

SURFACE TRANSPORTATION BOARD

DECISION

STB Ex Parte No. 646 (Sub-No. 1)

SIMPLIFIED STANDARDS FOR RAIL RATE CASES

Decided: August 14, 2009

In a decision served in this proceeding on September 5, 2007 (Simplified Standards), the Board modified its simplified rail rate guidelines, creating a simplified stand-alone cost (Simplified-SAC) approach for medium-size rail rate disputes and revising its three-benchmark approach for smaller rail rate disputes. For Simplified-SAC cases, the Board established procedures to reduce cost and complexity, including that findings in prior full stand-alone cost (Full-SAC) cases are used in parts of the road property investment (RPI) analysis. Simplified-SAC cases utilize a rolling average from prior cases, such that as new Full-SAC cases are issued by the Board, older cases are dropped from the comparison in subsequent proceedings. See Simplified Standards, at 38.

The Board has recently completed two Full-SAC cases, including administrative appeals. See Western Fuels Association, Inc., and Basin Electric Power Cooperative v. BNSF Railway Company, STB Docket No. 42088 (Sub-No. 1) (STB served Feb. 18, 2009); AEP Texas North Company v. BNSF Railway Company, STB Docket No. 41191 (Sub-No. 1) (STB served May 15, 2009). In accordance with Simplified Standards, these two cases replace the two oldest Full-SAC cases in the RPI rolling average. The tables in Appendix A of this decision reflect this change and will replace tables A-2 through A-13 in Simplified Standards. These tables shall be used in Simplified-SAC RPI analyses until further updated.<sup>1</sup>

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

It is ordered:

1. The tables in Appendix A replace tables A-2 through A-13 in Simplified Standards.

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<sup>1</sup> The cases within the tables in Appendix A are in chronological order by decision date, with the oldest case listed first.

2. This decision is effective on its service date.

By the Board, Leland L. Gardner, Director, Office of Economics, Environmental Analysis, and Administration.

Anne K. Quinlan  
Acting Secretary

**Appendix A – Road Property Investment**

**Table A-2**

**Comparison of Per Acre Land Costs by Category**

	<b>Cost Index Year</b>	<b>Agricultural</b>	<b>Residential</b>	<b>Industrial</b>	<b>Commercial</b>
<b>CP&amp;L</b>	2002	\$3,932	\$4,913	\$83,253	\$130,900
<b>Duke/CSXT</b>	2002	\$4,141	\$6,982	\$39,842	\$94,656
<b>Xcel</b>	2001	\$446	\$22,157	\$13,797	\$42,549
<b>Otter Tail</b>	2002	\$533	\$13,006	\$14,844	\$32,423
<b>AEP Texas</b>	2000	\$597	\$11,733	\$93,408	\$51,602
<b>WFA</b>	2004	\$620	\$4,225	\$10,385	\$10,385

**Table A-3**

**Comparison of Earthwork Unit Costs (per cubic yard)**

	<b>Common</b>	<b>Loose</b>	<b>Solid</b>	<b>Borrow</b>	<b>Fine Grading</b>
<b>CP&amp;L</b>	\$3.34	\$8.81	\$9.20	\$9.89	
<b>Duke/CSXT</b>	\$3.29	\$8.67	\$9.09	\$9.81	
<b>Xcel</b>	\$3.43	\$8.00	\$9.57	\$12.26	\$0.15 slope \$0.32 subgrade
<b>Otter Tail</b>	\$3.90	\$6.57	\$9.22	\$12.35	\$0.33
<b>AEP Texas</b>	\$3.42	\$6.85	\$8.89	\$12.10	\$0.33
<b>WFA</b>	\$2.17	\$8.69	\$10.55	\$13.69	

**Table A-4**

**Comparison of Other Earthwork Unit Costs**

	<b>Total Cost (\$ Millions)</b>	<b>Route Miles</b>	<b>Cost per Route Mile</b>
<b>CP&amp;L</b>	\$79.1	818	\$96,555
<b>Duke/CSXT</b>	\$93.8	1,197	\$78,399
<b>Xcel</b>	\$21.7	367	\$59,027
<b>Otter Tail</b>	\$43.8	1,208	\$36,260
<b>AEP Texas</b>	\$34.9	1,169	\$29,904
<b>WFA</b>	\$13.2	301	\$43,623

**Table A-5****Comparison of Track Construction Costs**

	<b>Total Cost (\$ Millions)</b>	<b>Track Miles</b>	<b>Cost per Track Mile</b>
<b>CP&amp;L</b>	\$508.3	1,073	\$473,693
<b>Duke/CSXT</b>	\$712.4	1,510	\$471,816
<b>Xcel</b>	\$358.1	678	\$528,123
<b>Otter Tail</b>	\$744.5	1,563	\$476,342
<b>AEP Texas</b>	\$889.5	1,730	\$514,097
<b>WFA</b>	\$250.2	444	\$563,989

Note: Ballast and sub-ballast costs excluded from the above chart.

**Table A-6****Comparison of Eastern Bridge Construction Costs  
cost per linear foot per track**

	<b>Type 1</b>	<b>Type 2</b>	<b>Type 3</b>
<b>Duke/NS</b>	\$6,044	\$3,405	\$3,813
<b>CP&amp;L</b>	\$5,790	\$3,967	\$3,701
<b>Duke/CSXT</b>	\$4,892	\$3,924	\$3,993

Note: The cost index year for Duke/NS is 2002.

**Table A-7****Comparison of Western Bridge Construction Costs  
cost per linear foot per track**

	<b>Type 1</b>	<b>Type 2</b>	<b>Type 3</b>
<b>TMPA</b>	\$2,225	\$3,862	\$4,409
<b>Xcel</b>	\$1,793	\$2,690	\$4,427
<b>Otter Tail</b>	\$2,315	\$2,552	\$4,300
<b>AEP Texas</b>	\$5,976	\$4,019	\$3,150
<b>WFA</b>	\$3,345	\$3,070	\$4,077

**Table A-8**

**STB Derived Trend Curve for Western Bridges**

	<b>x = bridge length {feet}</b> <b>y = \$/linear ft per track</b>
<b>Western SAC Cases</b>	$y = -0.0075x^3 + 6.3024x^2 + 2566.9x + 14488$

Note: This equation gives a unit cost indexed to 2005.  
 It is not a case specific index which is required for determining unit costs for other investment items.

**Table A-9**

**Comparison of Culvert Construction Costs**

Input units     Pipe cross-sectional area  
 for Corrugated Metal Pipe & Structural Steel Plate; x {sq. in.}  
 for Reinforced Concrete Box; x {sq. ft.}

Output units    y {\$/LF}

	<b>Corrugated Metal Pipe</b>	<b>Reinforced Concrete Box</b>	<b>Structural Steel Plate</b>
<b>CP&amp;L</b>	$y=0.025x+11.322$	$y=4.563+198.47$	$y=0.0161x+163.875$
<b>Duke/CSXT</b>	$y=0.0276x+8.89$	$y=8.671x+134.295$	$y=0.0161x+145.66$
<b>Xcel</b>	$y=0.0304x+26.399$	$y=3.886x+286.052$	$y=0.00934x+155.158$
<b>Otter Tail</b>	$y=0.0392x+17.606$	$y=4.017x+172.3$	$y=0.0171x+72.524$
<b>AEP Texas</b>	$y = 0.0185x + 48.0701$	$y = 6.2711x + 335.3920$	$y = 0.0220x + 0$
<b>WFA</b>	$y = 0.0254x + 71.4752$	$y = 8.1320x + 810.9174$	$y = 0.0209x + 399.6942$

**Table A-10****Comparison of Signaling & Communications Costs (with CTC)**

	<b>Total Cost (\$ Millions)</b>	<b>Route Miles</b>	<b>Cost per Route Mile</b>
<b>CP&amp;L</b>	\$138.7	818	\$169,578
<b>Duke/CSXT</b>	\$187.8	1,197	\$156,914
<b>Xcel</b>	\$76.8	367	\$209,142
<b>Otter Tail</b>	\$203.8	1,208	\$168,669
<b>AEP Texas</b>	\$145.9	1,169	\$124,783
<b>WFA</b>	\$61.7	301	\$204,797

**Table A-11****Comparison of Building & Facilities Costs  
per ton of total traffic volume**

	<b>Total Cost (\$ Millions)</b>	<b>Forecast Volume (Million Tons)</b>	<b>Cost per Ton</b>
<b>CP&amp;L</b>	\$37.9	72.3	\$0.524
<b>Duke/CSXT</b>	\$62.0	104.9	\$0.591
<b>Xcel</b>	\$41.2	105.3	\$0.391
<b>Otter Tail</b>	\$51.3	219.6	\$0.234
<b>AEP Texas</b>	\$49.4	222.5	\$0.222
<b>WFA</b>	\$36.6	68.3	\$0.535

**Table A-12****Comparison of Public Improvement Costs (Without Grade Separations)**

	<b>Total Cost (\$ Millions)</b>	<b>Route Miles</b>	<b>Cost per Route Mile</b>
<b>CP&amp;L</b>	\$7.6	818	\$9,313
<b>Duke/CSXT</b>	\$3.7	1,197	\$3,549
<b>Xcel</b>	\$12.3	367	\$33,597
<b>Otter Tail</b>	\$29.5	1,208	\$24,391
<b>AEP Texas</b>	\$42.9	1,169	\$36,706
<b>WFA</b>	\$11.5	301	\$38,194

**Table A-13****Comparison of Grade Separation Costs**

	<b>Total Cost (\$ Millions)</b>	<b>Number Separations</b>	<b>Cost per Separation</b>
<b>CP&amp;L</b>	\$3.3	6.0	\$554,317
<b>Duke/CSXT</b>	\$3.7	7.9	\$469,857
<b>Xcel</b>	\$8.8	16.3	\$539,225
<b>Otter Tail</b>	\$9.6	17.0	\$561,877
<b>AEP Texas</b>	\$25.3	41.2	\$613,229
<b>WFA</b>	\$13.5	17.2	\$784,235