its 2003 forecasts were markedly more optimistic than its 2002 forecasts.

Shortly after the Board issued its decisions in these cases, the EIA released its 2004 forecasts for the Central Appalachian region. That new release reported a drop in coal production in 2002 and the first part of 2003, and for a number of reasons it forecast that the region would produce less coal thereafter than previously anticipated. The railroads argue that, given the significantly altered trends, the 2004 EIA forecasts should be used in these cases, not the 2003 forecasts.

Any forecasts will prove to be inaccurate to some degree, and the farther into the future the projections run the greater the impact of inaccuracies. As a general matter, the Board must judge the reasonableness of a carrier's rates based on the best evidence available at the time of its decision. In these cases, however, the large disparity between EIA's 2003 and 2004 forecasts for the

Central Appalachian region and the reasons for those discrepancies present a new development of such significance that it cannot reasonably be disregarded. Thus, on reconsideration, we substitute EIA's 2004 forecasts in the Board's SAC analyses in these three cases.

On reconsideration, we also update the equity component of the cost-ofcapital calculation in all three cases, and in the two cases where it is an issue, we include in the SAC analyses the cost to retrofit locomotives of the "residual" defendant carrier, which would need to use distributed power for handling non-issue coal traffic that the SARR would interline with the defendant carrier for run-through service. Additionally, we make various technical corrections, as discussed in the appendices. In all other respects, the petitions for reconsideration are denied.

Using the more recent EIA forecasts significantly reduces the forecast revenues. Including the off-SARR costs that would be necessitated by the SARRs' use of distributed power in run-through service increases the costs that would need to be covered in the SAC analysis, while revising the cost of capital reduces the cost of financing the SARRs. Certain of the technical corrections favor the shippers, while others favor the railroads. The combined result of the various changes is that in all three cases the challenged rates are not shown to be unreasonable under the SAC test.

The SAC test is not the only regulatory constraint on railroad pricing, however, and it may be that abrupt rate increases of the magnitude seen in these cases was contrary to the Board's phasing constraint. See Coal Rate Guidelines, Nationwide, 1 I.C.C.2d 520, 546-47 (1985) (Guidelines), aff'd sub nom. Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3d Cir. 1987). Accordingly, the complainants here should advise the Board if they wish to seek relief under the Board's phasing constraint. Should the complainants wish to pursue such claims, the parties will be afforded an opportunity to address whether the magnitude of these rate increases violated the phasing constraint and, if so, what relief should be afforded at this point.

BACKGROUND

A. The Duke/NS Case

In STB Docket No. 42069, Duke Energy Corporation (Duke) challenged the rates charged by Norfolk Southern Railway Company (NS) for transporting coal from Central Appalachian mines to four electricity generating facilities in North Carolina. In *Duke Energy Corporation v. Norfolk Southern Railway Company*, 7 S.T.B. 89 (2003) (*Duke/NS*), the Board found that the challenged rates had not been shown to be unreasonable under the SAC test, as the revenues from the traffic group selected by Duke were less than the revenues the SARR would require to serve that traffic group. However, in a subsequent decision served February 3, 2004, the Board found that there had been certain inadvertent technical and computational errors in the evidence and calculations used in the *Duke/NS* decision. After correcting for those errors, the SAC analysis indicated that the revenues from the traffic group would exceed the SARR revenue requirements by a modest amount,

suggesting that the challenged rates were unreasonably high. Duke and NS each then filed a timely petition for reconsideration of the *Duke/NS* decision as corrected, to which the other has replied.

B. The Duke/CSXT Case

In STB Docket No. 42070, Duke challenged the rates charged by CSX Transportation, Inc. (CSXT) for transporting coal from Central Appalachian mines to three electricity generating facilities in North Carolina and South Carolina. In *Duke Energy Corporation v. CSX Transportation, Inc.*, 7 S.T.B. 402 (2004) (*Duke/CSXT*), the Board found that the challenged rates had not been shown to be unreasonable under the SAC test. Duke and CSXT have each filed a timely petition for reconsideration, to which the other has replied.

C. The CP&L Case

In STB Docket No. 42072, Carolina Power & Light Company (CP&L) challenged the rates charged by NS for transporting coal from Central Appalachian mines to two electricity generating facilities in North Carolina. In *Carolina Power & Light Company v. Norfolk Southern Railway Company*, 7 S.T.B. 235 (2003) (*CP&L*), the Board found that the challenged rates were unreasonably high under the SAC test and prescribed the maximum reasonable rate. CP&L and NS have each filed a timely petition for reconsideration, to which the other has replied.

CP&L and NS have also asked us to resolve a dispute as to whether, if the unreasonable rate finding is affirmed on reconsideration, NS would be entitled to collect a separate fuel surcharge in addition to the rate prescribed by the Board. NS argues that a fuel surcharge is a product of a separate "rule" under 49 U.S.C. 10702(2), not part of the challenged "rate" under 49 U.S.C. 10702(1), and that fuel surcharges must be collected to ensure that the carrier is fully compensated for its costs of providing service. CP&L argues that, because the SAC analysis included a fuel cost component, the carrier should not be entitled to any additional compensation. We need not resolve that issue here, as it is mooted by our determination on reconsideration that the rate has not been shown to be unreasonable under the SAC test.

DISCUSSION AND CONCLUSIONS

A party may seek to have the Board reconsider a decision by submitting a timely petition that presents new evidence or changed circumstances that would materially affect the case or that demonstrates material error in the prior decision. 49 U.S.C. 722(c); 49 CFR 1115.3.

In addition to various claims of technical errors (addressed in the appendices to this decision), the petitions for reconsideration in these cases raise 10 discrete substantive issues, which we address in turn here.

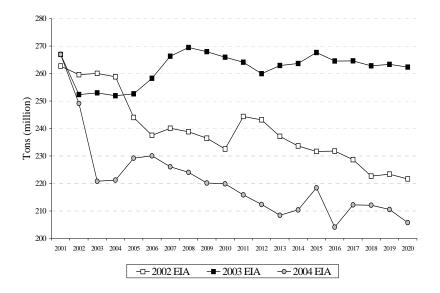
I. Traffic Forecasts

A. EIA 2003 vs. EIA 2004 Forecasts (Duke/NS, Duke/CSXT, CP&L)

The Board in these cases used forecasts for coal production and consumption published by the EIA. *Duke/NS* at 103, 143-149; *Duke/CSXT* at 426, 444-448; *CP&L* at 249-251, 285. EIA forecasts have the advantage of coming from a neutral, authoritative source. *Duke/NS* at 145. The parties themselves had used EIA forecasts released in January 2002 (*EIA 2002*) for various purposes in their SAC presentations. But in January 2003, after the close of the record in each case, the EIA released updated forecasts for the Central Appalachian region (*EIA 2003*) which differed significantly from the earlier, *EIA 2002* forecasts. So that its decisions would reflect the most up-to-date and accurate information available, the Board took official notice of the *EIA 2003* forecasts and used them to forecast tons and revenues in all three cases.

In January 2004, the EIA released still newer forecasts (*EIA 2004*), which incorporate actual Central Appalachian mine production for 2002 and the first 6 months of 2003. The latest forecasts anticipate that coal production for 2005-2021 will be significantly below the level forecasted in *EIA 2003*, returning closer to the levels forecasted in *EIA 2002*. The chart below shows the relevant EIA forecasts published in 2002, 2003, and 2004.

EIA Central Appalachian Forecasts



The EIA has identified five factors that would limit the ability of Central Appalachian coal mines to service the increased coal demand projected in *EIA* 2003. First, previous lawsuits had temporarily prevented the issuance of permits to open new mines. Second, several coal companies have experienced financial difficulties. Third, mines in many Central Appalachian states have experienced geological problems and underground mine fires. Fourth, the Central Appalachia's newer mines are projected to have higher strip ratios, thinner seams, lower yields, and other characteristics that will result in reduced productivity. Fifth, several mines reached the end of their reserve base and were compelled to shut down production. As a result, the EIA determined that a downward adjustment to its Central Appalachian coal outlook was necessary. In contrast to the 0.5% growth in production forecast by the EIA in 2003 for all mines in the Central Appalachian region, the *EIA* 2004 forecasts assume that coal production will remain constant for Central Appalachia's underground mines, and will decline by 0.5% per year for its surface mines.

In light of the more recent forecasts, the railroads argue that the Board should not rely on the *EIA* 2003 forecasts but should use the more recent *EIA* 2004 forecasts instead. They point out that the actual production data for 2002 and part of 2003 demonstrate the inaccuracy of the *EIA* 2003 forecasts for the same period. For example, *EIA* 2003 showed a 5.5% drop in volume from 2001 to 2002 (a percentage used in *Duke/NS* and *CP&L*). But *EIA* 2004, based on more complete production data, shows an actual drop of 6.7%. The railroads argue that it is unreasonable to rely on outdated EIA forecasts when the EIA itself has released new forecasts that conflict with its prior predictions. And CSXT notes that its case was decided after the EIA released its updated forecasts, making *EIA* 2004 the most recent data available at the time of the Board's decision.

Duke and CP&L object to using the latest forecasts. They argue that the Board is not obligated to update the record as newer forecasts become available, citing Bowman Transp. v. Arkansas-Best Freight Sys., Inc., 419 U.S. 281, 294 (1974); Illinois Comm. Comm'n v. United States, 292 U.S. 474, 480 (1934); and Nance v. EPA, 645 F.2d 701, 717 (9th Cir. 1981). But they do

¹ U.S. Coal Supply and Demand: 2003 Review, Energy Information Agency (April 2004)

² *Id.* at 5-6.

 $^{^{3}}$ *Id.* at 6.

⁴ EIA/Model Documentation: Coal Market Module, DOE/EIA-M060 (2004) at 24-25; see also Annual Energy Outlook—2004, Appendix G, DOE/EIA-0383 (January 2004) at 258.

⁵ U.S. Coal Supply and Demand: 2003 Review, Energy Information Agency (April 2004) at

⁶ EIA/Model Documentation: Coal Market Module, DOE/EIA-M060 (2004) at 24.

⁷ NS Pet. for Recon. (CP&L case) at 9; NS Pet. for Recon. (Duke/NS case) at 4-5; CSXT Pet. for Recon. at 2-3.

⁸ CSXT Pet. for Recon. at 3.

⁹ CP&L Reply at 6, 20-21; Duke Reply (Duke/NS case) at 6-8; Duke Reply (Duke/CSXT case)

at 3-4.

Duke Reply (Duke/NS case) at 7; Duke Reply (Duke/CSXT case) at 3-4; CP&L Reply at 5.

not explain why continued reliance on the EIA 2003 forecast would be reasonable in light of this latest information.

We are sensitive to the need to bring a close to cases and achieve a reasonable measure of finality in the Board's decisions. Thus, we will not reopen a case simply because fluctuating traffic levels fail to match forecasts in a particular period. Rather, our concern is properly with unforeseen long-term shifts in traffic patterns that undermine the multi-year projections upon which the Board has relied. See Arizona Pub. Serv. Co. v. Atchison, T. & S.F. Ry., 3 S.T.B. 70, 75 & n.16 (1998). Here, the EIA has itself reevaluated the circumstances surrounding its EIA 2003 coal production forecasts for the Central Appalachian region and has significantly altered its projections. Given the reasons provided by the EIA for its reevaluation, and given how dramatically the EIA 2004 forecasts depart from the EIA 2003 forecasts upon which the Board initially relied in these cases, we do not believe that it would be responsible regulatory policy to disregard the EIA 2004 forecasts and adhere to forecasts in which we and the EIA can no longer have confidence. Therefore, we modify the traffic and revenue figures used in the SAC analyses in these cases to reflect the EIA 2004 forecasts.

B. Shipper-Specific O/D Forecasts vs. Regional Forecasts (Duke/NS, CP&L)

In the two NS cases, NS argues that, for 2002-2004 traffic volumes, the Board should have used NS's shipper-specific origin/destination (O/D) forecasts, rather than the region-wide EIA forecasts, in view of the Board's general preference for specific data over generalized data. This issue was examined and discussed at some length in *CP&L* (at 250-251), and need not be further addressed here, as we are not persuaded that the Board's analysis was erroneous. In any event, this issue would not affect the outcome of these cases even if NS were to persuade us of its position.

II. Operating Expenses

A. Operating Plans (Duke/NS, Duke/CSXT)

In the two Duke cases, Duke proposed SARRs that would deliver trainloads directly from their origin to either their on-SARR destination or their point of interchange with the off-SARR delivering carrier, without SARR facilities for staging and/or assembling trains. The Board could not see how such an operating plan would meet the demands of the traffic groups selected by Duke. Without gathering or staging facilities, combining multiple shipments into large trains would not be possible, and Duke's operating plans for the SARRs did not allow time to shuttle trains between multiple origins. Thus, the only plausible way to reconcile Duke's operating plans with the omission of staging and/or assembling facilities was to assume that Duke intended to

¹¹ See, e.g., Carolina Power & Light Co. v. Norfolk S. Ry., STB Docket No. 42072 (STB served May 12, 2003) (disallowing the submission of updated traffic data with a party's brief).

¹² NS Pet. for Recon. (Duke/NS case) at 4; NS Pet. for Recon. (CP&L case) at 8.

resource the coal, with the SARRs transporting coal for shippers from mines dictated by the railroad, rather than from mines specified by the shipper. But, as the decisions noted, coal is not a fungible commodity, and utilities that now purchase coal from a particular mine would not necessarily agree to obtain their coal from other mines. See Duke/NS at 119 (discussing the non-homogeneous features of coal); Duke/CSXT at 427-428. Therefore, Duke's operating plans were rejected as unworkable, and the Board used the operating plans proposed by the defendant railroads. *Duke/NS* at 117-121; *Duke/CSXT* at 426-431.

In its petitions for reconsideration, Duke argues that the Board misconstrued its operating plans, which it claims were not designed to meet the peak-week demands of receivers but rather to provide trainload service by changing the timing of shipments.¹³ Duke asserts that, over the course of a year, both the SARRs and the incumbent railroads would deliver the exact same amount of coal from the exact same origins, and that the only difference between Duke's operating plans and the defendant railroads' operating plans is one of timing: "Duke's plan would deliver trainload quantities of coal for blending at the plant, while NS's plan (at great and needless expense) accomplished 'blending in the trainload.'"¹⁴

This characterization of Duke's operating plans does not square with the record. In the Duke/NS case, NS had complained that Duke's operating plan would send trainloads of coal to a university in North Carolina that can handle only 6 cars at a time and maintains no stockpile of coal. 15 In response, Duke denied that its plan would change the size of shipments to that customer, stating that it would instead combine a small shipment to that customer with other small shipments (to other customers) into a single trainload of coal. 16 And the spreadsheets that Duke submitted to the Board unambiguously showed shipments that currently originate from multiple mines being combined into a single train.17

In any event, even if the record were consistent with Duke's current characterization of its operating plans, those operating plans would be unacceptable. Duke claims that such altered operations would be adequate because "[t]iming is not a factor in the transportation of coal." But shippers make complex decisions on a daily basis as to how much coal to burn at their various plants, and they carefully manage the amount of coal at their plants to minimize the storage costs of large coal piles while avoiding having to curtail the burn to conserve coal reserves. Their needs and preferences are clear from their established shipping patterns, which involve receiving small shipments of coal from diverse mines in the Central Appalachian region. That is why the

¹³ Duke Pet. for Recon. (Duke/NS case) at 14-17; Duke Pet for Recon. (Duke/CSXT case) at

Duke Pet. for Recon. (Duke/NS case) at 15.

SR Reply Narr. at III-C-8.

Duke Reb. Narr. at III-C-15 n.16.

¹⁷ See, e.g., Duke Reb. e-WP., Duke/CSXT, "CSX SAC Trains"; Duke Reb. e-WP., Duke/NS, "REVISED string chart data for NS."

Duke Pet. for Recon. (Duke/CSXT case) at 10.

defendant railroads incur the significant expense of gathering and staging operations in the Central Appalachian region.

Duke's approach would violate a core principle of SAC: that a SARR must be able to meet the transportation needs of the traffic it is designed to serve. It is well established that a SARR proponent may not assume a changed level of service to suit its proposed configuration and operating plan, unless it also can demonstrate that the affected shippers, connecting carriers, and receivers would have no cause to object. *FMC Wyo. Corp. v. Union Pac. R.R.*, 4 S.T.B. 699 (2000) (*FMC*) at 735-736; *McCarty Farms*, *Inc. v. Burlington N., Inc.*, 2 S.T.B. 460, 476 (1997) (*McCarty Farms*); *West Texas Util. Co. v. Burlington N.R.R.*, 1 S.T.B. 638, 664 (1996) (*West Texas*). A railroad's ability to deliver product when desired by its customers lies at the heart of the transportation services it provides in today's dynamic marketplace. Thus, "[i]n order to meet its customers' needs, any railroad must equip itself to accommodate fluctuating traffic requirements, and not simply the yearly average." *McCarty Farms*, 2 S.T.B. at 476.

Because Duke failed to provide workable operating plans for its SARRs, the Board relied on the operating plans submitted by NS and CSXT. In its case, NS presented an operating plan that would stage and gather traffic into larger trains by consolidating small shipments at one of a few expanded yards. In contrast, CSXT submitted an operating plan that adhered to Duke's design, which included no gathering yards, and assumed that the SARR would shuttle numerous small trains from the mines to the interchange points.

Duke complains that the operating plans submitted by the railroads were inefficient and would result, it claims, in operating costs for the SARR that exceed the costs actually incurred by the defendant railroads for providing the existing service. However, a shipper may not rely on either the defendant railroad or the Board to make the best possible case for the shipper. Here, the operating plans submitted by the railroads were designed to conform as much as possible to the assumptions reflected in the complainant's own case. Moreover, unlike the operating plans submitted by Duke, the railroads' plans were workable and would meet the shippers' needs. Had Duke wished to modify the railroads' operating plans to address inefficiencies in those plans (or modify its own operating plans to address the deficiencies exposed by the railroads), it could have sought to supplement the evidentiary record in its cases. See Duke Energy Corp. v. CSX Transp., Inc., STB Docket No. 42070 (STB served March 25, 2003) at 4. Because Duke failed to do so, and because there was no other acceptable alternative before it, the Board properly relied on the operating plans submitted by the railroads.

¹⁹ Duke Pet. for Recon. (Duke/NS case) at 99; Duke Pet. for Recon. (Duke/CSXT case) at 3.

B. Retrofitting for Distributed Power (Duke/NS, CP&L)

In the two NS cases, a significant feature of the complainants' design of the SARRs was the SARRs' use of distributed power (DP) locomotive arrangements. See Duke/NS at 131-132; CP&L at 273. This involves positioning a locomotive at the rear of a train, thereby reducing the drawbar tension between cars and enabling the same number of locomotives to haul heavier, longer trains. It also permits more efficient loading at a mine, as a train can use the rear locomotive to back out of a mine lead without any loop tracks. Thus, the SARRs' costs were lowered by reducing the rail facilities needed at the mines served by the SARRs.

Another significant feature of the SARR designs in these cases was the use of run-through service to minimize the costs of interchanging traffic between the SARR and the residual NS. See Duke/NS at 152-153; CP&L at 290. With run-through service, a pool of locomotives consisting of both SARR and residual-NS locomotives would be used to provide the service to the selected

NS, which has very few DP units itself, argued that its locomotives would need to be retrofitted so that the residual NS could operate in DP run-through service with the SARR and that the cost of retrofitting should be included in the SAC analysis. The Board rejected that claim on the ground that the rear locomotive would be taken off of a train at the interchange, so that no NS locomotives would be used on the SARR and that there would thus be no need to retrofit the residual NS fleet for DP service. Duke/NS at 152-153; CP&L at 290-291. NS argues that this was material error because with run-through service, as provided for in the operating plans used by the Board, NS locomotives would be used on the SARR.²⁰ Thus, to enjoy the benefits of both DP power and run-through service, the entire pool of locomotives used for the run-through service would need to be equipped for DP service. Both the lead (controlling) and rear locomotives would need to be equipped to communicate with each other. If NS's locomotives could not communicate with the rear locomotives attached at the interchange, then the train could not serve the mines in the manner assumed in the operating plans and with the mine configurations specified.

Duke and CP&L assert that the SARRs could handle the occasional runthrough trains that would not be configured for DP power. According to complainants, if a SARR received such a train, that train would operate in a non-DP configuration and go only to a mine where DP power would not be required.²¹ There are, however, two flaws with this argument: complainants' choice of relying on DP power in lieu of loop tracks at most mines means that the majority of the coal mines would require DP power; and a majority of the run-through coal trains would have a residual railroad locomotive at the lead. Thus, the majority of the trains would not be able to serve the majority of the mines.

 $^{^{20}\,}$ NS Pet. for Recon. (Duke/NS case) at 17-19; NS Pet. for Recon. (CP&L case) at 10-11. $^{21}\,$ Duke Reply (Duke/NS case) at 19-20; CP&L Reply at 21-22.

Accordingly, we grant NS's petition for reconsideration on this issue and modify the SAC analysis to include the cost for NS to retrofit the number of NS locomotives that would be needed for this service.

C. Base-Year Operating Statistics (Duke/NS, Duke/CSXT, CP&L)

The defendant railroads based their operating plans for the SARRs on tonnages for the peak year (which the railroads assumed would be 2003 in the Duke/NS and CP&L cases, and 2004 in the Duke/CSXT case), so as to ensure that the proposed configurations of the SARRs could handle the peak forecasted traffic. To derive the base-year (2002) operating statistics (e.g., fuel, crew wages, number of cars), they scaled back the peak-year operating statistics by the ratio of the peak-year tons to the base-year tons. In other words, the defendant railroads assumed that the operating statistics would vary in direct proportion to tonnage. For example, in the Duke/CSXT case, CSXT assumed that the SARR would carry 105 million tons in the peak year and 100 million tons in the base year. CSXT applied a tonnage scaling factor (100 ÷ 105) to the peak year operating statistics to obtain the base-year (2002) operating statistics. Thus, for example, it obtained crew hours for the base year (2002) by looking forward to the crew requirements in the peak-year (2004) and then scaling that number back to the base year, rather than calculating crew requirements for 2002 directly.

The Board accepted the railroad's methodology and its underlying assumption that there is a directly proportional relationship between operating statistics and traffic volumes. But because the Board's findings on the base-year tonnages were higher than those assumed by the railroads, the Board needed to recompute the scaling factor. As all of the parties point out,²² the Board inadvertently failed to make that adjustment. We correct that error here by substituting the correct base-year tonnage to obtain the scaling factor.

NS and CSXT argue that instead we should first calculate the operating statistics for the peak year reflected in the Board's findings (2008 in all three cases) and then scale those figures back to the base-year.²³ But they have not explained why that additional step would be needed. If changes in operating statistics are directly proportional to changes in tonnage, as their scaling procedure assumes, then the relationship between tonnage and operating statistics should not vary from year to year and the results should be approximately the same regardless of which year is used as the starting point for the scaling.

²² NS Pet. for Recon. (Duke/NS case) at 19; NS Pet. for Recon. (CP&L case) at 3-4; CSXT Pet. for Recon. at 10-11; Duke Reply (Duke/NS case) at 19; CP&L Reply at 9; Duke Reply (Duke/CSXT case) at 9-10

case) at 9-10.

23 NS Pet. for Recon. (Duke/NS case) at 19; NS Pet. for Recon. (CP&L case) at 3-4; CSXT Pet. for Recon. at 10-11.

D. Locomotive Fuel (Duke/CSXT)

In Duke/CSXT, to estimate the fuel expenses for the SARR, the Board rejected CSXT's fuel study in favor of the carrier's system-average locomotive fuel costs, on the ground that CSXT's fuel study was based on a type of locomotive that the SARR would not use. Duke/ČSXT at 455. In its petition for reconsideration, CSXT shows that the fuel study was, in fact, based on the same type of locomotives the SARR would use.²⁴ However, in its rebuttal, Duke had pointed out several anomalies that undermined the credibility of the study, such as fluctuating mileages captured for the same movement, suspect mileage totals, inclusion of fuel consumption during loading and unloading operations while excluding mileage traveled during such operations, and unexplained full throttle operations recorded for periods while locomotives were located in yards or on shipper property.²⁵ Thus, CSXT's fuel study must be rejected on other grounds, and we will not alter the fuel cost figures used in the SAC analysis in that case.

III. Road Property Investment

The railroads object to portions of the Board's road property investment findings in these cases. First, CSXT and NS object to the Board's acceptance of the shippers' argument that a power shovel could excavate the right-of-way. Second, NS objects to the Board's use of the shippers' unit costs for clearing and grubbing trees. Third, NS objects to the Board's decision to reject its hauling cost additive for rough terrain.²⁸ Fourth, NS objects to the Board's decision in CP&L to use the ICC Engineering Reports to calculate the earthwork quantities for yards not now in existence (specifically, the SARR yards at Kenova and Vabrook).2

These issues are specific to the particular records in these cases and immaterial to the outcome of the cases for CSXT and NS. Thus, we see no need to address them here.

IV. DCF Analysis

A. RCAF-A v. RCAF-U (Duke/NS, Duke/CSXT, CP&L)

Because the SAC analysis in each of these cases covered a 20-year period, the base-year operating expenses needed to be adjusted for inflation over that

²⁴ CSXT Pet. for Recon. at 11.

²⁵ Duke Reb. II-A.

²⁶ Duke/NS at 180 CP&L/NS at 81; Duke/CSXT at 481; NS Pet. for Recon. (Duke/NS case) at 15; NS Pet. for Recon. (CP&L case) at 18; CSXT Pet. for Recon. at 7.

27 Duke/NS at 175-176; CP&L/NS at 77-78; NS Pet. for Recon. (Duke/NS case) at 15; NS Pet.

for Recon. (CP&L case) at 18.

CP&L at 315; NS Pet. for Recon. (CP&L case) at 16-18; Duke/NS at 180; NS Pet. for Recon. (Duke/NS case) at 14-15.

CP&L at 313; NS Pet. for Recon. (CP&L case) at 19-20.

period. All parties based their estimates of inflation on projections of the rail cost adjustment factor (RCAF), an index of railroad costs developed on a quarterly basis. But the complainants and the railroads disagreed on which version of the RCAF should be used. The Board publishes both a version that is adjusted for the average change in productivity in the rail industry over the most recent 5-year period (RCAF-A) and an unadjusted version (RCAF-U).³⁰

While the Board acknowledged that a SARR could be expected to realize some productivity improvements over a 20-year period, it concluded that using the RCAF-A would overstate the improvements. That is because the RCAF-A index measures the productivity improvements of railroads with older technology that is generally not replaced until it wears out. In contrast, as a new railroad a SARR would incorporate the latest technology and the efficiencies associated with those technologies, leaving less room for future improvement. The Board concluded that the understatement that would result from using the RCAF-U would be less than the overstatement that would result from using the RCAF-A. Thus, lacking a better alternative, the Board used the RCAF-U to index operating expenses. *Duke/NS* at 123; *CP&L* at 261; *Duke/CSXT* at 432.

Duke and CP&L contend that it was error to use an index with no productivity component.³¹ They rely on: (1) the Board precedent in *Wisconsin Power & Light Co. v. Union Pacific R.R.*, 5 S.T.B. 955 (2001) (*WPL*); (2) specific evidence of expected SARR productivity gains submitted in each of these three proceedings; and (3) the fact that EIA uses a productivity index in its revenue forecasts, thereby assertedly creating a mismatch between those forecasts and the operating cost forecasts. Finally, Duke and CP&L argue that, if we do not believe that it is appropriate to use RCAF-A in these cases, we should either develop an alternative index or shorten the period of analysis, rather than overstate future operating expenses.

1. The WPL Case

Prior to WPL, the Board had consistently used RCAF-U for indexing operating costs in SAC cases.³² But in the WPL case, the complainant proposed to index the SARR operating expenses using a business forecast developed by the defendant carrier in the ordinary course of business showing its expected cost for moving coal. The Board relied on that internal business forecast as the best evidence of record in that case, as the business forecast was specific to the expected future cost increases for providing rail service only for coal, whereas the RCAF-U reflects the historical experience of the entire railroad industry for providing all types of rail service. WPL at 1040.

 $^{^{30}\,}$ See 49 U.S.C. 10708 (requiring quarterly publication by the Board of both an adjusted and unadjusted version of the RCAF).

Duke Pet. for Recon. (Duke/NS case) at 5-8; CP&L Pet. for Recon. at 3-4; Duke Pet. for Recon. (Duke/CSXT case) at 20.

³² See, e.g., West Texas, 1 S.T.B. at 676; Arizona Pub. Serv. Co. v. Atchison, Topeka & S.F. Ry. Co., 1 S.T.B. 367, 441 (1997) (Arizona).

In these cases, however, the Board was not presented with a comparable choice between a general inflation index and one specifically tailored to coal traffic. Instead, the Board was asked to choose between two general indexes (RCAF-A and RCAF-U) based on which index would better predict future operating expenses for a SARR that would already incorporate the most recent technological improvements. WPL does not stand for the proposition that any index with a productivity component should be favored over one with none. Nor does it support the use of RCAF-A, which was not the index used there. Indeed, the Board has consistently rejected the use of RCAF-A to forecast operating expenses for a SARR. See Texas Mun. Power Agency v. Burlington N.&S.F. Ry., 6 S.T.B. 573, 750 (2003); Public Serv. Co. of Colo. d/b/a Xcel Energy v. Burlington N.&S.F. Ry., 7 STB 578, 608-610 (2004). Thus, there was no departure from precedent in this case.

2. Evidence of Productivity Gains

The complainants argue that the SARR would realize productivity increases over the SAC analysis period, through technological improvements in the transportation management system and more efficient methods of operation, which must be taken into account.³³ But the parties have provided no evidence to support the use of the RCAF-A for this purpose. While the SARR might indeed realize some productivity improvements over the 20-year period, the impact of any such improvements would be far less than it would be for existing railroads, making the RCAF-A an inappropriate measure.

Duke argues that productivity gains would be realized through increased traffic.³⁴ But the discounted cash flow (DCF) analysis in a SAC case incorporates the economies of density that a SARR would experience as a result of increasing traffic levels.³⁵ A double-count would be created if the RCAF-A were also used for that purpose.

3. Operating Expenses and Revenues

The EIA forecasts used in these cases reflect assumptions as to the future productivity of the railroad industry. Duke and CP&L argue that it is inconsistent to use revenue forecasts that would fall in real terms (i.e., after adjusting for inflation) due to projected productivity improvements, but to use operating expenses for the SARR that would stay constant in real terms.³⁶

However, revenues for the railroad industry and operating expenses for a SARR could well grow at different rates. For example, consider a situation

³³ Duke Pet. for Recon. (Duke/NS case) at 5-7; CP&L Pet. for Recon. at 3-5; Duke Pet. for Recon. (Duke/CSXT case) at 20.

³⁴ See Duke Pet. for Recon. (Duke/NS case) at 5, citing Duke Energy Corp. v. Norfolk S. Ry., STB Docket No. 42069 (STB served February 3, 2004) at 5 (reflecting a 10% increase in traffic from 2002-2008).

³⁵ See Xcel at 34.

³⁶ Duke Pet. for Recon. (Duke/NS case) at 6; CP&L Pet. for Recon. at 6; Duke Pet. for Recon. (Duke/CSXT case) at 20.

where over the next 5 years a railroad is expected to replace an aging locomotive fleet with more efficient locomotives. Its revenues might be forecast to fall (in real terms) if the railroad passes some of the savings to its customers, but operating expenses would also fall because the new locomotives would be more efficient. A SARR, however, would equip itself with all those new locomotives at the outset. Having already been credited with those cost savings, the operating expenses for a SARR could remain constant (in real terms) over the next 5 years. In such circumstances, the revenues of the actual carrier and the hypothetical operating expenses of a SARR would grow at different rates, illustrating that their rates of growth need not be directly correlated.

As the Board has acknowledged, in the long-term using RCAF-U may overstate a SARR's future operating expenses in later years, as there could well be some limited productivity improvements that the SARR would be expected to achieve over the next 20 years. But the records in these cases failed to support the use of RCAF-A, which would understate operating expenses in *every* year of the SAC analysis. Thus, while we recognize that using RCAF-U to index operating expenses for inflation is not perfect, it is clearly superior to the use of RCAF-A, and it is therefore the best evidence of record.

4. Alternative Approaches

Finally, Duke and CP&L suggest that if the use of RCAF-A is rejected we should develop an alternative index that would take into account the productivity gains a SARR could be expected to realize.³⁷ However, they have not offered a suitable alternative here. Nor did the Board's solicitation of suggestions in another SAC case yield an acceptable alternative. *See Xcel* at 609-610.

Alternatively, Duke suggests that we shorten the SAC analysis period.³⁸ But there is no single Board-prescribed period for a SAC analysis. And in each case here, the shipper chose to rely on a 20-year analysis. While a multi-year analysis has generally been regarded as preferable to a single-year analysis—see Guidelines, 1 I.C.C.2d at 545; PPL Montana, LLC v. Burlington N.&S.F. Ry., 5 S.T.B. 1105, 1109 (2001)—the Board is mindful of the disadvantages of a lengthy analysis period. See FMC at 741 ("Indeed, even if we could be sure that all of the forecasts here will ultimately be realized, we do not believe that it would be fair or proper to set the rates that [a railroad] can now charge based on economies of density and revenue contributions that do not yet exist."); West Texas Util. Co. v. Burlington N. R.R., STB Docket No. 41191 (STB served June 25, 1996) at 4 (declining to extend the SAC analysis beyond 20 years because "it is plainly unfair to require today's ratepayers to pay for costs that may or may not be accurately calculated, and that would be generated, if at all, by ratepayers more than 20 years in the future.").

Recon. (Duke/CSXT case) at 20.

38 Duke Pet. for Recon. (Duke/CSXT case) at 8.

³⁷ See Duke Pet. for Recon. (Duke/NS case) at 5-8; CP&L Pet. for Recon. at 6-8; Duke Pet. for Recon. (Duke/CSXT case) at 20

To make the SAC test less sensitive to the choice of an inflation index. Duke now suggests that the Board end the SAC analysis at the point when revenues would fall below the revenue requirements of the SARR.³⁹ While proposals to shorten the SAC analysis period might have merit, it would not be reasonable to define the cut-off point as the point at which the results no longer favor the complainant, as Duke suggests. In any event, Duke (which used a 20-year analysis period in its SAC presentations) raises this issue for the first time on reconsideration. Thus, we do not have the benefit of a thorough analysis of the issue. Under these circumstances, it would not be appropriate to alter the 20-year period for the SAC analyses in these cases.

B. Cost of Capital (Duke/NS, Duke/CSXT)

Where a multi-year DCF model is used, a discount factor must be applied to calculate the present value of the SARR cost and revenue streams. There was no dispute in these cases as to how to calculate the appropriate cost of capital. Duke (and CP&L) used a composite of the rail industry's cost of capital for the years 1999 through 2001, as determined annually by the Board, weighted according to the timing of the SARR expenditures during the construction period. The railroads agreed with that methodology but, because they assumed a different construction schedule, calculated slightly different cost-of-capital figures. The Board applied the general methodology used by both parties to the construction schedules it found most appropriate for the SARRs. *Duke/NS* at 123; *Duke/CSXT* at 433; *CP&L* at 261-262.

Duke now argues that the methodology used to compute the SARRs' costs of capital should be modified to conform to established case precedent. 40 Duke points out that in Bituminous Coal - Hiawatha, Utah to Moapa, Nevada, 6 I.C.C.2d 1, 71-73 (1989) (Nevada Power), the interest rates used to develop the cost-of-debt component of the cost of capital were the prevailing debt rates during the time the SARR would be built (a 2-year period) while the equity cost component was developed from the prevailing equity costs from the date construction was assumed to begin until the date of the decision (a 10-year period). Duke argues that this same procedure should have been used in these cases. Alternatively, Duke would have us recalculate the cost of capital by assuming the SARR would refinance all of its debt in 200241 or by relying solely on the industry average cost of capital in 2002. 42

Duke is correct that, unlike the cost of debt, the equity costs a SARR would face would not be fixed, but would change each year. And Duke accurately points out that in past SAC cases the cost of equity was estimated by not only averaging the cost of equity during the construction period, but also including the most recent findings on the rail industry's cost of equity. See Nevada Power, 6 I.C.C.2d. at 71-73; see also Arizona, 2 S.T.B. at 438;

Duke Pet. for Recon. (Duke/NS case) at 8; Duke Pet. for Recon. (Duke/CSXT case) at 20.

Duke Pet, for Recon. (Duke/NS case) at 9; Duke Pet, for Recon. (Duke/CSXT case) at 20.

See Duke Recon. e-WP "DCF_2002Debt.123".

See Duke Recon. e-WP "DCF_2002CostofCapital.123".

FMC at 178. In accordance with this precedent, we update the cost-of-equity computation in these proceedings to incorporate the Board's findings in Railroad Cost of Capital–2002, 7 S.T.B. 1 (2003) and Railroad Cost of Capital–2003, 7 S.T.B. 742 (2004). And even though this issue was not raised in the CP&L case, we apply the same correction to that proceeding to conform to established precedent.

Duke's alternative suggestions are rejected, as these are new arguments that should have been raised in Duke's case-in-chief.

C. Results

1. Duke/NS

The results of the Board's revised DCF calculations for the Duke/NS case are shown in Table 1, below. As that table shows, over the 20-year SAC analysis period, the forecast revenues from the selected traffic group are less than the revenue requirements of the SARR. Thus, Duke has not shown that the challenged rates are unreasonably high.

Table 1
Duke/NS Revised DCF Analysis
(\$ millions)

	SARR Revenue	NS Forecast		Present	Cumulative
Year	Requirements	Revenues	Difference	Value	Difference
2002	524.2	491.6	-32.6	-31	(31.0)
2003	512	462.7	-49.3	-42.6	-73.6
2004	525.6	471.2	(54.4)	-42.7	-116.3
2005	545.2	491.1	-54.1	-38.5	-154.8
2006	562	500.5	-61.5	-39.7	-194.4
2007	575.2	496.4	-78.8	(46.2)	-240.6
2008	589.3	504.7	(84.6)	(45.0)	-285.6
2009	603.0	501.0	-102	(49.2)	-334.8
2010	619.7	518.0	(101.7)	(44.5)	-379.3
2011	634.9	519.4	-115.5	(45.9)	-425.2
2012	651.1	519.2	-131.9	(47.5)	-472.7
2013	668.0	521.7	(146.3)	(47.9)	(520.6)
2014	690.1	540.4	(149.7)	(44.4)	(565.0)
2015	717.2	570.8	(146.4)	(39.4)	-604.4
2016	727.5	559.5	(168.0)	-41.1	(645.5)
2017	756.5	587.5	(169.0)	(37.5)	(683.0)
2018	780.4	607.2	(173.2)	(34.8)	(717.8)
2019	804.2	619.7	(184.5)	(33.7)	-751.5
2020	826.3	623.6	(202.7)	(33.6)	-785.1
2021	854.8	647.0	-207.8	(31.2)	-816.3

2. Duke/CSXT

The results of the Board's revised DCF calculations for the Duke/CSXT case are shown in Table 2, below. As that table shows, over the 20-year SAC analysis period, the forecast revenues from the selected traffic group are less than the revenue requirements of the SARR. Thus, Duke has not shown that the challenged rates are unreasonably high.

3. CP&L

The results of the Board's revised DCF calculations for the CP&L case are shown in Table 3, below. As that table shows, over the 20-year SAC analysis period, the forecast revenues from the selected traffic group are less than the revenue requirements of the SARR. Thus, CP&L has not shown that the challenged rates are unreasonably high.

Table 3 CP&L Revised DCF Analysis (\$ millions)

	1	ı	1		Ī
Year	SARR Revenue Requirements	NS Forecast Revenues	Difference	Present Value	Cumulative Difference
2002	330.8	351.0	20.2	19.8	19.8
2003	427.3	433.1	5.8	5.1	11.9
2004	438.4	440.3	1.9	1.5	13.4
2005	455.1	458.0	2.9	2.1	15.5
2006	468.9	466.2	(2.7)	(1.8)	13.7
2007	479.5	462.3	(17.2)	(10.3)	3.3
2008	499.8	497.2	(2.6)	(1.4)	1.9
2009	509.3	492.8	(16.5)	(8.2)	(6.2)
2010	523.1	509.9	(13.2)	(5.9)	(12.2)
2011	535.3	511.0	(24.3)	(9.9)	(22.1)
2012	412.7	383.2	(29.5)	(13.8)	(35.9)
2013	561.9	513.0	(48.9)	(16.4)	(52.4)
2014	580.5	531.6	(48.9)	(14.9)	(67.3)
2015	604.1	561.4	(42.7)	(11.8)	(79.1)
2016	610.8	551.3	(59.5)	(15.0)	(94.0)
2017	635.9	578.3	(57.6)	(13.1)	(107.2)
2018	655.8	597.7	(58.1)	(12.0)	(119.2)
2019	675.5	610.4	(65.1)	(12.2)	(131.5)
2020	693.2	615.5	(77.7)	(13.3)	(144.7)
2021	717.3	639.0	(78.3)	(12.1)	(156.8)
2022	183.4	167.3	(16.1)	(2.4)	(159.3)

The difference in result from the initial decision, which showed the rates to be unreasonably high, is attributable in large part to the use of the new EIA forecasts for coal volumes and rates in the Central Appalachian region.

V. Conrail Condition (Duke/NS, Duke/CSXT)

In its petitions for reconsideration, Duke presses its claim that, in raising their rates charged to Duke substantially above the level of the expired contract rates, NS and CSXT violated a condition of the Board's approval of their acquisition of the Consolidated Rail Corporation (Conrail) in 1998, and that this provides an independent basis to roll back the rate increases, even if the level of the challenged rates are not unreasonably high under the Constrained Market Pricing principles set forth in *Guidelines*. The condition at issue directed the railroads to "adhere to all of the representations they made during the course of [that] proceeding, whether or not such representations are specifically referenced in [that] decision." *See CSX Corp. et al.—Control—Conrail Inc. et al.*, 3 S.T.B. 196, 387 (1998) (*Conrail*). Duke points to a colloquy at the June 3, 1998 oral argument, where the Board inquired as to whether the financial arrangements associated with the acquisition would cause rates to go up and NS responded that it expected the acquisition to be beneficial financially and that it had not assumed that it would increase any rates to obtain the benefits of that transaction.

The Board found no evidence linking the rate increases in these three cases to the *Conrail* transaction, and it declined to interpret the general representations condition as requiring NS and CSXT to freeze their then-existing rates indefinitely, thereby depriving them of the ability to adjust rates in response to changing market conditions. *Duke/NS* at 97; *Duke/CSXT* at 410-411. Duke challenges both rulings.

On reconsideration, Duke merely reiterates arguments that were previously rejected. In particular, Duke contends that the records in these cases contain ample evidence to link the Conrail transaction with the challenged rate increases. It cites evidence showing the impact of the Conrail transaction on the cash flows of both NS and CSXT. Duke also points to uncontested evidence that the contract rates were increased immediately following the Conrail transaction, and then again (more substantially) in 2002. However, Duke has offered no evidence linking the Conrail acquisition to these rate increases. While its cash flow exhibit shows the financial posture of these railroads, it does not demonstrate that the increased debt levels resulting from the Conrail transaction caused the rate actions taken in 2002. A railroad, like any profit-seeking firm, will seek to maximize its net revenues from captive shippers, regardless of the railroad's fixed costs or debt load. And here the railroads have provided a reasonable explanation for their pricing decision. They have explained that they had previously misjudged how regional electricity deregulation would influence Duke's demand for

⁴³ Duke Pet. for Recon. (Duke/NS case) at 3; Duke Pet. for Recon. (Duke/CSXT case) at 16.

transportation services, and that, after reassessing the situation as their respective contracts with Duke neared expiration, they each concluded that they could profitably raise rates on captive utility plants in the region.

Duke insists that the general representations condition prohibited CSXT and NS from making up unanticipated financial losses resulting from their purchase of Conrail by raising rates on captive traffic. But we do not agree either that the railroads promised not to increase any rates or that the Board imposed such a blanket restriction. The markets in which the railroads operate are fluid and require them to make constant adjustments to changing market conditions. Therefore, it would not be reasonable or wise regulatory policy to transform general assurances that the railroads had no present intent to raise rates for existing captive shippers into a promise that they would never raise rates.

VI. Phasing (Duke/NS, Duke/CSXT, CP&L)

Although none of the challenged rate levels has been shown to be unreasonable under the SAC test, the SAC test is not the only regulatory constraint on railroad pricing. In each of these cases, the challenged rates represented unusually large rate increases, and it may be that those increases violated the Board's phasing constraint. *See Guidelines*, 1 I.C.C.2d at 546-47; *Duke/NS* at 125-126; *Duke/CSXT* at 435-436. Therefore, in each case, the complainant should advise the Board, within 30 days of the service date of this decision, whether it wishes to seek relief under the phasing constraint. If it elects to pursue this option, it should suggest a procedural schedule for addressing the issue. If it elects not to seek such relief, the proceeding will be discontinued.

This decision will not significantly affect either the quality of the human environment or the conservation of energy resources.

COMMISSIONER BUTTREY, commenting:

In taking official notice of EIA's optimistic 2003 coal forecasts for the Central Appalachian region, the Board in late 2003 and early 2004 relied on what it thought was the most up-to-date and accurate information available to forecast tons and revenues in the Eastern cases. Unfortunately, there has been a substantial, unforeseen development since then. EIA's 2004 forecasts report a significant drop in coal production for the region and EIA now forecasts that significantly less coal will be produced from this region than previously anticipated. This appears to be more than a minor, year-to-year fluctuation that one might expect from annual forecasts, and we cannot simply ignore the apparent anomaly in the EIA 2003 forecasts. If the public is to have confidence in our decisions, we must be willing to revise them when circumstances change significantly, as is the case here.

I am concerned, however, about the effect of today's decision on the complainants in these cases. What was a win for CP&L in the Board's decision on the merits in the *CP&L* case, and a potential win for Duke in the Board's decision correcting technical errors in the *Duke/NS* case, becomes a loss for both complainants as a result of this decision on reconsideration. Given the level of the rate increases, we are providing complainants with the opportunity to pursue the Board's phasing constraint. This may provide some relief to complainants if they elect to pursue this option and the increases are ultimately found to have violated the phasing constraint.

It is ordered:

- 1. The petitions for reconsideration are granted to the extent set forth above and in the Appendices, and they are denied in all other respects.
- 2. Duke and CP&L shall advise the Board within 30 days of service of this decision whether they wish to pursue relief under the phasing constraint.
 - 3. This decision is effective November 19, 2004.

By the Board, Chairman Nober, Vice Chairman Mulvey, and Commissioner Buttrey. Commissioner Buttrey commented with a separate expression.

APPENDIX A — DUKE/NS

In a decision served February 3, 2004, the Board corrected several technical errors pointed out by Duke in a separate petition. In its petition for reconsideration, NS points out two additional errors, discussed below.

A. MOW Locomotives

NS notes that the Board failed to include three locomotives that would be needed to power maintenance-of-way (MOW) work trains for the SARR. ⁴⁴ NS is correct, as the Board used NS's evidence "to determine such matters as the number of locomotives." *Duke/NS* at 121-122. Accordingly, we adjust the number of locomotives the SARR would need.

B. CP&L & Duke Traffic Forecasts

NS notes that there was an error regarding the traffic forecasts for the period 2002 through 2004 for the CP&L and Duke traffic included in the traffic group in this case. The Board intended to apply the EIA forecasts to the entire traffic group, *Duke Energy Corp. v. Norfolk S. Ry.*, 7 S.T.B. 397 (2004), but in its electronic spreadsheets the Board inadvertently used NS's internal forecasts (which the decision had characterized as unreliable) for the traffic of those two shippers. This error is corrected here.

⁴⁴ Duke Pet. for Recon. at 19-20.

APPENDIX B — DUKE/CSXT

In a separate petition filed March 16, 2004, Duke points to a number of claimed technical errors. CSXT filed a reply on April 5, 2004. Duke's claims and the modifications we adopt here are discussed below.

A. Operating Expenses

1. Switch, Helper, and Work Train Crew Shifts Per Year

The parties agree that the Board should have used 270 crew shifts, rather than 250, in calculating the personnel requirements for switch, helper, and work train crews. 45 See Duke/CSXT at 456-457. Accordingly, we correct the computation.

2. Double-Count of Chief Engineer and Administrative Staff

The parties agree that the Board double-counted the positions for the chief engineer and other administrative staff by including them in two different accounts—the Maintenance-of-Way and the General & Administrative (G&A) departments.⁴⁶ We correct that here by removing the costs of these positions from the G&A account.

3. Outside Services

The parties agree that, because the Board accepted Duke's G&A department staffing levels, Duke/CSXT at 459, Duke's cost estimate for outsourcing various G&A functions should have been applied in calculating this expense item. 47 We agree and make this correction.

4. Non-Executive G&A Department Personnel Wages

The Board stated that it used Duke's evidence for non-executive G&A wages. Duke/CSXT at 462. However, as Duke points out, 48 the Board's workpapers show that CSXT's wage evidence was inadvertently used for nonexecutive G&A staff compensation. CSXT agrees that the Board used the wrong evidence for most G&A positions, but asserts that executive-level salaries should be paid to three positions: Director of Operations Control,

Duke Pet. to Correct Tech. Errors at 2-3; CSXT Reply at 3.
 Duke Pet. to Correct Tech. Errors at 3; CSXT Reply at 3.
 Duke Pet. to Correct Tech. Errors at 4; CSXT Reply at 4.

Controller, and Director of Customer Service.⁴⁹ Duke concedes that those three positions should be categorized according to STB Occupation Codes 102, 103, and 205, respectively. In this case, the Board accepted the railroad's definition of executive, which included those occupation codes. Accordingly, we correct the Board's SAC analysis to use Duke's nonexecutive salary evidence for non-executive G&A employees, except for the three disputed staffing positions, for which we use executive-level compensation (calculated as set forth at *Duke/CSXT* at 461-462).

5. Disallowed Re-routed Tonnage

In developing the operating statistics adjustment ratio, the Board used traffic volumes of 105,429,255 tons for the peak year (2004). According to Duke, 495,869 of those tons should have been excluded from the calculation because they were associated with eight movements that the Board disallowed because they were improperly rerouted by Duke. See Duke/CSXT at 422. When these tons are eliminated, Duke asserts, the adjustment ratio increases from 99.05% to 99.52%, resulting in increases in base year 2002 operating statistics.⁵² CSXT agrees that the tonnage should have been excluded.⁵³ We therefore exclude this tonnage from the calculation and recalculate the baseyear operating expenses accordingly.

6. Payments to Mines

The Board accepted CSXT's calculation of \$48.9 million in payments to mines as an operating expense the SARR would incur. Duke/CSXT at 471. Duke argues that CSXT overstated these expenses by failing to divide the percar cost by 100 tons in calculating the mine payments for the Goals mine, and by overstating the per-ton cost for payments for the Fola mine.⁵

CSXT concedes that its calculations for payments for movements from the Goals mine were in error,⁵⁵ and we correct that error here. For movements from the Fola mine, CSXT maintains that it correctly calculated the payment⁵⁶ using a per-ton mine refund payment (to which Duke agrees⁵⁷) plus a switching charge (which Duke would not include⁵⁸). The record shows that CSXT's agreement with the Vaughn Railroad includes a switching charge.⁵⁹ Thus, CSXT correctly calculated the payment for the Fola mine.

⁴⁹ CSXT Reply at 4-5.

See Duke Pet. to Correct Tech. Errors at 5-6; see generally 49 CFR 1245.5.

⁵¹ Duke Pet. to Correct Tech. Errors at 6-7.

⁵² *Id.* at 7.

⁵³ CSXT Reply at 5.

Duke Pet. to Correct Tech. Errors at 7-9.

⁵⁵ CSXT Reply at 6.

⁵⁷ Duke Pet. to Correct Tech. Errors at 8.

⁵⁸ *Id.* at 8. 59 CSXT Reply Narr. III-D-117.

7. Recruiting and Training Costs

The parties agree that recruiting costs (fees paid to recruitment agencies) for executives (employees at the CEO/Vice-President level or those paid a salary based on Occupation Codes 101, 102, 103, 105 or 205) were overstated by incorrectly treating five employees with an Occupation Code of 201 as "executive" employees under Occupation Code 205 in the calculations. 60 They disagree, however, on how to correct the error.

Duke would exclude the positions from its calculation of training and recruiting costs.61 CSXT submits that the proper solution would be to reclassify the positions as "non-executive" positions and include the appropriate pre-hire costs for these employees in the calculation of the nonexecutive training and recruiting costs.6

The Board included training costs for rank-and-file employees and recruiting costs for skilled employees. *Duke/CSXT* at 465. We therefore accept CSXT's proposed solution and make its proposed change.

B. Road Property Investment

1. Yard Grading (exclusive of Fayette Yard)

Duke notes that, although Duke's methodology for calculating yard grading costs was accepted for all SARR yards except the Fayette Yard, Duke/CSXT at 477, the Board's workpapers show that CSXT's methodology was inadvertently used in calculating these costs. The parties agree that this error overstated grading costs by \$3,247,984.⁶³ We accept this correction.

2. Clearing & Grubbing

The parties agree that clearing costs were understated by \$1,043,046 and grubbing costs by \$234,785.64 We accept this correction.

3. Tunnels

The parties agree that, although the Board restated tunnel lengths as 66,136 linear feet (LF), Duke/CSXT at 492, it computed tunnel investment costs based on 67,136 LF, and that this 1,000 LF discrepancy overstated tunnel investment costs by \$5,150,000.⁶⁵ We accept this correction.

The parties also agree that a 2,869-foot tunnel near Holden, WV, which was included in both parties' workpapers, should not have been included in

Duke Pet. to Correct Tech. Errors at 9-10; CSXT Reply at 7.

⁶¹ CSXT Reply at 7.

 ⁶² Id.
 63 Duke Pet. to Correct Tech. Errors at 10; CSXT Reply at 8.
 64 Correct Tech Errors at 11-12; CSXT Reply at 8. ⁶⁴ Duke Pet. to Correct Tech. Errors at 11-12; CSXT Reply at 8.

⁶⁵ Duke Pet. to Correct Tech. Errors at 12-15; CSXT Reply at 9.

the calculation of tunnel investment costs for the SARR.⁶⁶ CSXT explains that its tunnel inventory erroneously indicated that the tunnel was located on a line replicated by the SARR, when in fact it is on a nearby CSXT line not replicated by the SARR.⁶⁷ Duke states that it meant to exclude this tunnel in its Rebuttal workpapers.⁶⁸ The error overstated tunnel investment by \$14,775,350.⁶⁹ We accept the parties' explanation and exclude the costs associated with the Holden tunnel.

4. Facilities

The parties agree that, while the Board accepted CSXT's cost methodology for constructing the headquarters building, *Duke/CSXT* at 501, Duke's methodology was mistakenly applied in the Board's cost calculations. They agree that this error understated the costs to construct the headquarters building by \$512,065.70 We accept this correction.

5. Mobilization

Using CSXT's evidence, the Board included a mobilization expense that consisted of differing amounts for different components of the project, but which averaged out to approximately 2.7% of total construction costs. Duke/CSXT at 505. Duke contends that the Board erred by including mobilization costs for two expenses that it claims the Board found would not be incurred: (a) costs for separate equipment for spreading graded material for embankments; and (b) costs for excavating and compacting for culverts.

CSXT agrees that mobilization costs for spreading graded material for embankments were overstated.⁷² See Duke/CSXT at 478. Accordingly, we reduce the mobilization costs for this item.

With respect to costs for excavation and compaction for culverts, as CSXT points out, 73 the Board did not reject the costs for culverts; rather, it adopted Duke's evidence on culvert costs. Duke/CSXT at 482. Thus, mobilization costs associated with culvert construction costs are properly included in the calculation of total roadbed mobilization costs.

⁶⁶ Duke Pet. to Correct Tech. Errors at 15-16; CSXT Reply at 8.

⁶⁷ CSXT Reply at 8.
68 Duke Pet. to Correct Tech. Errors at 15-16.

 $^{^{69}}$ *Id.* at 16.

Id.; CSXT Reply at 8-9.
 Duke Pet. to Correct Tech. Errors at 17-18.
 See CSXT Reply at 9-10.

⁷³ *Id*.

C. Revenues

1. Duke Discounts

Under the terms of an agreement with CSXT, Duke receives discounts based in part on the volume of traffic shipped to three of Duke's utility plants. Therefore, to calculate revenues from the Duke traffic, the Board needed to calculate the amount of the discounts to Duke. However, the parties agree that the Board erred in its calculation of the per-ton discount. In particular, the Board excluded tons from Duke's Cliffside and Lee plants in performing the calculation. According to the parties, including the tonnages from the Cliffside and Lee plants in the analysis would reduce the discount from \$0.82 per ton to \$0.12 per ton. 74

In recalculating the discounts, however, the parties overstated the total tonnage for the three plants, as their spreadsheets inadvertently doublecounted the tons. We therefore make the appropriate correction to reflect the correct total tonnage.

In reexamining these discount calculations, we discovered another significant error in how CSXT computed the discounts to Duke. For loading more than 90 tons per car, CSXT calculated the discount per ton, when it should have been per car. CSXT's miscalculation understated revenues by several million dollars annually. That error is corrected here.

2. Steel Movement

The parties agree that, for the steel move from Russell, KY, to Ashland, KY, CSXT's revenue division approach was inadvertently applied rather than the Board's Modified Straight Mileage Prorate methodology. See Duke/CSXT at 422-424. They agree that this error caused the portion of the 2001 revenues attributed to the SARR's portion of the movement to be understated by approximately \$1.3 million.⁷⁵ We make this correction.

APPENDIX C — CP&L

In its petition for reconsideration, NS claims various technical errors in CP&L, to which CP&L has replied. NS's claims and the modifications we adopt here are discussed below.

A. Duke and CP&L Tonnage Forecasts

NS notes that there was an error regarding the traffic forecasts for the period 2002 through 2004 for the CP&L and Duke traffic included in the

 $^{^{74}\,}$ Duke Pet. to Correct Tech. Errors at 20-21; CSXT Reply at 10. $^{75}\,$ Duke Pet. to Correct Tech. Errors at 21; CSXT Reply at 10.

traffic group in this case. The Board intended to apply the EIA forecasts to the entire traffic group, *CP&L* at 250-251, but the Board's electronic spreadsheets inadvertently used NS's internal forecasts (which the decision had characterized as unreliable) for the traffic of these two shippers. This error is corrected here.

B. Tunnel Costs

The Board determined that ten of the SARR's tunnels would require double-tracking, and that the cost per double-tracked tunnel would be 175% of the cost of a single-tracked tunnel. CP&L at 326. But as NS points out, there was a discrepancy between those costs and the costs applied in the Board's workpapers.⁷⁷ CP&L concurs, although it disputes the corrected total cost put forth by NS.⁷⁸

Upon review, we agree that an error was made. However, NS incorrectly included in its corrections Tunnel Number 33, Hatfield Tunnel EB, which is a single-track tunnel. We make the appropriate corrections here.

C. Locomotives for MOW Trains

NS points out that, although the Board's decision stated that it was using NS's proposed operating plan and "the basic number of road, helper and switch locomotives" provided by NS, *CP&L* at 259, 289, the Board eliminated three locomotives that would be needed to power MOW work trains for the SARR. ⁷⁹ Upon further review, we agree that this was an error and we adjust the findings accordingly.

D. Operating Managers and G&A Employees

NS notes that the Board's decision and workpapers are inconsistent with respect to the number of operating managers and general and administrative personnel. The CP&L concurs with NS's assessment. We adjust the computations to correspond to the text of the decision.

E. Start-up Operating Expenses

While the Board's decision stated that \$8.8 million in first-year start-up costs (primarily for training) would be incurred by the SARR, *CP&L* at 288, NS notes that this figure was omitted from the Board's calculations. ⁸² CP&L agrees, and it notes that the amount stated in the decision was incorrectly

⁷⁸ CP&L Reply at 7.

NS Pet. for Recon. at 1.

⁷⁷ *Id.* at 2.

⁷⁹ NS Pet. for Recon. at 8.

⁸⁰ *Id.* at 4.

⁸¹ CP&L Reply at 10.
82 NS Pet. for Recon. at 4.

calculated.⁸³ The omission was inadvertent, and the correct amount of \$7.7 million is included in the calculations here.

F. Road Property Investment

1. New Yard Earthwork Costs

The decision stated that the Board used CP&L's earthwork quantities for two yards (Kenova and Vabrook) in locations in which no yard presently exists. *CP&L* at 311. But NS points out a discrepancy between the text of the decision and the workpapers, which show that the Board actually used NS's earthwork quantities as the basis for calculating the earthwork costs associated with building the two new yards. NS also notes that the Board inadvertently doubled the earthwork quantities for those yards. We agree that these were errors, and we adjust the calculations accordingly.

2. Clearing and Grubbing

The decision stated that the Board used CP&L's clearing and grubbing unit cost figures. CP&L at 310. But as NS points out, the decision incorrectly identified those costs. We use the correct unit costs (\$3,429.09, and \$2,292.94, respectively) to recalculate the total costs.

³³ CP&L Reply at 10-11.

NS Pet. for Recon. at 5, 19.

⁸⁵ *Id.* at 5.

⁸⁶ Id. at 18-19.