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SURFACE TRANSPORTATION BOARD

DECISION

STB Docket No. 42057

PUBLIC SERVICE COMPANY OF COLORADO D/B/A XCEL ENERGY
v.
THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY

Decided: January 19, 2005

Upon reconsideration, the Board modifies the rate prescription and reparations award in this proceeding.

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BACKGROUND

In this proceeding, Public Service Company of Colorado d/b/a Xcel Energy (Xcel) challenged the reasonableness of the rates charged by The Burlington Northern and Santa Fe Railway Company (BNSF) for movements of coal from origins in the Powder River Basin (PRB) of Wyoming to Xcel's Pawnee steam electric generating plant near Brush, CO. In a decision served June 8, 2004 (June '04 Decision), we found that BNSF has market dominance over that transportation and that the challenged rate is unreasonably high. Based upon a stand-alone cost (SAC) analysis, we prescribed maximum reasonable rates through the year 2020 and awarded reparations to Xcel.

Xcel and BNSF have each filed timely petitions for reconsideration, and this decision addresses their requests that we reconsider various substantive determinations made in the June '04 Decision. (In a separate decision, served December 14, 2004, we addressed various claims of technical errors in the June '04 Decision.) As discussed below, upon reconsideration we update and modify the SAC analysis in several respects, but deny the substantive reconsideration requests in other respects. We will entertain requests for a rulemaking to explore in a more general manner continuing concerns regarding the treatment of cross-over traffic and the appropriate method for indexing operating expenses in SAC cases, should any interested person(s) seek to pursue those matters.

DISCUSSION AND CONCLUSIONS

A party may ask us to reconsider a Board 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. Here, both parties have sought reconsideration of various issues. Some of those issues concern the nature and purpose of the SAC test and how that test should be administered. Therefore, a brief review of the SAC test will aid our discussion here.

The objective of a SAC analysis is to simulate the competitive rate that would be available to the captive shipper in a contestable market environment. Coal Rate Guidelines, Nationwide, 1 I.C.C.2d 520, 528-34 (1985) (Guidelines), aff'd sub nom. Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3d Cir. 1987). In a SAC analysis, we seek to determine, based on the record

developed by the parties, what a hypothetically efficient "stand-alone railroad" (SARR) would need to charge a selected traffic group, free from any costs associated with inefficiencies or cross-subsidization of other traffic, to earn a reasonable return on its invested capital.

The SARR is designed to serve the identified traffic group using the optimum physical plant or rail system needed for that traffic. A computerized discounted cash flow model simulates how the SARR would likely recover its capital investments over time, taking into account inflation, tax liabilities, and a reasonable rate of return. The annual capital costs are combined with the annual operating expenses to calculate the annual revenue requirements of the SARR.

We then calculate the annual revenues that the defendant carrier is expected to earn from the selected traffic, based on the parties' evidence, and compare the expected revenues to the annual revenue requirements of the SARR to determine the over- or under-recovery for each year. Because the SAC analysis period is lengthy, a present value analysis is used that takes into account the time value of money, netting annual over-recovery and under-recovery as of a common point in time. If there would be a net under-recovery for the entire analysis period (i.e., the revenues from the traffic group are less than the revenue requirements of the SARR), then the challenged rates are considered reasonable. If, on the other hand, there would be a net over-recovery (i.e., the defendant carrier earns more from the traffic group than the revenue requirements of the SARR), then the challenged rates are unreasonable and the rates that the defendant carrier may charge for the traffic at issue in the complaint are limited to what the SARR would need to charge to avoid an over-recovery.

With that introduction, we turn to the issues raised by the parties in their petitions for reconsideration, which are discussed below.

I. Evidentiary Standards

In the June '04 Decision at 23-27, we found that Xcel had not presented a feasible operating plan. BNSF argues that Xcel's complaint should therefore have been dismissed on the ground that Xcel did not satisfy its burden of proof.[1] BNSF's argument assumes that, in considering a challenge to the reasonableness of a rate, our role is simply to act as an umpire, calling balls and strikes for the adversaries appearing before us, and that a significant deficiency in the complainant's opening presentation must therefore be fatal to its case. However, as discussed below, we do not view our role as so limited.

Our predecessor, the Interstate Commerce Commission (ICC), was expected to be "directly and immediately concerned with the outcome of virtually all proceedings conducted before it. It [was]

[1] BNSF Pet. for Recon. at 2-4.

not intended to be a passive arbiter but the 'guardian of the general public interest,' with a duty to see that this interest is at all times effectively protected."[2] Thus, the ICC was not the prisoner of the party's submissions, but rather had the duty to "weigh alternatives and make its choice according to its judgment of how best to achieve and advance the goals of the National Transportation Policy."[3] In other words, the ICC was not expected to blandly call balls and strikes; rather, "the right of the public must receive active and affirmative protection at the hands of the Commission."[4]

In the Staggers Rail Act of 1980,[5] Congress limited the agency's authority to determine the reasonableness of rail rates to traffic over which the railroad has market dominance[6] and for which the parties have not entered into a rail transportation contract.[7] And in the ICC Termination Act of 1995,[8] which replaced the ICC with the Board, Congress further limited our authority to investigate the lawfulness of a carrier's rates to those rates against which a complaint has been filed.[9]

Where a shipper challenges the reasonableness of a common carrier rate over which the carrier has market dominance, however, our role as the guardian of the public interest is unchanged. We are authorized to investigate those rates, 49 U.S.C. 11701(a), and we are empowered to obtain from the railroads whatever information we deem necessary to carry out our duties, 49 U.S.C. 721(b)(3). If,

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[2] H.R. Doc. No. 678, Practices and Procedures of Governmental Control of Transportation, 78th Cong., 2d Sess., at 53 (1944).

[3] Baltimore & Ohio R.R. v. United States, 386 U.S. 372, 429 (1967) (Brennan, J., concurring).

[4] Harlem Valley Transp. Ass'n. v. ICC, 500 F.2d 328, 335 (2d Cir. 1974) (quoting Scenic Hudson Pres. Conference v. FPC, 354 F.2d 608, 614 (2d Cir. 1965)); see also Isbrandtsen Co. v. United States, 96 F. Supp. 883, 892 (S.D.N.Y. 1951).

[5] Pub. L. No. 96-448, 94 Stat. 1989.

[6] See former 49 U.S.C. 10709 (1993), now codified at 49 U.S.C. 10707. Market dominance is "an absence of effective competition from other carriers or modes of transportation for the transportation to which a rate applies." 49 U.S.C. 10707(a).

[7] See former 49 U.S.C. 10713 (1993), subsequently revised and now codified at 49 U.S.C. 10709.

[8] Pub. L. No. 104-88, 109 Stat. 803.

[9] See 49 U.S.C. 10704(b).

after a full hearing, we determine that the challenged rate is unreasonable, we may prescribe the maximum reasonable rate and enjoin the carrier from charging a rate above that level. 49 U.S.C. 10704(a)(1).

To resolve disputes in SAC cases, we apply the evidentiary standards set forth in Duke Energy Corp. v. Norfolk S. Ry., STB Docket No. 42069 (served Nov. 6, 2003) (Duke/NS) at 13-15. Where the complaining shipper's opening evidence is feasible and supported, that is what we use in our SAC analysis. However, where on reply the defendant railroad demonstrates that what the shipper presented is infeasible or unsupported and the defendant offers feasible, realistic alternative evidence that avoids the infirmities in the shipper's evidence and that is itself supported, we use the reply evidence. Where the defendant has identified flaws in the shipper's evidence but has not itself provided evidence that can be used in our SAC analysis (or shown that the shipper's evidence is so flawed as to preclude the development of appropriate reply evidence to avoid or address the flaws), or where the shipper shows that the railroad's reply evidence is unsupported, infeasible, or unrealistic, the shipper may supply corrective evidence on rebuttal. A shipper is not free on rebuttal to significantly redesign its SARR or alter the core assumptions upon which its case-in-chief is based without first seeking permission to supplement the evidentiary record.

These evidentiary standards are designed to permit us to carry out our statutory obligation—to determine if the challenged rate is reasonable—based on a well-developed evidentiary record. Our evidentiary standards impose obligations on both parties. The shipper must submit its best case on opening. It may not hold back to see the railroad's reply evidence before finalizing or supporting its own case, because an opportunity to use its rebuttal to correct deficiencies in its opening evidence is not assured. On the other hand, a railroad may not exploit weaknesses in the shipper's opening evidence to escape an examination of the reasonableness of the challenged rate.

In SAC cases, the railroad has the advantage of having much greater knowledge and experience in how to construct and operate a railroad. Moreover, as a potential repeat participant in SAC cases, the defendant carrier may have an incentive to contest every detail of a SAC presentation. Our expertise and our interest in the SAC test serving its intended purpose can level the playing field somewhat, but we must ensure that an adequate record is developed upon which we can make an informed determination. Were we to entertain only those rate complaints where the railroad could not poke holes in the operating plan devised by the shipper for its SARR, almost every rate challenge considered by this agency since the adoption of the SAC test would have had to have been dismissed.

The public interest would not be served by dismissing rate complaints solely because of correctable defects in the shipper's presentation with respect to how a hypothetical railroad would operate. Indeed, the Board's use of its investigative powers and the parties' evidentiary submissions resulted in a record sufficient for the Board to determine whether the rate was unreasonable.

Thus, where the complainant has made a good-faith effort to present reasonable evidence on all of the basic components of the SAC test, even though when the record is fully developed that evidence might not be accepted as the best evidence of record, we are reluctant to dismiss the entire case without completing the SAC analysis. See McCarty Farms, 2 S.T.B. 460, 476-78 (1997) (electing not to dismiss a rate complaint notwithstanding the patent infeasibility of the operating plan). Accordingly, because Xcel made a good faith effort to present reasonable evidence on all the basic components of the SAC test, BNSF's renewal of its request that the complaint be dismissed will be denied.

II. Revenue Adequacy Considerations

In determining the reasonableness of a challenged rate, we are directed to consider, among other things, Congress's directive that railroads have an opportunity to earn adequate revenues.[10] BNSF complains that our June '04 Decision did not address how our decision took account of or would affect BNSF's "revenue inadequate" status. Based on that silence, BNSF charges that we failed to take into account its need to earn adequate revenues.[11]

We did not need to separately address BNSF's revenue adequacy needs in the June '04 Decision, however, because the SAC test inherently addresses those needs. The very purpose of the SAC test is to determine what BNSF needs to charge to earn "adequate" revenues on the portion of its system that is included in the system of the SARR. The SAC test excludes revenue needs associated with other traffic and other parts of BNSF's system, because the SAC test is designed to prevent the traffic at issue from cross-subsidizing other traffic. Guidelines, 1 I.C.C.2d at 1451 (a captive shipper is not required to pay the cost of any facilities or service from which it derives no benefit). Thus, "a rate may be unreasonable even if the carrier is far short of revenue adequacy." Id. at 536.

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[10] 49 U.S.C. 10701(d)(2). Congress has directed us to make an annual determination as to whether each Class I railroad (i.e., each railroad with annual operating revenues exceeding $250 million in 1991 dollars, 49 CFR 1201 General Instruction 1-1) is earning adequate revenues. 49 U.S.C. 10704(a)(3). Congress has defined "adequate" revenues as revenue levels sufficient to cover operating expenses, support prudent capital outlays, repay a reasonable debt level, raise needed equity capital, and otherwise attract and retain capital in amounts adequate to provide a sound rail transportation system. 49 U.S.C. 10704(a)(2).

[11] BNSF Pet. for Recon. at 1-2.

III. Cross-Over Traffic

Over 90% of the traffic included in the SAC analysis in this case would constitute cross-over traffic, i.e., movements for which the SARR would not replicate all of BNSF's current movement but would instead interchange the traffic with the residual (off-SARR) portion of the BNSF system. On reconsideration, BNSF again argues that we should disallow a SAC analysis that relies on cross-over traffic as the predominant source of traffic for the SARR.[12] Alternatively, BNSF asks us to reconsider the methodology used in this case to allocate the revenues from cross-over traffic between the on-SARR and off-SARR portions of the movement.[13]

A. Use in SAC Analysis

BNSF first objects to the use of cross-over traffic in a SAC analysis, arguing that it is inconsistent with SAC principles to include traffic without measuring all of the costs associated with that traffic. But as discussed in the June '04 Decision at 13-17, the inclusion of cross-over traffic is a well established practice in SAC cases that enables these cases to focus on the facilities and services that are used by the complainant shipper, and it prevents SAC cases from becoming unmanageable. We recognize that, as with any simplifying assumption, the inclusion of cross-over traffic introduces some imprecision into the SAC analysis. We remain concerned that, without cross-over traffic, captive shippers could lack a practicable means by which to prosecute rate complaints. Thus, we continue to believe that the value of this evidentiary tool outweighs its limitations.

B. Revenue Allocation

BNSF argues that the method applied in this case of allocating revenue from cross-over traffic between the on-SARR and off-SARR parts of a movement is arbitrary and distorts the results of the SAC analysis. There is no prescribed revenue allocation methodology in SAC cases,[14] and in recent cases the Board has sought to improve upon the allocation method used.[15] In this case, we were faced with a choice between two allocation methods: the "Modified Straight-Mileage Prorate" (MSP) that

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[12] Id. at 4-7.

[13] Id. at 7-9.

[14] See, e.g., PPL Montana, LLC v. Burlington N. & S.F. Ry., STB Docket No. 42054 (STB served Aug. 20, 2002) (PPL) at 7 n.14 ("We have not adopted a single preferred procedure for developing revenue divisions on cross-over traffic.").

[15] See Duke/NS at 22-25.

had been used in recent cases and an alternative proposed by BNSF called the "Density Adjusted Revenue Allocation" (DARA). We applied the MSP approach. BNSF argues that we should have used DARA.[16]

MSP is a refinement of a mileage-based formula long used in SAC cases to allocate cross-over traffic revenues. Under the original formula, the on-SARR and off-SARR parts of a move were each credited with one "block" for every 100 miles (or portion thereof) of the total movement. An additional block (the equivalent of a 100-mile share of the line-haul costs) was credited for originating or terminating the traffic, in recognition of the additional costs associated with providing those services.[17] The total revenues were then allocated in proportion to the total number of blocks assigned to each part of the movement.

In Duke/NS at 22-25, the Board determined that the mileage allocation for each part of a cross-over movement should be its proportionate share of the combined mileage. The Board concluded that this would better approximate the relative costs incurred for line-haul transportation, based on the reasonable assumption that average costs are a continuous function of distance (holding other factors constant). The 100-mile additive for originating or terminating the traffic was retained, as a surrogate in the absence of any better evidence as to the costs of those functions.

BNSF criticizes MSP for not taking into account the cost differences generated by differing traffic densities on different parts of a route and for not accurately reflecting the costs to originate and terminate carloads of unit-train traffic. BNSF argues that, if cross-over traffic is included, DARA must be used because, according to BNSF, DARA is superior to MSP.

Under DARA, BNSF would first calculate the variable costs associated with each part of the movement and assign revenues to cover those costs. The remaining revenue from the movement—the contribution to fixed costs—would be allocated between the on-SARR and off-SARR part of the movement based on a formula[18] that assigns a greater share to the part with the longer distance and to the part using lighter density lines.

Upon examination, however, it appears that DARA is actually insensitive to economies of density, ignoring the well-accepted principle that economies of density will vary with different levels of

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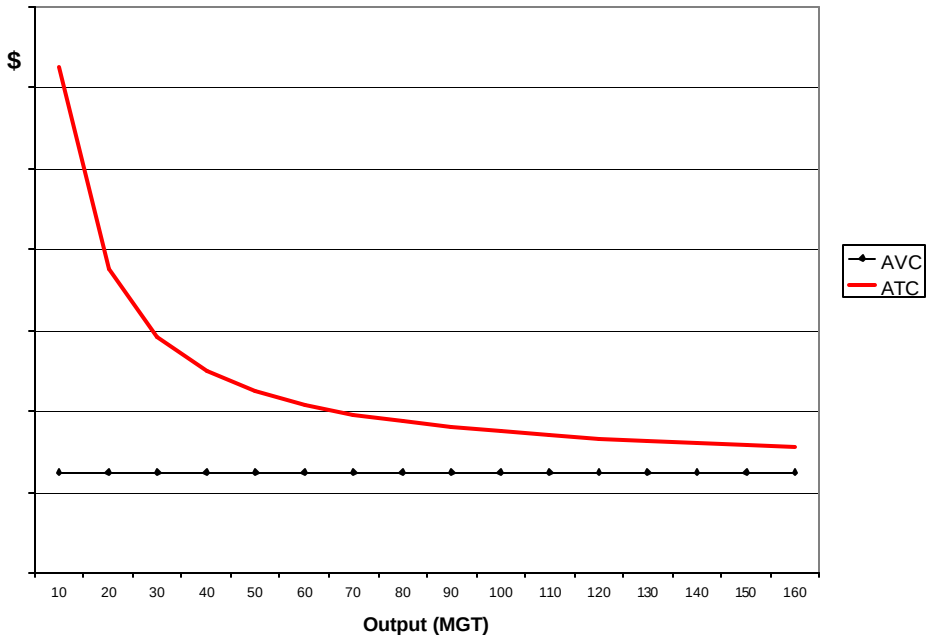
[16] BNSF Pet. for Recon. at 7-9.

[17] See McCarty Farms, 2 S.T.B. at 472.

[18] See Duke/NS at 20-21 n.31.

output. A typical cost curve, with constant average variable cost (AVC) and diminishing average total costs (ATC) is illustrated below.



As illustrated, the economies of density diminish with higher output, as the fixed threshold costs are spread over more output. We use this cost function to illustrate the deficiency with DARA.

The examples below show how DARA would allocate $10 per ton in revenue from a 1,000-mile cross-over movement that travels an equal distance over a heavy-density on-SARR line and an off-SARR line with half the density. The examples assume that the two lines each have identical threshold costs of $100 million and that the AVC of moving a ton of traffic over each line are also identical ($2.50 per ton for each line, for a total combined variable cost of $5 per ton). In each example the only cost difference distinguishing the two parts of the movement is that the average fixed costs per ton of traffic are twice as high on the light-density line because there is only half as much traffic among which to distribute the fixed costs. The economies of density, if any, are reflected in the difference in the ATC of the two lines.

Example 1
Strong Economies of Density

	Residual	SARR
Density	10 MGT	20 MGT
AVC	$2.50	$2.50
ATC	$12.50	$7.50
DARA	AVC+($5×(10÷30)) = $5.83	AVC+($5×(20÷30)) = $4.17

Example 2
Significant Economies of Density

	Residual	SARR
Density	40 MGT	80 MGT
AVC	$2.50	$2.50
ATC	$5.00	$3.75
DARA	AVC+($5×(80÷120)) = $5.83	AVC+($5×(40÷120)) = $4.17

Example 3
Weak Economies of Density

	Residual	SARR
Density	80 MGT	160 MGT
AVC	$2.50	$2.50
ATC	$3.75	$3.13
DARA	AVC+($5×(160÷240)) = $5.83	AVC+($5×(80÷240)) = $4.17

As these illustrations show, the dollar amount that DARA would allocate to the light- and heavy-density lines would not vary in any of the scenarios, regardless of the degree of economies of density. Thus, contrary to BNSF's claim, DARA does not take into account the degree of economies of density. It simply allocates a higher portion of the revenues to the part of a movement traveling over lighter-density lines.

In our discussion of DARA in the June '04 Decision at 18-19, we expressed concern that DARA could overstate the revenues that should be allocated to the light-density lines. We incorrectly suggested that the fault was in DARA's reliance on the Uniform Rail Costing System (URCS), our

general purpose costing system for all regulatory costing purposes.[19] However, there is no systemic bias in URCS that would favor either heavy- or light-density lines. And while we gave an example of an instance in which DARA would overstate the average costs of a light-density line, other examples could be constructed where those costs would be understated.

But as illustrated above, DARA can overstate the revenues that should be allocated to lighter-density lines. Even where economies of density have been, for practical purposes, exhausted, DARA would continue to allocate greater revenue to the part of the movement using the lighter-density line. Thus, DARA does not accomplish its stated objective.

In sum, we are not persuaded that a departure from precedent is necessary or appropriate here. DARA has not been shown to be superior to the mileage-based approach that has been traditionally used in SAC cases. And BNSF has failed to convince us that cross-over traffic must be disallowed altogether here for lack of a better means of allocating revenue from that traffic.

There may well be a better revenue allocation procedure that could be practical for SAC cases, and we remain open to proposals as to how best to allocate revenues on cross-over traffic. We also do not rule out further consideration of the extent to which use of cross-over traffic is necessary and appropriate to ensuring that the SAC test provides a practicable means of assessing the reasonableness of a challenged rate. Thus, we will entertain requests for a rulemaking on these issues, if any interested persons are prepared to present a more in-depth exploration of the issues.

IV. Other Issues

A. Jeffrey Energy Center

BNSF objects to the inclusion in the traffic group of the rerouted Jeffrey Energy Center traffic.[20] BNSF repeats the same arguments that it raised earlier: that the SARR could not provide the same level of service on the alternative route and that including the traffic would create an impermissible cross-subsidy. These arguments were fully addressed in the June '04 Decision at 19-23, 28-32, and nothing in BNSF's petition requires additional discussion here.

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[19] See Adoption of the Uniform Railroad Costing System As A General Purpose Costing System For All Regulatory Costing Purposes, 5 I.C.C.2d 894, 899 (1989).

[20] BNSF Pet. for Recon. at 10-11.

B. Operating Plan

As mentioned above, we found that the operating plan proposed by Xcel in this case was infeasible, because it failed to provide for staging trains into the PRB mines in a rational fashion and improperly assumed that the majority of the SARR's line would be straight and level. See June '04 Decision at 23-27. Xcel seeks reconsideration of that aspect of the decision.[21]

Xcel first claims that we erred in finding that the SARR would need to construct infrastructure at the mines to stage multiple trains awaiting loading. It claims that the SARR would not need such facilities. Xcel attributes the extended dwell times to inefficiencies in the defendant's operations that the SARR would avoid.[22]

In a SAC analysis the operating plan for a SARR need not match existing practices, as the objective of the SAC test is to determine what it would cost to provide the service with optimal efficiency. However, the assumptions used in the SAC analysis, including the operating plan, must be realistic, i.e., consistent with the underlying realities of real-world railroading. A real-world railroad could not place empty trains at mines at its convenience, without regard to whether the trains could be accommodated at the mine at that time. Staging facilities would be required, whether at the mine or elsewhere. It does not matter where the operating plan would stage the trains, so long as the trains would flow into and out of the PRB region in a reasonable fashion. But without such arrangements, as we stated in the June '04 Decision at 26, Xcel's operating plan would result in massive congestion and gridlock.

Xcel also argues that we should have accepted its operating plan despite the fact that the plan omitted data on grades and curves over a large portion of the SARR.[23] It is true that all models abstract away some real-world complications in order to focus the analysis on more important questions. But the terrain of a rail line cannot be ignored: a coal train could not travel over the Rockies as quickly as it might traverse the same distance of the Great Plains. Here, train speeds—and, hence, crew, locomotive, and railcar requirements—all depend on the proper application of grade and curve data. An operating model that ignores terrain does not provide reliable operating statistics or demonstrate the feasibility of the SARR.

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[21] Xcel Pet. for Recon. at 4-8.

[22] Id. at 5-8.

[23] Id. at 8.

C. Operating Expenses

1. Locomotive Peaking Factor

Xcel claims that we erred in accepting BNSF's locomotive peaking factor.[24] See June '04 Decision at 59-60. BNSF had argued that the SARR should have sufficient locomotives capable of handling traffic on its peak day, an approach that the Board accepted in Texas Municipal Power Agency v. The Burlington N. & S.F. Ry., STB Docket No. 42056 (STB served Mar. 24, 2003) (TMPA) at 81. In this case, however, that approach produced a spare margin of 43.4%, far higher than in any other recent SAC case.

Upon further reflection, we agree that requiring the SARR to have enough locomotives to handle the peak day is an unrealistic standard in this case. While the evidence submitted by BNSF showed a peak day of 31 train starts, the same evidence also showed that only 28 starts were recorded on the second-busiest day. In this situation, requiring the SARR to equip itself to meet the peak day traffic needs would result in a need for 9 locomotives (for 3 trainsets) that the SARR would employ only 1 day per year. No real-world railroad would buy locomotives to use only once a year and store away for the remainder of the year.

A more reasonable expectation would be for the SARR to have sufficient locomotives available to handle the forecasted peak week demand. Using BNSF's evidence, we have calculated total train starts using a 7-day rolling average. The average number of train starts per day during the peak week would be 23.9. The overall average for train starts per day would be 19.9. Dividing 23.9 by 19.9 yields a peaking factor of 20.1%. BNSF's evidence shows that over the course of a year, only 30 days would require more than 24 locomotive starts. For these 30 days, it is reasonable to assume that the orders would be deferred to later in the same week when locomotives would be available. We revise our SAC analysis accordingly.

2. Locomotive Fuel Consumption

Xcel claims we should not have used the results of BNSF's event recorder fuel study—prepared to measure BNSF's variable cost of serving Xcel's traffic—for the SAC portion of the case.[25] See June '04 Decision at 60, 137-38. Xcel argues that the SARR would have less congestion and faster cycle times and therefore its fuel consumption would be lower. Xcel would have us use BNSF's system-average unit costs for fuel in the SAC analysis.

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[24] Id. at 12-13.

[25] Id. at 13-14.

We remain confident that the event recorders more accurately reflect the fuel consumption that the SARR could expect than BNSF's system-average figure. As compared against the traffic examined by the fuel study, the SARR would move the same kind of trains (unit trains of coal) using the same type of locomotives and the same type of operation (with distributed power) over the same type of terrain. Thus, while there may be some differences between BNSF's current operations and those that would be conducted by the SARR, we are satisfied that BNSF's fuel consumption experience for Xcel's traffic is closer to what the SARR could expect to achieve than BNSF's system-average, which applies to entirely different geographical areas, classes of traffic, and categories of trains than what the SARR would encounter.

D. Forecasting Issues

1. Tons and Revenues

Xcel claims we erred in excluding from the traffic group coal tonnages from two plants— the Lower Colorado River Authority's Seymour plant and LG&E Energy's Ghent plant—in 2004 and beyond,[26] see June '04 Decision at 52-53, and that we should have applied a SAC presumption that historic traffic patterns will continue into the future. That presumption is rebuttable, however, and here BNSF's internal forecasts—which were developed in the ordinary course of business and were otherwise used by both parties to project future movements of the non-Xcel traffic—showed no tonnages flowing to Seymour and Ghent after 2004. BNSF further supported the internal forecasts with a statement from marketing personnel.

Xcel argues that there was evidence of likely traffic to those plants via BNSF. With respect to the Seymour plant, it points to a statement in LCRA's 2002 annual report that the company had entered into a multi-year contract with two railroads to haul coal from the PRB. But this statement does not show whether the contract extended to 2004, and, more importantly, how much coal LCRA expected to ship via BNSF in 2004 under this undisclosed contract. Thus, we did not have the evidence needed to include such traffic. Xcel's arguments with respect to traffic to the Ghent plant after 2004 were fully addressed in the June '04 Decision at 52-53, and need not be repeated here.

BNSF objects to our reliance on forecasts of the Energy Information Administration of the United States Department of Energy (EIA) for traffic volumes for the period 2005-2007, see June '04 Decision at 53-54, rather than BNSF's Macro Coal Forecast, a separate internal business forecast which projected BNSF's aggregate coal volumes for its entire system (not just PRB coal).[27] Under the

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[26] Id. at 8-10.

[27] BNSF Pet. for Recon. at 12.

Macro Coal Forecast, BNSF would experience no coal volume growth at all between 2005 and 2007. But as Xcel had pointed out, that forecast was undated and bore no resemblance to other BNSF internal coal forecasts. And, as Xcel also pointed out, the reliability of the Macro Coal Forecast was undermined by BNSF's assertions that it could not accurately forecast coal tonnages on an origin-to-destination pair basis beyond a few years. Moreover, because the Macro Coal Forecast covered all coal transported on the BNSF system, it was not representative of the selected traffic group. Thus, it was reasonable for us to prefer the EIA forecasts, which were prepared by an official, neutral source and were specific to PRB coal. BNSF has offered no persuasive reason to reconsider that decision.

We adjust the revenue figures for the SARR, however, to reflect changed circumstances affecting the rate forecasts for three cross-over movements in the traffic group. BNSF has established a new rate to govern transportation from the PRB to the Moba and Okalunion plants. And we have revised our rate prescription for movements from the PRB to TMPA's plant at Iola, TX. We therefore update the revenue forecasts for these three movements. Because we use revenues generated by a Board rate prescription for the TMPA movement, rather than the rates that were challenged or otherwise set in the marketplace, we should not reduce that movement's dollar contribution towards the SARR's revenue requirements, lest we create a circularity problem between the cases. Accordingly, in determining the maximum reasonable rate, we will hold the TMPA contribution at the level of our rate prescription.

2. RCAF-U

An important issue in SAC cases is how to adjust the base year operating expenses for inflation over the 20-year analysis period. In this case, both parties used projections of the rail cost adjustment factor (RCAF), an index of railroad costs we publish on a quarterly basis. We publish a version of the RCAF that does not take into account changes in the rail industry's productivity (RCAF-U) as well as one that does (RCAF-A). Here, Xcel advocated using an RCAF-A forecast to adjust operating expenses; BNSF urged us to use an RCAF-U forecast. As in other SAC cases,[28] we used RCAF-U. We explained that, while use of RCAF-U may somewhat overstate the SARR's operating costs over the 20-year SAC analysis period, the understatement that would result from use of RCAF-A would be far greater. We also explained why the alternative measures that Xcel had suggested in response to a Board invitation were inappropriate. See June '04 Decision at 32-34.

[28] See Duke Energy Corp. v. Norfolk S. Ry., STB Docket Nos. 42069, 42070 & 42072 (STB served Oct. 20, 2004) at 15-19; TMPA at 161.

Xcel seeks reconsideration, arguing that the overstatement caused by use of RCAF-U is so significant that we should devise an alternative measure ourselves.[29] However, the parties were afforded an opportunity to devise an acceptable alternative and we do not believe that it is necessary or appropriate to delay this case further in a continuing pursuit of a more perfect approach. At some point, we must be able to rely upon the best evidence of record and bring the case to a conclusion.

That said, we recognize that this is an important issue of continuing concern that is common to all SAC cases. Indeed, no issue has been more thoroughly debated in recent SAC cases. Therefore, we will entertain requests for a rulemaking in which all potentially interested persons could participate in attempting to develop a more appropriate method for indexing operating expenses.

E. Road Property Investment

BNSF seeks reconsideration of various components of the construction cost estimates for the SARR,[30] which we discuss below.

1. Yards

In the June '04 Decision at 94-95, we applied a rebuttable presumption that 1 foot of fill would be appropriate for those yards located in a valuation section of the ICC Engineering Reports[31] that originally contained a yard. We explained that BNSF had not provided sufficient evidence to rebut this presumption. BNSF had submitted a topographical map of the area, but it had not contrasted this with the topography of the original yards.

BNSF seeks reconsideration, arguing that additional excavation costs would be required for the Guernsey and Wendover yards.[32] BNSF has supplied a new map, showing the topography of both the original Guernsey yard and where Xcel would locate the SARR's yard, along with a narrative explaining that part of Xcel's chosen location would need to be excavated. We will not reconsider this

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[29] Xcel Pet. for Recon. at 11-12.

[30] BNSF Pet. for Recon. at 12-19.

[31] The ICC Engineering Reports is a compendium of data collected by the ICC in the early part of the 20th century, detailing the material quantities required to build most rail lines in place at that time.

[32] BNSF Pet. for Recon. at 12-15.

matter. The evidence BNSF now offers was available when the record was developed and therefore should have been submitted at that time. See TMPA at 3.

2. Earthwork Unit Costs

BNSF asks us to reconsider the type of equipment that would be needed for excavation. First, it argues that the 11 cubic yard (CY) scraper that was included in the evidence we accepted, see June '04 Decision at 95-96, could not handle much of the soils that would be encountered along the SARR route and that a 14 CY self-propelled scraper would be needed.[33] However, BNSF failed to provide soil studies to support its claims regarding the nature of the soil or evidence supporting the need for such special equipment for the type of soil it claims is present.

BNSF also asks us to reconsider our decision to exclude from the solid rock excavation costs the costs for secondary handling of large boulders that result from blasting and drilling.[34] For solid rock excavation and blasting, Xcel used the average of the Means[35] cost for "bulk drilling and blasting" and "drilling and blasting over 1,500 cubic yards." We concluded that Xcel's unit cost for large-scale blasting operations and removal of blasted materials was feasible and supported. BNSF had contended that we must also include additional costs to reduce the size of large boulders resulting from large-scale blasting operations. However, the only evidence BNSF offered to support this expense item was a series of photos from a recent construction blasting site in Blackhawk, CO.[36] BNSF did not demonstrate that the Blackhawk construction project was similar to the blasting operation envisioned here. Moreover, the Means unit cost for blasting would seem to reflect the entire cost of large blasting operations, the goal of which is to reduce the rock to rubble, not to boulders which themselves would require more blasting at an additional expense. Thus, we see no reason to reconsider our decision on this issue.

3. Materials Transportation Unit Costs

In the June '04 Decision at 107, we accepted Xcel's materials transportation unit costs. In doing so, we inadvertently attributed to BNSF what was actually Xcel's position: that the SARR

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[33] Id. at 15-16.

[34] Id. at 16.

[35] R.S. Means Manual (Means) is a set of nationwide standardized unit costs that is often relied upon in SAC cases to estimate construction costs.

[36] BNSF Reply WP. III-F-00392-394.

would route materials over its yet-to-be constructed line. As BNSF points out,[37] it is not proper to assume that a SARR could transport material over the very line that the SARR would need to build.[38] Therefore, we will modify our SAC calculations to use BNSF's evidence on the unit costs for materials transportation.

4. Side Slope and Roadbed Width

BNSF also asks us to reconsider our acceptance of the side slope and roadbed width that Xcel proposed for the SARR.[39] BNSF argues that, because a SARR must provide the same level of service as the defendant carrier, it could not have roadbed infrastructure that is inferior to what the defendant has in place. But under the SAC test, so long as what is proposed for the SARR is reasonable and feasible, it need not replicate a particular characteristic of the incumbent's line. Here, as discussed in the June '04 Decision at 90-92, use of a 1.5:1 side slope ratio is reasonable and consistent with precedent,[40] and BNSF has failed to rebut the presumption that a 24-foot roadbed width—which BNSF itself has in some places—would not be reasonable for those portions of the SARR's lines for which Xcel's design specified that width.

5. Guernsey Daylight Tunnel # 2

In the June '04 Decision at 93, we used BNSF's cost evidence for daylighting the Gurnsey Tunnel #2, but we excluded costs for side slope protection and a raised track bed because BNSF had failed to make Xcel aware of these project components during discovery. BNSF seeks reconsideration of our decision to exclude these costs, claiming that Xcel had not sought information on daylighting Guernsey Tunnel #2 in discovery.[41] However, as Xcel shows, based on its discovery requests BNSF should have produced this information.[42]

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[37] Id. at 17.

[38] See TMPA at 137.

[39] BNSF Pet. for Recon. at 90-92.

[40] See TMPA at 116 n.183; FMC Wyo. Corp. v. Union Pac. R.R., STB Docket No. 42022 (STB served May 12, 2000) at 111-12.

[41] BNSF Pet. for Recon. at 18-19.

[42] Xcel Reply to BNSF Pet. for Recon. at 22-23.

F. Variable Cost Calculation

We may consider the reasonableness of a challenged rate only if the carrier has market dominance over the traffic involved,[43] and the statute precludes a finding of market dominance where the carrier shows that the revenues produced by the movements at issue are less than 180% of the carrier's variable costs for providing that service.[44] Because the 180% revenue-to-variable cost (R/VC) level serves as a floor for seeking regulatory rate relief, we cannot prescribe a rate below that level.[45] Accordingly, the maximum reasonable rate that was prescribed in this case is the higher of the rate level produced by the SAC analysis or the regulatory floor (the 180% R/VC rate level).

In its petition for reconsideration, Xcel raises several challenges to the way we calculated the variable costs of the challenged movements, in an effort to lower the 180% R/VC calculation.[46] However, the revised SAC rates shown in **Table 2**, infra, would remain well above the regulatory floor, as previously calculated in the June '04 Decision at 119-146, over the entire 20-year analysis period. Thus, Xcel's variable cost arguments would not affect the outcome of this proceeding and need not be addressed here.

V. Recalculated SAC Rates

As discussed above, upon reconsideration we revise our SAC analysis in this case in three respects: we modify the peaking factor used to estimate the number of locomotives that the SARR would need, we revise the revenue projections for three movements in the traffic group, and we correct our estimate of the cost to transport materials to the construction site. In accordance with our precedent,[47] we also update the cost-of-equity computation in these proceedings to incorporate the findings in Railroad Cost of Capital–2002, Ex Parte No. 558 (Sub-No. 6) (STB served June 19, 2003) and Railroad Cost of Capital–2003, Ex Parte No. 558 (Sub-No. 7) (STB served June 28, 2004). Finally, we grant Xcel's request to update the inflation indices to incorporate the latest findings in Quarterly Rail Cost Adjustment Factor, Ex Parte No. 290 (Sub-No. 5) (2005-1) (STB served

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[43] 49 U.S.C. 10701(d)(1), 10707(b).

[44] 49 U.S.C. 10707(d)(1)(A).

[45] See West Texas Util. Co. v. Burlington N. R.R., 1 S.T.B. 638, 677 (1996).

[46] Xcel Pet. for Recon. at 16.

[47] See, e.g., Duke Energy Corp. v. Norfolk S. Ry., STB Docket No. 42069 (STB served Oct. 20, 2004) at 19-20 (reconsideration decision).

Dec. 20, 2004). We continue to escalate the challenged rates using RCAF-U, as the parties had agreed to this approach and such escalation is consistent with the terms of the tariff itself.

To determine the resulting revised SAC rates, we perform a revised discounted cash flow (DCF) analysis to compare the stream of revenues that would be generated by the traffic group to the revised stream of costs that the SARR would incur, discounted to a common point in time. The DCF model distributes the total cost of the SARR over the 20-year analysis period and determines the amount of revenues that would be needed by the SARR to cover its operating expenses, meet its tax obligations, recover its investment, and obtain an adequate return on that investment.

The results of our revised DCF calculations are shown in **Table 1** below. As that table shows, over the 20-year SAC analysis period the present value of the expected revenues from the traffic in the stand-alone group would exceed the present value of the SARR's revised revenue requirements by approximately $619 million.

Table 1
Revised Discounted Cash Flow Analysis
($ millions)

Year	SARR Revenue Requirements	BNSF Forecast Revenues	Difference	Present Value	Cumulative Difference
2001	$301	$341	$41	$40	$40
2002	$298	$359	$61	$55	$95
2003	$317	$367	$50	$40	$135
2004	$324	$379	$54	$38	$173
2005	$340	$404	$63	$40	$213
2006	$351	$424	$73	$42	$255
2007	$360	$435	$75	$39	$294
2008	$365	$438	$73	$34	$328
2009	$375	$453	$78	$33	$361
2010	$384	$466	$82	$31	$392
2011	$393	$477	$84	$29	$421
2012	$403	$488	$85	$26	$447
2013	$412	$502	$90	$25	$472
2014	$422	$514	$93	$23	$495
2015	$432	$532	$100	$26	$522
2016	$443	$554	$111	$23	$545
2017	$453	$564	$111	$21	$565
2018	$463	$578	$115	$19	$585
2019	$475	$592	$118	$18	$602
2020	$486	$609	$123	$17	$619

Table 2 sets forth the revised SAC rates. The reparations and prescription ordered in the June '04 Decision are revised here to reflect the revised SAC rates.

Table 2
Revised SAC Rate

Year	Steel Car Tariff Rate	Alum. Car Tariff Rate	SAC Rate Reduction	Steel Car SAC Rate	Alum. Car SAC Rate
2001 1Qtr	$9.24	$8.98	12.37%	$8.10	$7.87
2001 2Qtr	9.16	8.91	12.56%	8.01	7.79
2001 3Qtr	9.19	8.93	12.20%	8.07	7.84
2001 4Qtr	9.18	8.92	12.03%	8.08	7.85
2002 1Qtr	9.16	8.90	17.97%	7.51	7.30
2002 2Qtr	9.16	8.90	18.34%	7.48	7.27
2002 3Qtr	9.16	8.90	18.12%	7.50	7.29
2002 4Qtr	9.16	8.90	15.98%	7.70	7.48
2003	9.34	9.08	13.94%	8.04	7.81
2004	9.55	9.28	14.83%	8.13	7.90
2005	9.78	9.51	16.19%	8.20	7.97
2006	10.05	9.77	17.81%	8.26	8.03
2007	10.28	9.99	17.84%	8.45	8.21
2008	10.52	10.22	17.21%	8.71	8.46
2009	10.77	10.47	17.75%	8.86	8.61
2010	11.01	10.70	18.21%	9.00	8.75
2011	11.26	10.94	18.21%	9.21	8.95
2012	11.52	11.20	17.99%	9.45	9.19
2013	11.78	11.45	18.43%	9.61	9.34
2014	12.05	11.72	18.61%	9.81	9.54
2015	12.33	11.99	21.84%	9.64	9.37
2016	12.61	12.23	20.59%	10.02	9.71
2017	12.90	12.54	20.33%	10.28	9.99
2018	13.20	12.83	20.58%	10.48	10.19
2019	13.50	13.13	20.49%	10.74	10.44
2020	13.82	13.43	20.80%	10.94	10.64

Rates shown in columns 2 & 3 below the bold line are based on applying the RCAF-U forecast thereafter to the challenged rate.

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

It is ordered:

1. The petitions for reconsideration are granted to the extend set forth in this decision and denied in all other respects.

2. The rate prescription and reparations award in this case are revised as discussed above and set forth in **Table 2** of this decision.

3. This decision is effective February 18, 2005.

By the Board, Chairman Nober, Vice Chairman Buttrey, and Commissioner Mulvey.

Vernon A. Williams
Secretary