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SURFACE TRANSPORTATION BOARD

DECISION

STB Docket No. 42069

DUKE ENERGY CORPORATION
v.
NORFOLK SOUTHERN RAILWAY COMPANY

Decided: February 3, 2004

The Board makes certain technical corrections to the decision issued in this proceeding on November 6, 2003.

In a decision served November 6, 2003 (Nov. 6 Decision), the Board found that Duke Energy Corporation (Duke) had failed to establish that the rates of Norfolk Southern Railway Company (NS) for movements of coal from Central Appalachian mines to several of Duke's North Carolina power plants are unreasonably high. On November 18, 2003, Duke filed a petition asking the Board to correct various claimed technical errors in the stand-alone cost (SAC) calculations contained in the Nov. 6 Decision and to stay the decision pending resolution of the petition. NS has replied to that petition, and Duke has submitted a letter clarifying its positions and responding to the issues raised by NS in its reply. In a decision served on November 23, 2003, the Board granted Duke's request to stay the Nov. 6 Decision until the Board addresses Duke's petition. In this decision, the Board addresses that petition, which it grants in part for the reasons discussed below.

BACKGROUND

In its complaint filed on December 19, 2001, Duke challenged the reasonableness of the rates charged by NS for the movement of coal from various mines in Virginia, West Virginia, and Kentucky to Duke's Allen, Belews Creek, Buck, and Dan River electricity generating facilities in North Carolina. Using the SAC test,[1] Duke designed a stand-alone railroad (SARR), the Appalachia & Carolina Central Railroad (ACC), that it asserted could profitably provide service to Duke (along with selected other traffic) at rates lower than those charged by NS. In a voluminous record, the parties presented evidence on the cost to build and operate such a rail system and the revenues that such a system would

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[1] See Coal Rate Guidelines Nationwide, 1 I.C.C.2d 520 (1985), aff'd sub nom. Consolidated Rail Corp. v. United States, 812 F.2d 1444 (3d Cir. 1987).

generate over a 20-year period. After examining the evidence, the Board found that the revenue stream that would be generated by the traffic the ACC was designed to serve would not exceed the cost to build and profitably operate the ACC. Rather, the Board concluded that, over the 20-year SAC analysis period, the ACC would experience a cumulative revenue shortfall of approximately $550 million.

Duke asserts that the Nov. 6 Decision contained computational errors related to the cost of bridge abutments, retaining walls, tunnel investment, tunnel daylighting, mobilization, and maintenance-of-way (MOW), as well as errors related to the ACC's projected revenues and operating expenses over the 20-year analysis period. NS agrees that the Nov. 6 Decision contains computational errors as to all of those items except operating expenses. On certain items, however, NS's quantification of the errors differs from Duke's. NS also asserts that the decision contained an additional computational error relating to the earthwork costs that the ACC would incur during construction of the SARR. Duke agrees with NS's revised computation for all items except tunnel daylighting costs. Thus, the only disputed matters here relate to tunnel daylighting and the development of operating expenses.

DISCUSSION

In complex rate cases such as this, the Board encourages parties to bring computational or technical errors to its attention. See, e.g., West Texas Utilities v. Burlington N.&S.F. Ry., STB Docket No. 41191 (STB served May 29, 2003). The record in a SAC case includes thousands of pages of evidence and workpapers, along with massive electronic spreadsheets which are used by the parties to calculate the costs to build and operate the ACC. As a practical matter, the Board cannot verify each individual calculation performed by those spreadsheets. Rather, the Board generally relies on the adversarial process to bring computational problems in the spreadsheets to light. Unfortunately, however, as this case shows, the parties do not always detect computational errors in the spreadsheets prior to the close of the record and the issuance of the Board's decision. Nevertheless, it is not too late to correct those errors now.

Accordingly, in this decision the Board modifies its SAC calculations to make the agreed-upon corrections. These include: reducing the bridge abutment costs by $278.2 million; reducing retaining wall costs by $88.9 million; reducing tunnel investment costs by $58.6 million; reducing mobilization costs by approximately $1 million; increasing earthwork costs by $12.8 million; and increasing annual MOW expenses by $1.8 million. As discussed below, the Board in this decision is modifying the methodology for calculating tonnage and revenues, and the adjustments adopted by the Board are reflected in the tables found later in this decision.

A. Tunnel Daylighting

The parties agree that the Nov. 6 Decision contained computational errors relating to the cost to cut through hilly terrain (tunnel daylighting), but they disagree on the magnitude of those errors. Duke argues that the costs were overstated by $20.6 million, while NS contends that they were overstated by $21.3 million. The disagreement stems from uncertainty as to how the Board calculated the amount of excavation that would be required to daylight tunnels.

To develop the amount of excavation required, the Board accepted Duke's 0.5:1 side slope proposal for daylighted tunnels and NS's evidence that double-tracking would increase excavation by 75%. The Board also assumed that the roadbed width for single-tracked cuts would be 28 feet wide (as Duke had proposed in its opening evidence and as NS had accepted in its reply evidence). Accordingly, tunnel daylighting costs used in the Nov. 6 Decision will be reduced by $21.6 million.

B. Cost Indexation

The ACC's operating costs were developed for a base year (2002) and then indexed for the remaining years of the analysis (2003-2021). The Board publishes two versions of the rail cost adjustment factor (RCAF), a quarterly index of changes in railroad costs. The RCAF-A factors into the cost index the effect of changes in railroad productivity on railroad costs, whereas the RCAF-U does not make such an adjustment. See 49 U.S.C. 10708. Duke argues that the RCAF-A should have been used to index base year operating costs over the 20-year analysis period, and it seeks to characterize the use of the RCAF-U for indexing the cost of the ACC in the Nov. 6 Decision as a technical error.

Rather than relating to a computational error, Duke's argument concerns an express Board ruling in the Nov. 6 Decision rejecting Duke's arguments for indexing costs using the RCAF-A. The Board concluded that, absent any evidence on likely productivity improvements for the ACC, the RCAF-U should be used. See Nov. 6 Decision at 37. Any argument that the RCAF-A is the more appropriate index to use in the circumstances of this case should be presented in a petition for reconsideration. (Both parties have indicated that they plan to file petitions for reconsideration after the Board rules on the instant petition to correct technical errors.)

C. Additional Matters

In addition to the errors pointed out by the parties, there are two other computations that need to be modified, as noted in the Board's recent decision in Carolina Power & Light Co. v. Norfolk Southern Ry., STB Docket No. 42072 (STB served Dec. 23, 2003) (CPL/NS). The SAC analysis in that case was based on a SARR that would replicate much of the same parts of the NS rail system as the ACC, and the parties there used similar procedures to develop much of the evidence, including projecting tonnages and revenues of the SARR. The Board there concluded that the procedure used to project tonnages and revenues was deficient and, in correcting that procedure, stated that the corrected procedure would be applied to this case as well in this decision. See CPL/NS at 20.

1. Tonnage Forecast

In determining coal tonnage, the Nov. 6 Decision applied different approaches for different time periods. For the first part of 2002, actual NS traffic movements, which were available in the record, were used. For the second half of 2002 through the end of 2004, NS's internal business forecasts for the challenged origin/destination (O/D) pairs were used. For 2005 and beyond, the most recent tonnage forecasts for the Central Appalachian region obtained from the Energy Information Administration (EIA) were used. See Nov. 6 Decision at 59-62.

As noted in CPL/NS, however, NS's projections were understated because they were limited to movements from the same origin mine to the same destination in both 2001 and 2002. CPL/NS at 16. In reality, the coal business in the Central Appalachian region is constantly shifting. A customer may ship from one mine in one year, then shift to another the next year, and back to the first mine in the following year. Consequently, to restrict the traffic group to the exact origin/destination pair matches reflected in one particular year, as NS did, is unduly restrictive and does not fairly reflect the traffic that would likely be available to the SARR in any given year. Moreover, given the constantly changing traffic patterns reflected in the Central Appalachian region, such an approach would virtually ensure a decline in tonnage. Under that approach, the SARR would lose any traffic that shifts to another mine, even when that alternate mine would also be served by the SARR; and the SARR would not get the benefit of traffic that shifted from a mine not served by it to a mine that would be served by the SARR. Thus, that approach understates the actual tonnage volumes the SARR could expect to haul.

The Board found that the better approach is to view the coal traffic in the group selected by the complainant as meant to encompass all coal traffic served by the defendant that moves over the lines replicated by the SARR and to view the particular coal traffic that moved over those lines in 2001 as representative of the aggregate traffic that would be expected to move on the SARR in future years. Thus, the fact that some traffic would not continue to move from a specific mine to a specific destination throughout the SAC analysis period does not mean that other traffic would not move from the mines served by the SARR.

Moreover, there is no reason to assume that changes in traffic levels from the mines that would be served by the SARR would be any different from the average changes that the EIA is predicting for the Central Appalachian region as a whole. Thus, the Board treated the 2001 actual traffic group as a representative snapshot of the traffic that the SARR could carry over the 20-year period of the SAC analysis.

Accordingly, to be consistent with CPL/NS, the corrected analysis here uses 2001 tonnage, indexed to 2002 (the first year of operation for the ACC) based on the actual rate of change reported by the EIA for Central Appalachian region coal tonnage from 2001 to 2002. (The fact that 2001 traffic levels were abnormally high and declined in 2002 is reflected in the EIA adjustment.) The 2003 and 2004 traffic levels are also measured using EIA forecasts, rather than NS's internal business forecasts, in view of the demonstrated inaccuracy of the NS forecasts and the general preference for reliance on official, neutral governmental forecasts. (The EIA 2003 forecasts continue to be used for 2005 and beyond.)

Table 1 shows the revised tonnage estimates used here.

Table 1
Revised Tonnage Estimates

Year	Tons
2002	79,995,487
2003	82,531,867
2004	82,632,231
2005	82,844,820
2006	84,611,184
2007	87,124,736
2008	88,118,902
2009	87,634,325
2010	87,012,189
2011	86,433,822
2012	85,130,151
2013	86,071,170
2014	86,296,264
2015	87,356,083
2016	86,571,380
2017	86,596,390
2018	86,030,528
2019	86,199,349
2020	85,993,012
2021	85,183,299

2. Revenue Forecasts

In projecting the revenues associated with the tonnage forecasts for traffic not currently moving under contract and for traffic moving after expiration of the contract, the Board, in the Nov. 6 Decision, again applied different approaches for different time periods. For traffic moving prior to 2005, the applicable growth rate from NS's internal business forecasts was used. From 2005 onward, the Central Appalachian rate forecasts contained in a 2003 report of EIA (EIA 2003) were used. See Nov. 6 Decision at 62-64. To be consistent with the revised methodology for forecasting tonnage, as in CPL/NS, once a contract expires the EIA 2003 Central Appalachian rate forecasts are applied to that movement. This is different from the Nov. 6 Decision, where the rate forecasts contained in NS's internal forecasts were applied for non-contract traffic moving prior to 2005.

Table 2 shows the revised revenues figures used here.

Table 2
Revised Revenue Estimates

Year	Revenue
2002	$494,323,201
2003	$553,566,192
2004	$569,839,844
2005	$597,861,299
2006	$618,833,026
2007	$645,554,856
2008	$660,647,966
2009	$666,368,701
2010	$669,421,418
2011	$676,024,077
2012	$678,122,016
2013	$696,855,424
2014	$711,866,357
2015	$733,813,681
2016	$741,231,620
2017	$757,619,769
2018	$768,422,066
2019	$787,873,918
2020	$801,108,547
2021	$811,554,164

RESULTS OF CORRECTED ANALYSIS

Applying all of the changes discussed above results in the corrected discounted cash flow (DCF) analysis shown in **Table 3**. Based on **Table 3**, it now appears that, over the 20-year SAC analysis period, the ACC would earn slightly more than necessary to cover all its costs and that, under the SAC test, some rate relief is in order for Duke movements in certain years. However, both parties have indicated that they intend to file petitions for reconsideration of other aspects of the Nov. 6 Decision. Because those petitions could lead to further modifications of the SAC analysis in this case, it is possible that these numbers could be further revised. Therefore, for administrative efficiency, the Board will further stay the Nov. 6 Decision, as modified by this decision, while it considers those forthcoming petitions before quantifying and ordering rate relief in this case. This procedure should result in a more orderly administrative process.

Table 3
Revised Cash Flow

Year	Capital Costs & Taxes	Annual Operating Costs	Total Annual Costs	Annual Revenues	Annual Over/(Under) Payment (Current)	Annual Over/(Under) Payment (Present Value)	Cumulative Over/(Under) Payment (Present Value)
2002	294.2	231.3	525.5	494.3	(31.1)	(29.6)	(29.6)
2003	303.1	230.0	533.1	553.6	20.4	17.6	(12.0)
2004	312.5	234.7	547.2	569.8	22.6	17.6	5.6
2005	322.4	240.9	563.3	597.9	34.6	24.4	29.9
2006	332.7	250.7	583.4	618.8	35.5	22.6	52.5
2007	342.9	261.4	604.4	645.6	41.2	23.7	76.3
2008	353.2	269.2	622.4	660.6	38.2	19.9	96.2
2009	363.8	274.1	637.8	666.4	28.5	13.5	109.7
2010	375.1	279.3	654.4	669.4	15.0	6.4	116.1
2011	387.1	284.9	671.9	676.0	4.1	1.6	117.7
2012	399.4	289.2	688.6	678.1	(10.5)	(3.7)	114.0
2013	412.2	299.1	711.4	696.9	(14.5)	(4.6)	109.4
2014	425.5	308.4	733.8	711.9	(22.0)	(6.3)	103.1
2015	439.2	319.8	759.0	733.8	(25.1)	(6.5)	96.6
2016	453.3	326.5	779.8	741.2	(38.6)	(9.0)	87.6
2017	468.0	336.2	804.2	757.6	(46.6)	(9.9)	77.7
2018	483.1	345.2	828.3	768.4	(59.9)	(11.5)	66.2
2019	498.8	356.6	855.4	787.9	(67.5)	(11.7)	54.5
2020	515.0	367.6	882.5	801.1	(81.4)	(12.8)	41.8
2021	531.7	377.2	909.0	811.6	(97.4)	(13.8)	27.9

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

It is ordered:

1. The Nov. 6 Decision is modified as discussed above.

2. Petitions for reconsideration of the Nov. 6 Decision, as modified, are due by February 23, 2004.

3. The Nov. 6 Decision, as modified, is further stayed pending Board action on any timely filed petitions for reconsideration.

4. This decision is effective on February 3, 2004.

By the Board, Chairman Nober.

Vernon A. Williams
Secretary