**PUBLIC VERSION**

**BEFORE THE**
**SURFACE TRANSPORTATION BOARD**

| | | |
|---|---|---|
| CONSUMERS ENERGY COMPANY | ) | |
| Complainant, | ) | |
| v. | ) | Docket No. NOR 42142 |
| CSX TRANSPORTATION, INC. | ) | |
| Defendant. | ) | |

# REBUTTAL EVIDENCE OF COMPLAINANT

## NARRATIVE

**(Volume 2 of 2)**


CONSUMERS ENERGY COMPANY

Catherine M. Reynolds
Senior Vice President and General Counsel
Eric V. Luoma
Assistant General Counsel
Consumers Energy Company
One Energy Plaza
Jackson, Michigan 49201

Kelvin J. Dowd
Robert D. Rosenberg
Andrew B. Kolesar III
Daniel M. Jaffe
Katherine F. Waring
SLOVER & LOFTUS LLP
1224 Seventeenth St., N.W.
Washington, D.C. 20036

(202) 347-7170

OF COUNSEL:

SLOVER & LOFTUS LLP
1224 Seventeenth St., N.W.
Washington, D.C. 20036


Dated: May 20, 2016

## TABLE OF CONTENTS

## ACRONYMS

The following acronyms are used:

| | |
|---|---|
| AAR | Association of American Railroads |
| AEI | Automatic Equipment Identifier |
| AEO | 2015 Annual Energy Outlook Update Forecast |
| AII-LF | All-Inclusive Less Fuel Index, published by AAR |
| AMTO | Assistant Manager of Train Operations |
| ATC | Average Total Cost |
| ATF | Across-the-Fence |
| BNSF | BNSF Railway Company |
| BRC | Belt Railway Company of Chicago |
| CAPM | Capital Asset Pricing Model |
| CERR | Consumers Energy Railroad |
| CMM | Coal Marketing Module |
| CMP | Constrained Market Pricing |
| CN | Canadian National Railway |
| COC | Cost of Capital |
| COD | Cost of Debt |
| COE | Cost of Equity |
| CP | Canadian Pacific Railway |
| CSXIT | CSX Intermodal Terminals, Inc. |
| CSXT | Defendant CSX Transportation, Inc. |
| CTC | Centralized Traffic Control |
| CWR | Continuous Welded Rail |
| DCF | Discounted Cash Flow |
| DOT | Department of Transportation |
| DP | Distributed Power Configuration |
| DTL | Direct To Locomotive |
| EIA | Energy Information Administration |
| EPA | Environmental Protection Agency |
| ERM | Environmental Resources Management |
| FAS-PAS | Fail-Safe Audible Signal—Power Activated Switch |
| FED | Failed/Dragging Equipment Detector |
| FRA | Federal Railroad Administration |
| GAAP | Generally Accepted Accounting Principles |
| GTM | Gross Ton-Mile |
| GWR | Gross Weight on Rail |
| HDF | On-Highway Diesel Fuel Index |
| IHB | Indiana Harbor Belt Railroad |
| MERC | Midwest Energy Resources Company |
| MGT | Million Gross Tons |

| | |
|---|---|
| MISO | Mid-Continent Independent System Operator |
| MLO | Manager of Locomotive Operations |
| MMM | Maximum Markup Methodology |
| MOW | Maintenance of Way |
| MRP | Market Risk Premium |
| MSDCF | Multi-Stage Discounted Cash Flow |
| MSRR | Michigan Shore Railroad |
| MTO | Manager of Train Operations |
| NS | Norfolk Southern Railway Company |
| PPI | Producer Price Index |
| PRB | Powder River Basin |
| PTC | Positive Train Control |
| RCAF-A | Rail Cost Adjustment Factor, adjusted for productivity |
| RCAF-U | Rail Cost Adjustment Factor, unadjusted for productivity |
| ROI | Return On Net Investment |
| ROW | Right of Way |
| R/VC | Revenue-to-Variable Cost |
| RSIA | Rail Safety and Improvement Act of 2008 |
| RTC | Rail Traffic Controller Model |
| S&P | Standard & Poor's |
| SAC | Stand-Alone Cost |
| SARR | Stand-Alone Railroad |
| STEO | Short-Term Energy Outlook |
| T&E | Train & Engine |
| UP | Union Pacific Railroad Company |
| URCS | Uniform Railroad Costing System |
| WCTL | Western Coal Traffic League |

## CASE GLOSSARY

The following short form case citations are used:

| | |
|---|---|
| *AEPCO 2002* | *Ariz. Elec. Power Coop., Inc. v. BNSF Ry. & Union Pacific R.R.*, Docket No. 42058 (STB served Aug. 20, 2002) |
| *AEPCO 2011* | *Ariz. Elec. Power Coop., Inc. v. BNSF Ry. & Union Pacific R.R.*, STB Docket No. 42113 (STB served Nov. 22, 2011) |
| *AEP Texas* | *AEP Tex. N. Co. v. BNSF Ry.*, Docket No. 41191 (Sub-No. 1) (STB served Sept. 10, 2007) |
| *APS* | *Ariz. Pub. Serv. Co. and Pacificorp. v. The Atchison, Topeka & Santa Fe Ry.*, 2 S.T.B. 367 (1997) |
| *Cargill* | *Cargill, Inc. v. BNSF Railway*, STB Docket No. 42120 (STB served Aug. 12, 2013) |
| *Coal Rate Guidelines* or *Guidelines* | *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) |
| *Coal Trading* | *Coal Trading Corp. v. The Baltimore & Ohio R.R.*, 6 I.C.C.2d 361 (1990) |
| *CP&L* | *Carolina Power & Light Co. v. Norfolk S. Ry.*, 7 S.T.B. 235 (2003) |
| *Duke/CSXT* | *Duke Energy Corp. v. CSX Transp. Inc.*, 7 S.T.B. 402 (2004) |
| *Duke/NS* | *Duke Energy Corp. v. Norfolk S. Ry.*, 7 S.T.B. 89 (2003) |
| *DuPont/NS* | *E.I. DuPont De Numours and Co. v. Norfolk S. Ry.*, Docket No. 42125 (STB served March 24, 2014, updated Oct. 3, 2014) |
| *Ex Parte No. 664* | *Petition of the Western Coal Traffic League to Institute a Rulemaking Proceeding to Abolish the Use of the Multi-Stage Discounted Cash Flow Model In Determining the Railroad Industry's Cost of Equity Capital*, Ex Parte No. 664 (Sub-No. 2) (pending) |

| | |
|---|---|
| *Ex Parte No. 715* | *Rate Regulation Reforms*, Ex Parte No. 715 (STB served July 18, 2013) |
| *Ex Parte No. 722* | *Railroad Revenue Adequacy*, Ex Parte No. 722 (pending) |
| *FMC* | *FMC Wyo. Corp. v. Union Pac. R.R.*, 4 S.T.B. 699 (2000) |
| *IPA* | *Intermountain Power Agency v. Union Pac. R.R.*, STB Docket No. 42136 (Complaint filed May 30, 2012) |
| *KCP&L* | *Kansas City Power & Light Co. v. Union Pac. R.R.*, STB Docket No. 42095 (STB served May 19, 2008) |
| *Major Issues* | *Major Issues in Rail Rate Cases*, Ex Parte No. 657 (Sub-No. 1) (STB served Oct. 30, 2006) |
| *M&G* | *M&G Polymers USA, LLC v. CSX Transp., Inc.*, NOR 42123 (STB served Sept. 27, 2012, updated Dec. 7, 2012) |
| *Nevada Power II* | *Bituminous Coal - Hiawatha, Utah to Moapa, Nevada,* 10 I.C.C.2d 259 (1994) |
| *OG&E* | *Oklahoma Gas & Electric Co. v. Union Pac. R.R.*, Docket No. 42111 (STB served July 24, 2009) |
| *Otter Tail* | *Otter Tail Power Co. v. BNSF Ry.*, Docket No. 42071 (STB served Jan. 27, 2006) |
| *Sunbelt* | *Sunbelt Chlor Alkali Partnership v. Norfolk S. Ry.*, Docket No. 42130 (STB served June 20, 2014) |
| *TMPA* | *Texas Mun. Power Agency v. Burlington N. and Santa Fe Ry.*, 6 S.T.B. 573 (2003) |
| *TPI* | *Total Petrochemicals & Refining USA, Inc. v. CSX Transp., Inc.*, Docket No. 42121 (Complaint filed May 3, 2010) |
| *WFA I* | *Western Fuels Ass'n, Inc. & Basin Electric Power Coop. v. BNSF Ry.*, STB Docket No. 42088 (STB served Sept. 10, 2007) |
| *WFA II* | *Western Fuels Ass'n, Inc. & Basin Electric Power Coop. v. BNSF Ry.*, Docket No. 42088 (STB served Feb. 18, 2009) |

| | |
|---|---|
| *WPL* | *Wisconsin Power & Light Co. v. Union Pac. R.R.*, 5 S.T.B. 955 (2001) |
| *WTU* | *West Tex. Utils. Co. v. Burlington N. R.R.*, 1 S.T.B. 638 (1996), *aff'd sub nom. Burlington N. R.R. v. STB*, 114 F.3d 206 (D.C. Cir. 1997) |
| *Xcel I* | *Public Service Co. of Colorado d/b/a Xcel Energy v. Burlington N. & Santa Fe Ry.*, 7 S.T.B. 589 (2004) |
| *Xcel II* | *Public Serv. Co. of Colorado d/b/a Xcel Energy v. Burlington N. & Santa Fe Ry.*, Docket No. 42057 (STB served Jan. 19, 2005) |

## III-D Operating Expenses

## III. D. OPERATING EXPENSES

On Opening, Consumers provided for the necessary staffing and operating expenses to support the operations of the CERR. The functions covered included annual operating expenses for equipment, personnel, information technology, maintenance-of-way ("MOW"), taxes, insurance, and loss and damage, together with the development of the related service units and costs.

The expert witnesses responsible for the evidence in Consumers' Opening and again in its Rebuttal, include John Orrison and Robert Holmstrom (Operating and General & Administrative ("G&A") personnel and their equipment needs, and the CERR's outsourcing plan), Joseph Kruzich (IT requirements and costs), Lee Meadows (MOW plan, personnel and costs), and Brian Despard (the balance of Part III-D including, *inter alia*, locomotive and freight car requirements, personnel compensation, outsourcing costs, equipment lease rates and operating unit costs, taxes, loss and damage costs, travel expenses, and insurance costs). On Reply, CSXT raised several operational issues that relate to locomotive counts. As such, Mr. Orrison and Mr. Holmstrom, Consumers' operating experts, also co-sponsor Consumers' Rebuttal on those matters.

In contrast, CSXT's Reply evidence on the operational needs affecting locomotive requirements is not sponsored by any witness with a railroad operations background. Likewise, CSXT's train crew and non-train operating personnel is not sponsored by any witness with railroad operational experience, let alone railroad operational staffing experience.

CSXT also takes positions on Reply that the Board is all too familiar with from other railroads in SAC cases. First, CSXT assumes that virtually all employees must be saddled with three or more layers of management. No matter the function, CSXT adds more supervisors. As explained, herein, the additional management, with one exception, is just fattening the staff without providing for increased functionality. Second, CSXT continues to rehash arguments that the Board has already settled multiple times, such as the number of shifts that a train crew can work. Third, CSXT suggests, just as it did with the operating plan, that the sum of CSXT's criticisms suggest that Consumers' evidence is fatally flawed. Again, CSXT's broad argument is without merit, as are most the changes posited herein.

Consumers' Rebuttal costs reflect minor adjustments to its Opening costs which stem from changes to its RTC Model, as well as several issues that CSXT raised on Reply, as discussed below. Consumers' calculation of the Rebuttal annual operating expenses for 2015, in the CERR's first year of operations, are shown in Rebuttal Table III-D-1 below.

| REBUTTAL TABLE III-D-1<br>CERR 2015 OPERATING EXPENSES<br>($ Millions) | | | | |
|---|---|---|---|---|
| | **Opening** | **Reply** | **Rebuttal** | **Difference (Rebuttal v. Reply)** |
| Locomotive Lease | { } | { } | { } | { } |
| Locomotive Maintenance | { } | { } | { } | { } |
| Locomotive Operations | { } | { } | { } | { } |
| Railcar Lease | $5.0 | $4.7 | $5.1 | $0.4 |
| Materials & Supply Operating | $0.6 | $0.7 | $0.6 | -$0.1 |
| Train, Engine and Yard Personnel | $7.1 | $9.0 | $7.2 | -$1.8 |
| Non-Train Operating Personnel | $5.0 | $6.9 | $5.1 | -$1.8 |
| General & Administrative | $6.9 | $11.2 | $7.0 | -$4.2 |
| Loss & Damage | { } | { } | { } | { } |
| Ad Valorem Tax | { } | $1.2 | $2.0 | $0.8 |
| Maintenance-of-Way | $8.6 | $13.2 | $8.8 | -$4.4 |
| Insurance | $2.0 | $2.4 | $2.1 | -$0.3 |
| Startup and Training | $2.7 | $3.3 | $2.7 | -$0.6 |
| Joint Facilities | $1.5 | $4.4 | $1.8 | -$2.6 |
| Intermodal Lift | { } | { } | { } | { } |
| | | | | |
| **Total*** | **$54.3** | **$66.3** | **$56.8** | **-$9.5** |
| * Total may differ slightly from the sum of the individual items due to rounding. | | | | |

The source of the numbers in Rebuttal Table III-D-1 is Consumers Rebuttal e-workpaper "CERR Operating Expense_Rebuttal.xlsx," tab "DCF Transfer."

## 1. Locomotives

On Opening, Consumers determined that the CERR would require 12 locomotives.[1] Consumers' calculation of road locomotive requirements was

[1] *See* Consumers Opening at III-D-7.

based on the CERR's Operating plan and its RTC Model results. On Reply, CSXT increases Consumers' Opening road locomotive calculation of 12 to 18.[2] CSXT's revised calculation is accompanied by yet another long explanation of the supposed flaws in Consumers' operating plan. Specifically, CSXT complains:

1. The CERR did not account for certain foreign line delays.[3] As explained in Part A of the Introduction to Part III-C, CSXT's additional "foreign line" delays are unsupported and inconsistent with CSXT's own records.

2. The CERR did not account for hold times before entering the BNSF or UP track near the Cicero, Corwith or Proviso Yards.[4] As explained, in Part A of the Introduction to Part III-C, CSXT's supposed hold times are unsupported and CSXT provided no proof that the enroute delays were caused by the BNSF or UP.

CSXT also rehashes, over 18 pages, a number of other arguments it raised in Part III-C, including its incorrect argument that Consumers did not account for run-through locomotives included on trains, but not required for operations on the CERR.[5] As explained in Part III-C-2-a, CSXT's arguments in favor of counting these locomotives in the run-through calculation are inconsistent with: (i) CSXT's acceptance of the approach used by Consumers on Opening for

---

[2] *See* CSXT Reply at Table III-D-5.

[3] *Id.* at III-D-5.

[4] *Id.* at III-D-6.

[5] *Id.* at III-D-13-16.

locomotive consist requirements; (ii) with the fact that the locomotives are placed on the train for the convenience of the connecting carriers, and the CERR is transporting those locomotives without compensation; and (iii) with the fact that interchange partners have no expectation of compensation.

Below, Consumers addresses the other various arguments that CSXT makes for increasing locomotives in the order in which they were presented in CSXT's Reply Evidence.

Locomotive Time at 59th Street Intermodal Facility. As explained in Part III-C-2-d-vii, on Opening, Consumers included 30 minutes of crew time to originate/terminate shipments at CSXIT's 59th Street Intermodal facility. Consumers also agreed with CSXT that the 30 minutes should include locomotive time as well as crew time. Consumers has made the necessary adjustment in its Rebuttal RTC model and in the corresponding operating expenses.

Locomotive Time as West Olive. On Opening, Consumers inadvertently excluded the time that locomotives might dwell at the Consumers Plant. Specifically, the locomotives do not stay with the train at the plant. Rather, as Consumers explained on Opening, the locomotives are removed from the train, fueled on-site, and then placed on a different, outgoing empty train.[6] CSXT

[6] *See* Consumers Opening at III-C-71.

allocated 19 hours for the locomotive dwell time at the plant on Reply.[7] Consumers accepts and incorporates CSXT's calculation on Rebuttal.

Helper Locomotives. CSXT proposes that the CERR lease two SD40 locomotives as dedicated helpers for the Saugatuck Hill helper district rather than use the run-through power agreement with BNSF.[8] As explained in Part III-C-d-vii, the helper locomotives are already covered by the run-through agreement. Indeed, CSXT does not even suggest that it has dedicated helpers for this movement. Mr. Orrison and Mr. Holmstrom personally observed the operations in this area and noted that there were no CSXT locomotives in this area but BNSF helper locomotives waiting at the plant. However, CSXT correctly points out that Consumers understated the costs for the additional units under the run-through agreement, because the units do not leave the CERR. Consumers has corrected the calculation on Rebuttal by adding the cost of two dedicated SD40 helper locomotives as CSXT did on Reply.[9]

Yard Engines. CSXT rehashes its operating plan argument that the CERR requires two yard locomotives.[10] As explained in Part III-C-1-c-ii-(b), the additional yard locomotive is not required.

---

[7] *See* CSXT Reply at III-D-8-9.

[8] *See* CSXT Reply at III-D-10-12.

[9] *See* Consumers Rebuttal e-workpaper "CERR Operating Statistics_Rebuttal.xlsx," cell K32.

[10] *See* CSXT Reply at III-D-16.

Peaking Factor. As explained, in Part III-C-1-c-iv, Consumers has accepted CSXT's minor modification to the calculation of the peaking factor.

Spare Margin. CSXT expounds on its arguments from Part III-C concerning the calculation of the CERR's spare margin.[11] Consumers addresses CSXT's Part III-C and Part III-D spare margin arguments in Part III-C-1-c-iii of this Rebuttal. Briefly summarized, Consumers agrees that certain elements of CSXT's Reply calculation are correct, but CSXT's inclusion of fallout and repair time in the numerator of the spare margin calculation is incorrect. Thus, with Consumers' properly revised calculation, the CERR's Rebuttal locomotive spare margin calculation is { } for ES44AC locomotives and { } for SD40 locomotives.[12]

Based on Consumers' revised RTC model and the adjustments described herein, Consumers has determined on Rebuttal that the CERR requires 15 ES44AC locomotives, one SD40 yard locomotive, and two SD 40 helper locomotives.[13]

**a. Locomotive Leasing**

As explained on Opening, the CERR leases all of its locomotives. However, CSXT did not provide any lease costs for the CERR's primary road

---

[11] *Id.* at III-D-19.

[12] *See* Consumers Rebuttal e-workpaper "Locomotive Utilization_Rebuttal.xlsx," tab "sheet 1," cells AU20 and AU37.

[13] *See* Consumers Rebuttal e-workpaper "CERR Operating Statistics_Rebuttal.xlsx," cells K28, K31 and K32.

locomotive, the ES44-AC. Thus, to determine the costs associated with the ES44-AC road locomotives, Consumers' experts used an annual lease cost of { }, which was based on public information available from the *AEPCO*[14] case and indexed accordingly.[15] The Board accepted the same locomotive lease cost development procedure in *Sunbelt*, where it held that "[b]ecause Sunbelt chose to acquire its locomotives through lease and because NS was unable to provide any current leases [in] discovery, it was reasonable for Sunbelt to rely on a recent Board decision that included lease costs for that particular locomotive type." *Id.* at 36.

On Reply, CSXT argues that the CERR could not obtain the sort of favorable lease terms that the BNSF or UP received for ES44AC locomotives.[16] However, CSXT ultimately accepts the base lease costs.[17] CSXT then complains that Consumers selected the wrong index to bring the base costs forward from 2009. Specifically, CSXT argues that Consumers should not have used the AAR's Equipment Rents index for Eastern railroads, but instead it should have used the AAR's Equipment Rents index for Western railroads because the base lease costs were derived from Western carrier costs.[18]

---

[14] *See AEPCO* at 40-41.

[15] *See* Consumers Opening e-workpaper "ES44AC Loco Lease Cost.xlsx."

[16] *See* CSXT Reply at III-D-24.

[17] *Id.* at III-D-25.

[18] *Id.*

The fact that the *AEPCO* case involved Western railroads has nothing to do with how Consumers inflates what should be considered a market-based lease rate. However, the fact that this *Consumers* case involves an Eastern railroad *should* affect how Consumers inflates market-based lease rates. On Reply, CSXT simply has picked the index that leads to a higher lease rate. Because the *AEPCO* lease rate reflects a market lease rate for ES44AC's at a given point in time, the index used for inflating CERR locomotive lease costs should be consistent with indexes used to inflate other CERR costs, which are AAR indexes for the Eastern region.[19] Consumers continues to use the AAR's Equipment Rents index for Eastern railroads to adjust *AEPCO* lease rates to current levels.

The parties agree on the annual lease cost for an SD40 locomotive.[20] Of course, the parties disagree on the total number of SD40 locomotives that the CERR requires. Consumers, as explained above and in Part III-C, continues to specify one SD40 locomotive.

Consumers' revised locomotive count of 15 ES44AC locomotives includes the application of its revised spare margin. Consumers' experts also applied a peaking factor of 1.226, which is described in Part III-C-1-c-iv above.

---

[19] *See* Consumers Opening e-workpaper "Exhibit III-H-1.xlsm," tab "Inputs," cell G30 which determines the regional indexes used in the CERR DCF model.

[20] *See* CSXT Reply at III-D-25.

*See* Rebuttal e-workpaper "CERR Operating Statistics_Rebuttal.xlsx," tab "Summary," cell K28. Consumers' experts also applied a peaking factor of 1.226, which is described in Part III-C-1-c-iv above. Application of these annual lease amounts results in a total locomotive lease expense of { } million for 2015.

**b. Maintenance**

On Opening, Consumers developed annual maintenance costs of { } per ES44AC locomotives and $104,358 per SD40 locomotives.[21] On Reply, CSXT restates these annual costs to { } per ES44AC locomotive and { } per SD40 locomotive.[22] The differences between Consumers' and CSXT's locomotive maintenance costs are discussed below by locomotive type.

**i. ES44AC Maintenance**

Consumers developed Opening ES44AC maintenance costs from actual costs paid by CSXT to { } pursuant to their locomotive maintenance agreement. Consumers specifically relied on the daily maintenance rate of { } for ES44AC locomotives as found in { }.[23]

---

[21] *See* Consumers Opening at III-D-10.

[22] *See* CSXT Reply e-workpaper "CERR Operating Expense_Reply.xlsx," tab "Summary," cell D78 times 365 days for ES44AC locomotives and cell D71 for SD40 locomotives.

[23] *See* Consumers Opening e-workpaper { }, tab "Billing Summary," cell D34 plus cell D43.

CSXT claims that Consumers excluded several components of ES44AC locomotive maintenance cost under its agreement {

}.[24]

{

}. With the additions discussed above, the daily rate per ES44AC locomotive becomes { } for an annual cost of { } per locomotive ({ } x 365 days).[25]

The CERR's locomotives are inspected and maintained at the CERR's Barr Yard, where the CERR has provided a locomotive maintenance facility to be used by its locomotive maintenance contractor.[26] CERR road locomotives requiring inspection or maintenance are removed from trains that are stopped at Barr Yard for 1,000 or 1,500-mile inspections, but only as necessary (*i.e.*, the locomotive is due for FRA-required periodic inspection or a locomotive is in need of more extensive servicing). The CERR is not the primary servicing

---

[24] *See* CSXT Reply e-workpaper { } page 16 and CSXT Reply e-workpaper { } tab "Billing Summary," cell E38.

[25] *See* Consumers Rebuttal e-workpaper "Locomotive Maintenance_Rebuttal.xlsx," tab "Rebuttal LocoMaint," cell B16.

[26] This facility is shown on page 7 of Consumers Rebuttal Exhibit III-B-1. It is described in more detail in Part III-F-7.

center for foreign locomotives in any event as those locomotives traverse less than 50 miles on the CERR. Regardless, if a swap of locomotives is required, freshly serviced units are placed on the train rather than waiting for the current units to be serviced. The switch crew at Barr Yard shuttles the locomotive to and from the locomotive shop.

### ii. SD40 Maintenance

On Opening, Consumers relied on CSXT's 2014 system average locomotive maintenance expense for CERR's SD40 helper locomotive. Relying on CSXT 2014 R-1 Schedule 410 expenses, Consumers arrived at a SD40 maintenance rate of $1.99 per gross ton-mile.[27] CSXT noted on Reply that Consumers' calculation of SD40 locomotive expenses excluded expenses for fringe benefits.[28] Consumers agrees that fringe benefits should be included in the SD40 maintenance expenses for the SD40 locomotive. After including fringe benefits in the SD40 locomotive expense, Consumers' Rebuttal rate becomes $2.13 per gross ton-mile.[29] This revised maintenance rate per gross ton-mile results in an annual maintenance cost per SD40 locomotive of $111,876.[30]

---

[27] *See* Consumers Opening e-workpaper "CERR Operating Expense_Open.xlsx," tab "Summary," cell E79.

[28] *See* CSXT Reply at III-D-29.

[29] *See* Consumers Rebuttal e-workpaper "Locomotive Maintenance_Rebuttal.xlsx," tab "Rebuttal LocoMaint," cell B38.

[30] Consumers Rebuttal e-workpaper "CERR Operating Expense_Rebuttal.xlsx," tab "Summary," cell D71.

### c. Locomotive Servicing

#### i. Fuel Cost

CSXT accepts Consumers' cost per gallon of { }.[31]

#### ii. Fuel Consumption

On Opening, Consumers relied on information provided by CSXT in discovery to develop fuel consumption requirements for ES44AC locomotives.[32] In doing so, Consumers used CSXT's system average fuel consumption for ES44AC locomotives. CSXT takes exception to Consumers' use of a system average consumption rate and suggests that Consumers instead should have tailored the consumption rate to reflect each train type's share of unit-miles for CERR trains and not the total unit-miles of all CSXT trains.[33]

Consumers disagrees that it should develop system average consumption rates for ES44AC locomotives by train type, which would then be applied to CERR locomotives by train type. Developing fuel consumption by train type (and commodity) would be affected disproportionately by the varying terrains (and commodity) across the CSXT system. As can be seen from CSXT's workpapers, gallons per LUM for coal unit trains is 3.27 while gallons per LUM

---

[31] *See* CSXT Reply at III-D-30.

[32] *See* Consumers Opening e-workpaper "ERAD_2014_Open.xlsx," tab "Pivot – Fuel Consumption," cell F14.

[33] *See* CSXT Reply at III-D-31.

for all other trains is 2.50.[34] Coal unit trains on CSXT's system are disproportionately affected by grades in the Appalachian Mountains and foothills. The terrain across the CERR on the other hand is relatively flat. CSXT's approach for calculating and applying fuel consumption rates magnifies the impact that the terrain-affected consumption rates for coal unit trains across CSXT's system has on CERR fuel consumption. For this reason, Consumers maintains the use of CSXT system average ES44AC fuel consumption rates on Rebuttal.

#### iii. Sanding and Other Functions

On Reply, CSXT agrees with the approach used by Consumers to calculate locomotive servicing costs, except that CSXT includes its Reply fringe benefits ratio in its cost calculations.[35] As discussed elsewhere, Consumers continues to rely on the fringe benefits ratio it developed on Opening.

### 2. Railcars

#### a. Leasing

CSXT accepts, with one modification, Consumers' Opening methodology for determining rail car leasing costs based on CSXT's 2014 R-1 Annual Report data.[36] CSXT's argues that Consumers' spread the payments of car-hire across the system thereby diluting the unit costs that Consumers applied

---

[34] *See* CSXT Reply e-workpaper "ERAD 2014_Reply.xlsx," tab "Rates."

[35] *See* CSXT Reply at III-D-31.

[36] *See* CSXT Reply at III-D-33.

the CERR's foreign cars.[37] To address this issue, CSXT calculates the percentage of foreign cars-miles by car type based for cars traversing Illinois, Indiana and Michigan.[38] Because CSXT did not provide system-wide foreign car statistics in discovery and because Consumers developed car costs on a system-wide basis, Consumers did not make a percentage of foreign car adjustment on Opening to car-miles and car hours used to calculate foreign car unit costs. CSXT's approach to addressing this issue inappropriately applies the traffic mix in Illinois, Indiana and Michigan to system-wide costs to arrive at unit costs for the cars on the CERR. Because CSXT did not provide statistics on foreign cars in discovery, there is no way to know how the traffic mix in Illinois, Indiana and Michigan compares to CSXT's system-wide traffic.

On Rebuttal, Consumers maintains the system-wide approach, albeit without an adjustment to the hours and car-miles used to calculate foreign car unit costs.

**b. Maintenance**

CSXT accepted Consumers' methodology for determining repair expenses for coal and general freight railcars that must be borne by the CERR.[39] The parties differ on the total costs due to the differences in the parties'

---

[37] *Id.*

[38] *See* CSXT Reply e-workpaper "Miles_by_CarType.xlsx," tab "Summary."

[39] *See* CSXT Reply at III-D-33.

calculations of car requirements. *See* Consumers Rebuttal e-workpapers "Car Repair User_2014.xlsx," cell G20 for URCS repair cost per car-mile and "CERR Car Costs_Rebuttal.xlsx," tab "Coal Cars" cell M36 for coal private car-miles and tab "General Freight" cell N26 for general freight private car-miles.

#### i. Private Car Allowance

CSXT accepted Consumers' methodology for determining private car allowances.[40] The parties differ on the total costs due to the differences in the parties' calculations of car requirements. *See* Consumers Rebuttal e-workpaper "CERR Car Costs_Rebuttal.xls," tab "Private Cars."

### 3. Operating Personnel

As noted on Opening, the CERR is a small SARR. Indeed, compared to the *TPI*, *DuPont*, and even the *Sunbelt* SARRs, the CERR is very modest in size and scope. It is a non-unionized Class II rail carrier with less than $140 million in 2015 revenues.[41] Half of the CERR's operations consist of unit trains, and the balance of the trains are handled intact. Moreover, the CERR has only one local customer (Consumers) and one locally served facility (59th St. Intermodal terminal). Simply put, the CERR does not require Class I-style staffing.

---

[40] *Id.* at III-D-34.

[41] *See* Consumers Opening e-workpaper "Summary of CERR Traffic Volumes and Revenues.xlsx," tab "Summary_Vol_Rev," cell N10.

Not surprisingly, CSXT has decided, on Reply, to overstaff the SARR. As mentioned above, this is routine for defendant railroads in such cases. Moreover, CSXT goes to new lengths here. For example, CSXT recrews 58% of the West Olive-bound trains, even though its own RTC Modeling found no need for such recrews.[42] Unsatisfied with that result, CSXT just ignores its own modeling results and opts to increase crews. CSXT's approach essentially posits that the Board's long-standing approval of the RTC Model is without merit. CSXT's unwarranted attack must be rejected. Likewise, as explained below, CSXT's other arguments to increase crews are without merit.

**a. Operating**

**i. Staffing Requirements**

As explained on Opening, the CERR's operating personnel include train crews as well as other operating employees, including the senior management staff based at the railroad's West Olive headquarters and line supervisory and other field employees in the Transportation and Engineering/Mechanical departments.[43] Consumers' Witnesses Mr. Orrison and Mr. Holmstrom developed the CERR staffing plan. Extensive descriptions of their operating experience were included in Consumers Opening evidence in Parts III-C, III-D and V.

---

[42] *See* CSXT Reply at III-D-39-40.

[43] *See* Consumers Opening at III-D-20-30.

As noted above, CSXT's operating personnel staffing is not sponsored by any witness with experience staffing the operations of a railroad. Consumers' witnesses nevertheless respond to the specious criticisms leveled by CSXT's consultants.

### ii. Train/Switch Crew Personnel

On Opening, Consumers determined that it required 52 train and engine ("T&E") crew members to perform its train operations.[44] This count, which includes switch crews based at Barr Yard and helper crews based at West Olive, was based on the number of trains moving over the various parts of the CERR system during the base year (indexed to reflect first-year traffic levels), and the crew districts/assignments, switch crew assignment, and helper crew assignment developed by Mr. Orrison and Mr. Holmstrom as described in Part III-C-3-a of Consumers Opening Evidence. The RTC Model simulation was used to confirm that most train crews operating in these crew districts could complete each tour of duty within 12 hours, as required by federal law.

Consumers' experts also reviewed the delay report generated by the RTC modeling to determine the need for recrews. The RTC delay report indicated no expiring crews, thus, recrewing was not required on the CERR. *See* Consumers Opening e-workpaper "CERR Opening.DELAY." On Rebuttal, two West Olive-bound crews did expire and were recrewed as necessary.

---

[44] *See* Consumers Opening at III-D-20.

CSXT determined that the CERR required 68 T&E personnel.[45] CSXT posits four reasons why Consumers' T&E personnel count is understated. For the reasons explained below, Consumers rejects each addition. Consumers notes that its Rebuttal train crew requirements did increase slightly to 53 T&E employees.

Turn Crews. CSXT largely repeats the arguments it made in Part III-C of its Reply Evidence, namely that the Chicago crews would require regular relief crews because 25% of the crews could not handle two train movements per day in turn service.[46] Each argument underlying its 25% recrew rate is addressed below.

CSXT argues that some crews must reach their hours of service limit when operating turn service in Chicago.[47] CSXT discusses, once again, that the terminal is busy; other carriers cannot wait for CERR crews to arrive on another train or by taxi; and that check-in time and preparation would eat up even more time.[48] CSXT then argues that its review of its RTC Model shows that 23% of westbound CERR trains operating in Chicago took four hours or more to travel between On-SARR and Off-SARR points and that another 16% took three to four

---

[45] *See* CSXT Reply at Table III-D-8.

[46] *Id.* at III-D-38.

[47] *Id.* at III-D-35-36.

[48] *Id.*

hours to travel their route.[49] Thus, by its estimate, with other time added, 39% of crews that operate westbound train would be into their fifth hour by the time they arrive at an interchange ready to receive their next assignment and one quarter of such crew will be in their sixth hour before they can board the second train.[50] Based on this analysis, CSXT decided to recrew 25% of the turn crew trains.[51]

CSXT's arguments are fatally flawed. CSXT's analysis is driven by a mathematical approach, not an operating plan approach. CSXT's arguments are also flawed because they largely assume that one crew starting from the most distant points, such as 22nd Street or 59th Street are destined to return to those points. To be sure, CSXT acknowledges that such crews could take a different, shorter second turn, but CSXT does not bother to make such an analysis. CSXT also fails to consider that one crew could handle up to four trips a day over most of the shorter moves (*i.e.*, Curtis to Dolton).

CSXT's math-driven approach belies the lack of operating experience of its witnesses. Mr. Orrison and Mr. Holmstrom are well aware of the operating need of the CERR and the challenges in the Chicago area. They were also aware of train flows and balance in setting up the CERR's approach to handling trains in Chicago. Based on the results of CSXT's own modeling, the average transit times for the three O-D pairs with the most trains in the base year

---

[49] *Id.* at III-D-38.

[50] *Id.*

[51] *Id.* at III-D-38-39.

(Curtis to 22nd Street, 71st to Curtis, and 59th Street to Curtis) are all less than 3:30 (3:19, 3:22 and 2:17, respectively).[52] Likewise, even if some trains took longer, as CSXT posits, by definition some took less thereby making a turn move even easier. CSXT mentions, but does not fully consider, that trains moving from Curtis to Dolton, Barr Yard, and Blue Island can all be handled in less than 2 hours on average. Thus, one crew coming on at 71st and moving to Curtis can easily handle a move back to 22nd Street. But even if that were not possible for some reason, that crew could handle a move to Barr, Blue Island or Dolton. Moreover, as Consumers showed in its Opening Tables III-C-3 and III-C-4, there is near parity in westbound and eastbound movements. Thus, there is ample opportunity for reverse moves as eastbound/westbound trains are arriving, on average, at a rate of one train every 1.83 hours. Even if a crew had to be taxied occasionally to another terminal (*i.e.*, from Curtis to Dolton, all of the terminals are in close proximity to each other).

CSXT also provides no crewing credits for the times that the CERR crews could make more than two movements in a day. For example, one crew could make three moves from, for example, Curtis to Dolton, Dolton to Curtis, and Curtis to Dolton. Both CSXT and Consumers showed in their RTC Models that the average time between locations was about 1:36 minutes (including 30 minutes

[52] CSXT Reply at Figure III-C-12.

for interchange).[53] Thus, the total transit time is only 4:48 minutes on average for three moves. This would allow, conservatively, 5½ hours to wait for trains, receive instruction or be taxied to another location. If the train dispatchers and incoming train line up worked, four such turns could be completed in one shift. To be conservative, Consumers assumed that each crew would only make two turns a day.

To further demonstrate that crews in the Chicago area operating trains traveling less than 50 miles can handle two trains per shift, Consumers analyzed RTC statistics for the peak period. Specifically, Consumers builds up total time needed by crews to handle two trains per shift. The total time per shift includes average transit times per day times two to reflect two trains as well as three (3) taxi trips of one hour each, two hours to come on duty and off duty, and one hour for interchanging. The results of Consumers analysis are shown in Rebuttal Table III-D-2 below.

[53] *Id.*; *see also* Rebuttal Table III-C-7.

**Rebuttal Table III-D-2**
**Total Crew Times for Chicago Area Crews**

| Train Suffix | Average Miles Per Train | Transit 2 Trains | Hours Per Crew On/Off Taxi | Duty | I/C | Total |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 20140323 | 27.0 | 5.3 | 3.0 | 2.0 | 1.0 | 11.3 |
| 20140324 | 25.7 | 5.1 | 3.0 | 2.0 | 1.0 | 11.1 |
| 20140325 | 24.5 | 4.9 | 3.0 | 2.0 | 1.0 | 10.9 |
| 20140326 | 26.2 | 5.2 | 3.0 | 2.0 | 1.0 | 11.2 |
| 20140327 | 25.2 | 4.9 | 3.0 | 2.0 | 1.0 | 10.9 |
| 20140328 | 27.7 | 5.6 | 3.0 | 2.0 | 1.0 | 11.6 |
| 20140329 | 25.8 | 5.2 | 3.0 | 2.0 | 1.0 | 11.2 |
| 20140330 | 26.2 | 5.2 | 3.0 | 2.0 | 1.0 | 11.2 |
| 20140331 | 23.6 | 4.7 | 3.0 | 2.0 | 1.0 | 10.7 |

Source: Consumers Rebuttal e-workpaper "Crews Handling 2 Trains_Rebuttal.xlsx."

As can be seen in Column (7) in Rebuttal Table III-D-2 above, on no days does the total time for crews exceed 12 hours. Thus, crews during the peak period are able to handle two trains per shift. This analysis also includes the conservative assumptions that each crew would require three (3) one-hour taxi rides to shuttle between stations for each shift, each crew would require two hours to come on duty and off duty for each shift, and that each crew would spend one hour per shift at interchanges.

Consumers has, thus, retained its Opening approach to turn crew requirements.[54]

West Olive Recrews.

CSXT complains that the CERR has no recrews for West Olive-bound trains.[55] CSXT suggests that the RTC Model is no longer valid for determining the operations of a SARR and that the Board must resort to CSXT's alleged real-world problems serving the plant.[56] Evidently, CSXT was not satisfied with its RTC Modeling as it attacks its own results at every turn (*i.e.*, trains would have to wait all over Chicago, trains have to wait all over the Grand Rapids Subdivision), but can find no way to make its own RTC Model match its verbiage. Hereto is another example, CSXT complains that the train crews are regularly held on the various sidings on the Grand Rapids Subdivision and that somehow the CERR is subject to the same problems.[57]

CSXT's arguments are without merit. First, the RTC Model is the proper tool for determining the feasibility of the SARR's infrastructure and its

---

[54] CSXT also argues, in passing, that the CERR cannot assume that every interchange will take place in 30 minutes. CSXT's accepted the 30 minutes for interchange that Consumers assumed on Opening. CSXT cannot then repudiate it for its problematic recrew argument. Regardless, CSXT again ignores that the 30 minutes is conservative in that step-off, step-on crew changes are commonplace in the terminal. Indeed, Mr. Orrison and Mr. Holmstrom note that this practice is particularly common with high priority trains.

[55] *See* CSXT Reply at III-D-39.

[56] *Id.* at III-D-39-40.

[57] *Id.* at III-D-40.

operating statistics. Second, the SAC analysis is not an analysis of CSXT's inefficiencies. Indeed, such an analysis would fall under the management efficiency constraint of the *Coal Rate Guidelines* standards. The CERR is under no obligation to duplicate the inefficiencies incurred by CSXT anywhere such inefficiencies are avoidable. Moreover, merely holding on a siding does not mean that a recrew was required. Indeed, CSXT made no such calculation of actual, real-world recrews that resulted from its alleged analysis of holds. Thus, CSXT has no basis in the RTC Model or in the data it developed to determine that 58% of the West Olive-bound trains required a recrew.

On Rebuttal, as explained in Part III-C, Consumers' RTC Model did require two trains to be held long enough on a Grand Rapids Subdivision siding to require a recrew. Thus, Consumers' Rebuttal T&E crew requirements were updated accordingly.

Total CERR Crews Required During Peak Period/Hours of Service Rules.

CSXT claims that Consumers did not provide for sufficient T&E crews to handle train flows during the peak period.[58] CSXT remedied this perceived shortcoming by developing a peaking factor it said was needed to ensure enough crew personnel were available to handle peak period trains. CSXT developed a peaking factor for its Reply crew personnel that increased crew

[58] *See* CSXT Reply at III-D-40.

personnel count by 18 percent.[59] To demonstrate its claim that the CERR crews need to be adjusted by a peaking factor, CSXT developed what amounts to a puzzle called "Crew Starts in Hindsight (Omniscient Railroad)."[60] In this puzzle, CSXT identified crew personnel needed during the peak period and attempted to "staff" the need using arbitrary groups of T&E personnel. For some unexplained reason, CSXT required "Group 1" personnel to work six (6) consecutive shifts.[61] With this requirement in place, CSXT attempted to "solve" its puzzle by matching crew groupings by day to crew needs by day. CSXT then inexplicably summed the maximum daily personnel count for each group across the peak period to arrive at what it claims is the true number of T&E personnel in the peak period. This arbitrary approach results in the claimed need for 58 peak period T&E personnel on Reply instead of 49 crew personnel calculated by CSXT using trains statistics.[62] CSXT took the ratio of 58 "needed" T&E personnel to 49 base year personnel (*i.e.*, 1.184) and applied it to first year crew requirements. This peaking

---

[59] *See* CSXT Reply at III-D-44.

[60] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cells AH35:AT50.

[61] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cells AJ40:AJ45.

[62] CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cell AU47 compared to cell AV53.

factor of 1.184 is then applied by CSXT to the first year personnel requirement of 51 to arrive at total road crew requirement of 61 people.[63]

CSXT also applied this peaking factor approach to Consumers' Opening crew needs, saying that Consumers should have included 50 crew personnel for the base year rather than 42.[64] This would have resulted in a peaking factor of 1.19 according to CSXT.[65]

CSXT's approach to calculating a crew peaking factor is flawed. First, CSXT's inability to match peak period T&E needs to personnel "groupings" on a daily basis is curious. Had CSXT tried harder it could have easily solved the puzzle in a number of different configurations without violating Hours of Service Rules it referred to on Reply at III-D-42. To demonstrate this, Consumers has developed a "puzzle" solution based on its Rebuttal peak period trains.[66]

CSXT's second flaw included in its crew peaking factor is the use of maximum daily crew requirements by crew group. As stated above, CSXT never defines what a group is and why CSXT sized them the way it did. But one thing is clear; taking the maximum count by group across the entire peak period, then

---

[63] *See* CSXT Reply e-workpaper "CERR Operating Statistics_Reply.xlsx," cell S28.

[64] *See* CSXT Reply at III-D-43.

[65] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cell P50.

[66] *See* Consumers Reply e-workpaper "Base Unit Merch Trains v6_Statistics_Rebuttal.xlsx," tab "Crew Peaking."

summing the group maximums, as CSXT did, over inflates what the peak need would be.[67]

The peak need is clear; it is the single day that requires the most crew members to handle that day's trains. This peak day crew requirement needs to be staffed without violating any of the Hours of Service rules referred to by CSXT in its Reply at III-D-42. In CSXT's Reply calculation, this peak crew requirement is 54 people to handle trains on March 30, 2014, not the 58 people determined by adding all the group maximums across the peak week.[68] In CSXT's replication of Consumers' Opening peak crew requirement, the peak requirement is 45, or the number of crew members needed on March 30, 2014.[69] Thus the peak crew requirement is not 50 as claimed by CSXT. Consumers included 47 crew personnel in its Opening operating costs, so no adjustment by way of a crew peaking factor should be required to ensure enough crew personnel are available to meet the crew requirements in the peak period of 45. Even though the 47 crew personnel figure reflects base year personnel counts indexed to first year levels, it

---

[67] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cell AU47.

[68] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cell AI45 compared to cell AU47.

[69] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Crew_Peaking," cell C45. CSXT incorrectly calculates this figure by rounding crew counts up to the nearest whole number, then multiplying by 2 to arrive at personnel. The proper method is to multiply crew counts by 2, then round up to the nearest whole number.

is the proper measure for determining if peak day crew needs are satisfied since the peak day crew needs should not be influenced by annual traffic indexing.

Because CSXT fails to adequately describe and efficiently solve its solution satisfying peak crew requirements and because CSXT failed to properly identify the peak crew requirement, CSXT's crew peaking factor should be rejected.

Yard Crews. On Opening, Consumers provided for three personnel to be assigned to yard crew duty.[70] CSXT argues for a fourth yard crew member.[71] An additional yard crew assignment is unnecessary. The yard crew is a light duty crew as the Barr Yard is primarily used for refueling and inspection of only a small number of trains per year. The CERR is only inspecting 47 trains during the peak period. Most of those trains will not require any assistance from the yard crew member. Moreover, CSXT fails to consider that there are multiple managers capable of pitching in if needed or a road crew could even help while waiting for another assignment. In other words, CSXT's addition of a fourth crew is an unnecessary nicety for the resources restrained CERR.

### (a) Compensation

On Reply, CSXT explains how T&E employee compensation should be lower to reflect fewer shifts per crew member per year on Reply versus

---

[70] *See* Consumers Opening e-workpaper "CERR Operating Statistics_Open.xlsx," cell S33.

[71] *See* CSXT Reply at III-D-44.

Opening.[72] However, CSXT uses the same number of shifts per crew member per year that Consumers used on Opening: 270 shift per year.[73] Consumers continues to use Opening compensation amounts for T&E employees that reflect 270 shift per year.

**(b) Fringe Benefits**

Fringe benefits are addressed below in Part III-D-3-a-iv-(a).

**(c) Taxi and Hotel Expense**

On Opening, Consumers calculated overnight and taxi costs separately for crews operating beyond the Chicago area and crews operating within the Chicago area.[74] CSXT agrees with Consumers overnight and taxi costs for crews operating beyond the Chicago area.[75] However, CSXT disagrees with Consumers' taxi expenses for crews operating within the Chicago area and suggests that Consumers expenses be arbitrarily doubled.[76] To support this position, CSXT states that CSXT averaged more than { } million annually on taxis to transport crews in the Chicago terminal over the 2012 through 2014 time period, and CSXT therefore claims that doubling Consumers' Chicago area taxi

---

[72] *See* CSXT Reply at III-D-45.

[73] *See* CSXT Reply e-workpaper "CERR Base Year Trains.xlsx," tab "Trains," cells AP10306 through AP10310 all use 270 shift per year.

[74] *See* Consumers Opening e-workpaper "CERR Operating Expense_Opening.xlsx," tab "Summary," cells D22 and D23.

[75] *See* CSXT Reply e-workpaper "CERR Operating Expense_Reply.xlsx," tab "Summary," cell D22.

[76] *See* CSXT Reply at III-D-50.

expenses is quite conservative.[77] CSXT provides no support for the items included in its { } million figure as it relates to underlying CSXT T&E crew counts or movement of trains operated by crew included in the costs. Given the size of the number though, it appears CSXT did not make a proper apples-to-apples comparison or that CSXT is highly inefficient in how it has spent money on taxis.

CSXT never critiques Consumers' approach to developing Chicago area taxi costs, which results in 2.75 taxi trips per crew per shift for crews operating within the Chicago area.[78] CSXT never addresses the reasonableness of CERR's conservative assumption that most Chicago-area crews will take three taxi trips per shift. Given that CSXT never critiques Consumers' development of taxi counts and costs or supports its own position for doubling Consumers' taxi costs, Consumers' taxi expenses for Chicago-area crews are reasonable and Consumer maintains its Opening position on Rebuttal.

### iii. Non-Train Operating Personnel

On Opening, Consumers' expert witnesses Mr. Orrison and Mr. Holmstrom provided for 37 non-train operating personnel that more than meet the

---

[77] *See* CSXT Reply at III-D-49-50.

[78] *See* Consumers Opening e-workpaper "Base Unit Merch Train v6_Statistics_Opening.xlsx," tab "Taxi and Overnight," average of cells V5, V6, V9 and V11 through V23.

requirements for the CERR's needs.[79] As explained on Opening, this staffing level reflects the volume of trains being handled by the CERR, the types of trains handled, and the other activities that the CERR requires.[80] This staffing level is comparable, in part, to other SARRs with similar volumes of traffic (*e.g.*, *WFA* and *IPA*, as proposed by the parties to that case). However, the staffing for the CERR was developed from the ground-up by Mr. Orrison and Mr. Holmstrom to reflect the particular territory the CERR traverses, the variations in traffic flows between the 22nd St. to Curtis segment and the Porter to West Olive segment, and the need for more operating personnel to coordinate activities between the CERR and other railroads in Chicago.

As is typical for such cases, CSXT increase the non-train operating personnel. Indeed, as reflected in Rebuttal Table III-D-3, CSXT proposes to add 13 positions to the staff. As explained below, the additional positions are not needed and Consumers continues to use its Opening staffing for non-train operating personnel.

---

[79] Consumers Opening at Table III-D-3.

[80] *Id.* at III-D-22-23.

| REBUTTAL TABLE III-D-3<br>CERR NON-TRAIN OPERATING PERSONNEL | | | | |
|---|---|---|---|---|
| **Position** | **Opening** | **Reply** | **Rebuttal** | **Difference (Reply v. Rebuttal)** |
| Vice President – Operations | 1 | 1 | 1 | 0 |
| Director of Operations Control | 1 | 1 | 1 | 0 |
| Managers of Train Operations | 3 | 4 | 3 | (1) |
| Assistant Managers of Train Operations | 3 | 4 | 3 | (1) |
| Manager of Locomotive Operations | 1 | 1 | 1 | 0 |
| Assistant Manager of Locomotive Operations | 0 | 1 | 0 | (1) |
| Dispatch Crew, Dispatch and Data Control | 0 | 1 | 0 | (1) |
| Manager of Crew and Dispatch | 0 | 5 | 0 | (5) |
| Crew Callers | 5 | 5 | 5 | 0 |
| Dispatchers | 9 | 9 | 9 | 0 |
| Manager of Operating Rules, Safety & Training | 1 | 1 | 1 | 0 |
| Manager of Customer Service and Support | 0 | 1 | 0 | (1) |
| Customer Service Managers | 2 | 2 | 2 | 0 |
| Chief Engineer | 1 | 1 | 1 | 0 |
| Manager of Mechanical Operations | 1 | 1 | 1 | 0 |
| Equipment Inspectors | 9 | 12 | 10 | (2) |
| **Total** | **37** | **50** | **38** | **(12)** |

### (a) Headquarters Transportation Management

On Opening, Consumers provided for the following positions:

1. Vice President-Operations (department head).

2. The Director of Operations Control (supervises all train operations and the CERR's field operating managers, crew callers and dispatchers).

3. Manager of Operating Rules, Safety & Training (interfaces with the FRA in matters pertaining to rules and operating practice, and is

responsible for the CERR's operating timetable, operating rules, operating bulletins, and related instructions).

4. Two customer service managers (monitor train locations, maintain contact with the CERR's operating personnel and interchange partners, and answer customers' questions concerning the locations of specific trains on the CERR system).

5. Dispatchers (9) that handle the two dispatching desks 24/7/365.

Consumers provided detailed explanations of all of the functions of these positions and how those personnel would meet the requirements of the CERR's operational and customer service needs.

CSXT accepts the VP Operations, Director of Operational Control, and the Manager of Operating Rules, Safety, and Training.[81] CSXT also accepts the dispatcher and customer service manager positions and the count of personnel for those positions.[82]

CSXT does, however, add seven brand new positions and a new subdivision and reporting structure entitled Dispatch & Data Control. Specifically, CSXT adds a Director Crew, Dispatch and Data Control, five Managers – Crew and Dispatch, and Manager Customer Service and Support.

---

[81] *See* CSXT Reply at Table III-D-10.

[82] *Id.*

CSXT's additions are simply fluff add-on "managerial" positions whose functions are already covered by the staff specified by Consumers' experts on Opening.

CSXT argues that a Director Crew, Dispatch and Data Control is needed to "bring focus, direction and management to this team."[83] CSXT's argument is unpersuasive. The dispatching and customer service functions are already covered by the CERR's Director of Operations Control. A point CSXT never even acknowledges. Moreover, CSXT has not specified any actual work that this position will perform or why the dispatchers require another director over them. As such, Consumers' experts reject this addition.

CSXT then argues the CERR needs another 24/7 position, Manager – Crew and Dispatch.[84] CSXT rests its support for this position on its incorrect assumption that the CERR's train selection process means that the CERR will have no idea, in advance, what trains it will be handling. As Mr. Orrison and Mr. Holmstrom have already explained, every carrier has insight into the trains it is handling. It is no different than any other group of trains, and the CTCO is well aware of where trains are destined. Moreover, 75% of all the trains that the CERR handles are unit trains and intermodal trains (*i.e.,* there are no random TIH worries – even if such an argument had any validity). Thus, there is no reason for another 24/7 management layer above the dispatchers.

---

[83] *Id.* at III-D-58.

[84] *Id.* at III-D-58-59.

Likewise, CSXT's assertions that this position has to design a new service plan every shift is absurd. All of the trains handled by the CERR have a known operation plans, which are reflected in the train symbols and these plans are designed and managed by the Director of Operations Control and the Vice President – Operations. These plans are also dictated in large part by the CERR's interchange partners thereby further reducing the need for a new service plan every shift.

CSXT also suggests this position has to manage crew assignments, especially turn crew assignments.[85] This is again unnecessary. Crew calling is already automated and the CERR's Manager or Train Operations are responsible for overseeing crews in the field and assuring that assignments are properly handed out during the shift (along with the crew caller system). Without the extra positions posited by CSXT, there is even less need for a Director position over the dispatchers and customer service managers.

CSXT also proposes that the CERR add a Manager over the Customer Service Managers. In other words, the managers need a manager. CSXT suggests that the primary function of this person will be to oversee the two Customer Service Managers. CSXT also proposes that the person interact with others in the operating and other departments of the CERR. CSXT also suggest

[85] *Id.* at III-D-60-61.

that the person should be involved in claims management, even though the Law and Administration Department is already handling this function.

There is no need to add a manager over the managers. The dispatching and customer service functions have up to four employees working at any time. CSXT never suggests these positions are not capable of performing the work that they do. The CERR is not a large railroad with many layers of management, and this is another example where the manager serves no function beyond adding unnecessary Class I-style bloat.

Moreover, CSXT ignores the description of the Customer Service Managers' duties, all of which its new manager duplicates. Specifically, on Opening, Mr. Orrison and Mr. Holmstrom specified that the Customer Service Managers monitor train locations, maintain contact with the CERR's operating personnel and interchange partners, and answer customers' questions concerning the locations of specific trains on the CERR system.[86] Their reasoning behind this staffing is that CERR serves only one local industry (Consumers) and one local facility (59th St. Intermodal terminal). It typically handles approximately 30 trains per day. There is only one primary route on the system and one secondary trackage rights route. Moreover, half of the trains are unit trains and the remaining trains move intact over the CERR. The vast majority of the trains move less than 40 miles on the CERR. Accordingly, the CERR does not need 24/7 coverage of

[86] Consumers Opening at III-D-25-26.

the customer service function. CSXT does not dispute these points. It just adds an unneeded manager and an unneeded director over these two positions.

**(b) Field Transportation Management**

On Opening, Consumers' witnesses included three Managers of Train Operations ("MTO"), three Assistant Managers of Train Operations ("AMTO") and one Manager of Locomotive Operations ("MLO").[87] These positions, which report to the Director-Operations Control, are the equivalent of the Trainmaster and Road Foreman of Engines positions on a Class I railroad.

Consumers' stationed the MTO's at the CERR's Barr Yard. This is a 24/7 position with 12-hour shifts. As is customary for such positions, three employees are needed to staff it. Likewise, Consumers provided for three AMTO's. CSXT accepts the roles of these position, but simply adds a fourth MTO and AMTO as, essentially, a relief crew.[88] CSXT's expansion is unwarranted. Consumers has used the standard staffing for such positions. Moreover, CSXT ignores that both positions do not have to be on duty at the same time and the six positions can cross-support each other during vacations and sick days. These positions are also backed up by the Director of Operations Control and the Vice President – Operations. Such staffing is typical of small railroads and even Class I railroads. For example, when Mr. Orrison was head of the

[87] *Id.* at III-D-26-28.

[88] *See* CSXT Reply at III-D-55.

Detroit Division, he would temporarily assign his Assistant Superintendent (located in the superintendent's office in Livonia, MI to Dayton, OH and Lima, OH to provide oversight to the field trainmaster position when the trainmaster was sick or on vacation. Likewise, Mr. Orrison has worked with the commuter rail system in Boston where the management regularly place the Assistant COO into field assignments covering for the Road Forman Engines ("RFE") while the RFE was temporarily assigned to training engineers and operating trains as needed.

CSXT also accepts Consumers' Manager of Locomotive Operations.[89] However, without any explanation, CSXT adds an Assistant Manager of Locomotive Operations. CSXT suggest that this position could also aid in inspecting locomotives at West Olive,[90] but CSXT does not suggest that this function is not adequately covered by the equipment inspectors.

Consumers rejects the addition of the Assistant Manager of Locomotive Operations. The CERR only has 53 train crew employees. Thus, the MCO can easily performs FRA-mandated testing and observation of engineers in train handling, efficiency testing, and provide other assistance as needed.

---

[89] *Id.*

[90] *Id.*

### (c) Engineering and Mechanical Management

CSXT accepts Consumers' staffing for the Chief Engineer and the Manager of Mechanical Operations.[91] CSXT, does, however, add three additional equipment inspectors. These additional inspectors are not required.

The Barr Yard inspects, on average, 6-7 trains a day (during the peak period of the peak year). *See* Consumers Opening Part III-C-3-c. As explained on Opening, this relatively small volume does not necessitate a large force vis-à-vis the CSXT's staff at Barr Yard where many trains receive an initial terminal inspection and many cars are inspected during classification and blocking. Mr. Orrison and Mr. Holmstrom did assign two Equipment Inspectors for each inspection. Given the number of inspections to be performed, the CERR has one two-person crew of Equipment Inspectors stationed at Barr Yard on a 24/7 basis. However, the CERR also has one two-person crew available on an on-call basis at Barr Yard. The one-person switch crew can also assist in train inspections as can the MTO and the ATMO on duty. Consumers' witnesses also intended for the MLO to assist as needed as well. The parties agree that one inspector is needed at West Olive.[92]

---

[91] *Id.* at III-D-56.

[92] *Id.* at III-D-57.

However, Consumers erred in its description of the assignments. Specifically, Consumers intended to station nine inspectors at Barr Yard and one inspector at West Olive for a total of 10 inspectors.

CSXT proposes 11 inspectors for Barr Yard but acknowledges that 9 people are required to cover the assignments.[93] As such, Consumers has used only 9 positions at Barr Yard on Rebuttal.

### iv. Operating Personnel Compensation

CSXT accepts Consumers' proposed approach of using data from CSXT's Wage Forms A and B to calculate salaries for the CERR's operating personnel.[94] However, CSXT uses its fringe benefits ratio as described below.

#### (a) Fringe Benefits

On Opening, Consumers developed a fringe benefits ratio of 37.6 percent based on the average fringe benefits ratio for all Class I railroad employees in the United States in 2014.[95] CSXT claimed this approach is flawed because Consumers uses a nationwide average rather than an average tailored to the railroads operating in the same region as the CERR and that Consumers uses a one-year snapshot, not a multi-year average.[96] CSXT suggests that the fringe benefits ratio should be developed based on an average for 2012 through 2014 of

---

[93] *Id.*

[94] *See* CSXT Reply e-workpaper "CERR Operating Expense_Reply.xlsx," tab "Operating-G&A," cells E6 through E33.

[95] *See* Consumers Opening e-workpaper "CERR Fringe Benefits.xlsx."

[96] *See* CSXT Reply at III-D-46.

all Class I carriers except KCS. CSXT says KCS does not have a physical presence in Chicago remotely comparable to the other Class I railroads. CSXT's fringe benefits ratio developed on Reply equals 41.6 percent.

Consumers disagrees that a 2012 through 2014 average is appropriate for calculating fringe benefits. This is because fringe benefits expenses for Class I railroads, as a percentage of total salary and wage expenses, have consistently declined from 2012 through 2014, indicating a trend toward more efficient management of fringe benefits expenses by all Class I railroads. Table III-D-4 below shows annual fringe benefits ratios for all Class I carriers for the 2012 through 2014 time period.

**REBUTTAL TABLE III-D-4**
**SUMMARY OF CLASS I CARRIER FRINGE BENEFITS RATIOS**

| | Carrier | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| 1. | BNSF | 38.9% | 38.0% | 35.1% |
| 2. | CN GTW | 35.7% | 39.5% | 36.0% |
| 3. | CP SOO | 42.8% | 39.3% | 32.8% |
| 4. | CSXT | 52.5% | 45.0% | 43.0% |
| 5. | KCS | 36.2% | 32.5% | 33.0% |
| 6. | NS | 48.6% | 46.9% | 41.6% |
| 7. | UP | 45.1% | 45.5% | 41.8% |
| 8. | Average | 42.8% | 40.9% | 37.6% |

Source: Consumers Rebuttal e-workpaper "Support for Rebuttal Fringe Benefits Table.xlsx."

As demonstrated Rebuttal Table III-D-4, the average fringe benefits ratio has declined each year between 2012 and 2014 (Line 8). In fact, CSXT's fringe benefits ratios, although the most inefficient of all Class I carriers, have declined nearly 18 percent from 2012 to 2014 (Line 4). Of the 14 individual year-over-year changes in Table III-D-4, only one shows a significant increase (CN in 2013, Line 2, Column (3)). Clearly all Class I carriers have realized efficiencies in fringe benefits costs between the 2012 through 2014 time period. For this reason, the average 2014 fringe benefits ratio is the appropriate ratio to estimate CERR fringe benefits for 2015 and beyond.

The inclusion of KCS in the average for fringe benefits is entirely appropriate, despite CSXT's claim that the KCS does not have the same physical presence in Chicago as the other Class I railroads. The vast majority of fringe benefits for Class I carriers are for employees that work nowhere near Chicago. In fact, the location of KCS's Kansas City headquarters is closer to Chicago than the headquarters for any other Class I carrier. CSXT is obviously attempting to remove KCS from the fringe benefits calculation because KCS has the lowest fringe benefits ratios of any Class I carrier and is closer in size to the CERR than any other Class I railroad.

Consumers' approach to average 2014 ratios for all Class I carriers is in fact conservative since this approach includes inefficient ratios rather than focusing on only the most efficient ratios. For these reasons, Consumers

maintains the fringe benefits ratio of 37.6 percent used on Opening to calculate Rebuttal fringe benefits expenses.

#### v. Transportation Management System Costs

CSXT did not address this subsection.

#### vi. CERR Operating Materials & Supplies

CSXT inserted this section in its Reply. Consumers addresses these issues under the appropriate G&A subsection as it did on Opening.

### b. General and Administrative

#### i. Introduction and Summary

Consumers based its General and Administrative ("G&A") staffing evidence upon the extensive experience of its Witnesses John Orrison, Robert Holmstrom, and Joseph Kruzich (with regard to IT).[97]

As noted in Consumers' Opening evidence, Messrs. Orrison and Holmstrom have extensive experience in railroad management and railroad operations in the particular geographic area traversed by the CERR. *See* Consumers Opening at III-D-2-5. Most notably, Mr. Orrison served as CSX's Vice President of Network Planning, Vice President – Service Design, General Manager Field Operations Development, and Division Superintendent – Detroit Division, where he oversaw the portion of the lines that the CERR is replicating

[97] Witness Brian Despard sponsored Consumers' Opening evidence regarding, *inter alia*, the CERR's associated G&A expenses. Mr. Despard has 25 years of experience analyzing economic and marketing issues related to transportation and energy. *See* Consumers Opening at III-D-5-6.

between Porter and West Olive. *Id.* at III-D-3. While serving as CSXT's Vice President – Network Planning, Mr. Orrison also was appointed the Co-Chairman of the Association of American Railroads' Chicago Planning Group, which was charged with improving passenger and freight train operations within and around the Chicago area network. *Id.*

Similarly, Mr. Holmstrom has substantial relevant experience in the Chicago area. Specifically, Mr. Holmstrom has spent more than forty years working in the railroad industry, exclusively in Chicago, IL. *Id.* at III-D-4. Mr. Holmstrom worked for CN for many years, and held CN's most senior position in the Chicago area; *i.e.*, CN's Assistant Superintendent Operations for Chicago. *Id.*

With regard to staffing and equipment for the information technology function, Consumers relied upon the expertise of Mr. Joseph Kruzich. Mr. Kruzich has more than 40 years of experience in railroad accounting, executive administration, and information technology, ultimately serving as KCS's Vice President Telecommunications and Chief Information Officer. *Id.* at III-D-5.

In its Opening evidence, Consumers first presented benchmarking statistics to show that its G&A staffing and expense estimates were demonstrably conservative under Board precedent. In particular, Consumers presented statistics based upon the same SARR revenue measures that CSXT itself had advocated in prior evidence before the Board to confirm that the CERR's G&A staffing and expenditures per dollar of SARR revenue were vastly higher than had been common in prior SAC cases. *Id.* at III-D-35-42.

For example, the average G&A staffing per $10 million in SARR revenue for the cases that CSXT had identified in its prior evidence was 1.43 members, but Consumers proposed a G&A staff level of 2.22 members per $10 million in SARR revenue. *Id.* at III-D-36. Similarly, the average G&A expense as a percentage of SARR revenue for the cases that CSXT had identified was 3.1% whereas Consumers proposed a G&A expense level (*i.e.*, $6.9 million) equating to 4.95% of the CERR's $139.4 million revenues. *Id.* at III-D-40. Significantly, Consumers' 3.1% G&A expense percentage does not reflect the $3.6 million that the CERR will spend for its RMI expense. *Id.* at III-D-41. Had Consumers included that RMI expense in its calculation (as has been the case in prior SAC proceedings), Consumers' proposed G&A expense would have constituted 7.5% of total CERR revenues, a figure substantially in excess of the G&A expense percentage for any of the prior SAC cases that CSXT had identified. *Id.*

In its Reply evidence, CSXT proposes to add substantial staffing and expense to the CERR G&A budget. In particular, CSXT adds a total of 25 employees to the CERR's 28-member staff for a total G&A staff of 53. CSXT's proposed staffing increases, by department, are as follows:

| REBUTTAL TABLE III-D-5<br>CSXT Proposed Staffing Increases | | | |
|---|---|---|---|
| **Department** | **Consumers Opening** | **CSXT Reply** | **Difference** |
| Executive | 2 | 3 | 1 |
| Marketing | 5 | 9 | 4 |
| Finance & Accounting | 8 | 12 | 4 |
| Law & Administrative | 7 | 20 | 13 |
| IT | 6 | 9 | 3 |
| *Total* | 28 | 53 | 25 |

Notably, CSXT's Reply narrative includes an erroneous summary table (Table III-D-19) that miscalculates the total number of G&A staff members that CSXT's Reply actually proposes. *See* CSXT Reply at III-D-99 (wrongly claiming that CSXT proposed a G&A staff of 50 members and a difference of 22 members relating to Consumers' Opening evidence). In any event, CSXT's 53-member staffing proposal would constitute an 89% increase to the CERR's G&A staff level as proposed by Consumers.

In terms of expenses, CSXT would add { } to the CERR's Opening $6.9 million G&A expense level.[98] Of that increment, approximately { } relates to higher compensation (*i.e.*, more employees/higher pay for certain positions), approximately { } relates to CSXT's higher fringe benefit ratio, and the approximate { } balance relates to non-compensation issues such as outsourcing or equipment.

---

[98] CSXT's summary Opening Expense Table { }, claiming a $4.3 million difference in G&A expense. *See* CSXT Reply at III-D-4.

In attempting to justify these substantial additions, CSXT seeks to downplay the benchmarking comparisons that Consumers provided on Opening. CSXT acknowledges that "top-down benchmarking can be a useful tool," but nevertheless contends that Consumers has applied its benchmarking results in an improper manner. *See* Reply at III-D-69-70. CSXT also seeks to minimize its own prior benchmarking evidence by claiming that "oftentimes benchmarking to CSXT was done to err on the side of being conservative." *Id.* at III-D-70.

Contrary to CSXT's suggestion, Consumers use of benchmarking is entirely proper. Consumers does not contend that the CERR is identical to any prior SARR, but instead, Consumers seeks to demonstrate (both through benchmarking measures and through the experience of its various expert witnesses) just how far CSXT's evidence strays from the historic standard of SAC cases involving SARR carriers of differing sizes and complexities.

For example, CSXT previously advocated the use of a revenue-based benchmark for gauging the reasonableness of a SARR's marketing staff. *See* Consumers Opening at III-D-49 (quoting CSXT TPI Reply at III-D-108 and III-D-114). Yet in the present case, CSXT insists that the CERR requires a nine-member marketing staff for a railroad with only $139.4 million in revenues (based on Consumers' Opening evidence) or only $109.4 million in revenues (based on CSXT's Reply evidence). In *Sunbelt*, however, the STB found that nine marketing staff members were sufficient for a SARR with $362 million in revenues. *See Sunbelt* at 52-53 (accepting NS's proposal of a 9-member SBRR

marketing staff); *id.* at 181 (calculating SARR revenues). There is no basis for claiming that this benchmark improperly compares "apples and oranges." *Cf.* CSXT Reply at III-D-69.[99] To the contrary, this comparison shows that CSXT's Reply evidence in the present case substantially overstates the staffing needs of the CERR.

Similarly, CSXT argued in its *TPI* Reply evidence that employee-to-revenue ratios were a "particularly relevant means" to judge accounting staff levels "because most accounting tasks are a function on the amount of a railroad's incoming revenue and the amount of its corresponding expenses." *See* Consumers Opening at III-D-54-55 (quoting CSXT TPI Reply at III-D-121 n.274). In the present case, however, CSXT has proposed a Finance & Accounting Department staff of 12 individuals for a SARR that CSXT contends will have only $109.4 million in first-year revenues. *See* CSXT Reply at III-D-80-86. That proposal yields a revenue-to-staff ratio of $9.1 million per staff member, whereas in *TPI*, CSXT proposed a Finance & Accounting Department with a revenue-to-staff ratio of $26.76 million per staff member. *See* Consumers Opening at III-D-55. In other

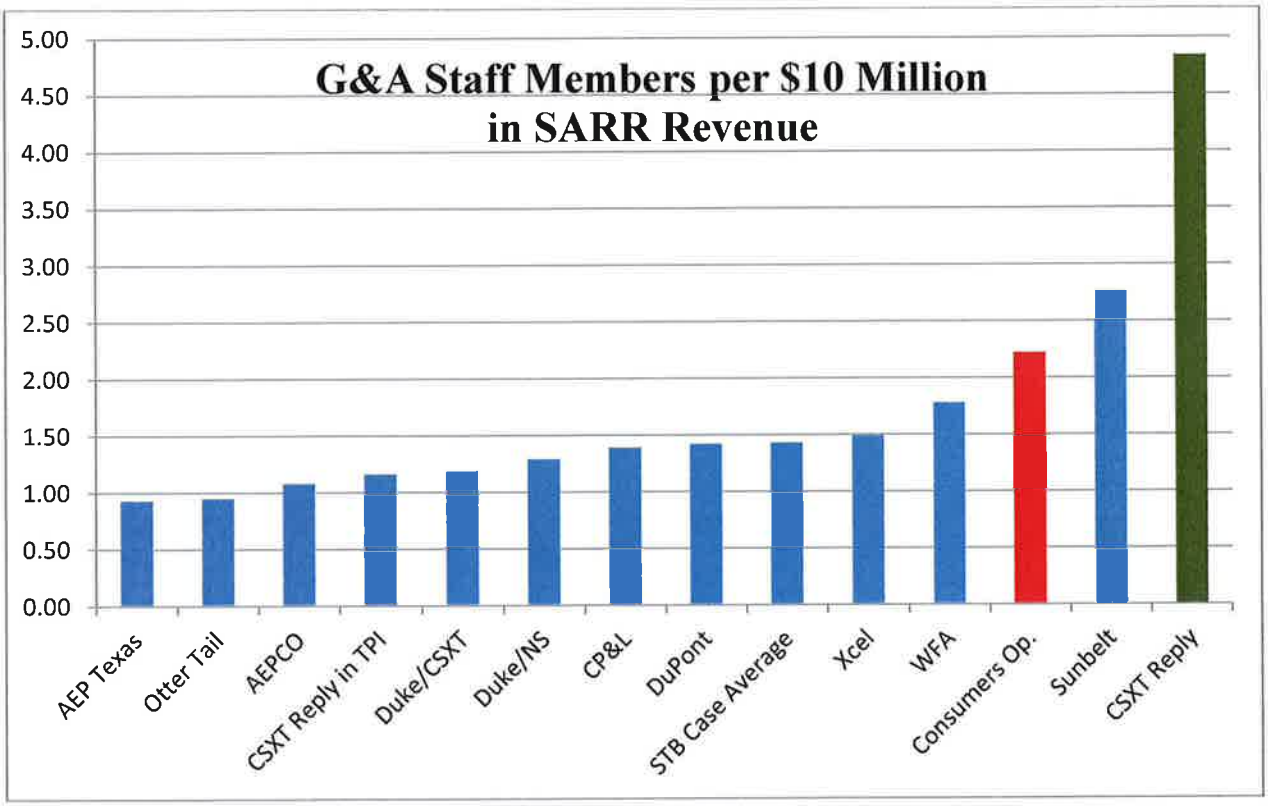
[99] Like CSXT's marketing arguments in the present case, NS's marketing staff arguments in *Sunbelt* emphasized the need for extra staffing to deal with Rule 11 traffic for which the SBRR would have "an obligation to negotiate and publish rates." *See Sunbelt* at 53; *accord* CSXT Reply at III-D-76-77 ("For Rule 11 traffic . . . the CERR will be responsible for managing the customers and rate making process . . . ."). Accordingly, there is no substantive difference in the marketing work to be performed by the two SARRs with regard to Rule 11 traffic. Instead, the principal difference is that SARR revenues in *Sunbelt* were approximately three times as high as in the present case.

words, CSXT's proposal for the CERR's Finance & Accounting Department would require approximately *three times* the staffing per dollar of SARR revenue than CSXT itself had advocated in its prior evidence. Again, this tremendous disparity in a specific staffing level that CSXT regards as being appropriate for a revenue-based benchmarking demonstrates the unreasonableness of CSXT's complaints about Consumers' evidence.

As a means of confirming the excessive nature of CSXT's G&A Reply evidence in the aggregate, Consumers has updated the tables that it presented on Opening. In that regard, Rebuttal Tables III-D-6 and III-D-7 below show that CSXT's proposed G&A staffing for the CERR would yield a figure of 4.84 G&A staff members per $10 million in CERR revenue, which is substantially higher than the corresponding ratio in any of the cited cases (and more than three times higher than the STB average in the cases that CSXT had identified):

| REBUTTAL TABLE III-D-6<br>BOARD-APPROVED STAFFING IN PAST 10 SAC CASES | | | |
|---|---|---|---|
| **Case** | **G&A Staff** | **Revenue (in millions)** | **G&A Staff Per $10M Revenue** |
| *Duke/NS* | 63 | $487.1 | 1.29 |
| *CP&L* | 63 | $453.7 | 1.39 |
| *Duke/CSXT* | 59 | $496.8 | 1.19 |
| *Xcel* | 51 | $341.5 | 1.49 |
| *Otter Tail* | 55 | $581.7 | 0.95 |
| *AEP Texas* | 66 | $711.0 | 0.93 |
| *WFA* | 39 | $218.4 | 1.78 |
| *AEPCO* | 225 | $2,075.8 | 1.08 |
| *DuPont* | 820 | $5,768.4 | 1.42 |
| *Sunbelt* | 100 | $362.4 | 2.76 |
| **Average** | – | – | **1.43** |
| CSXT Reply in *TPI* | 754 | $6,475.2 | 1.16 |
| **Consumers Opening** | **31** | **$139.4** | **2.22** |
| **CSXT Reply** | **53** | **$109.4** | **4.84** |

**REBUTTAL TABLE III-D-7**

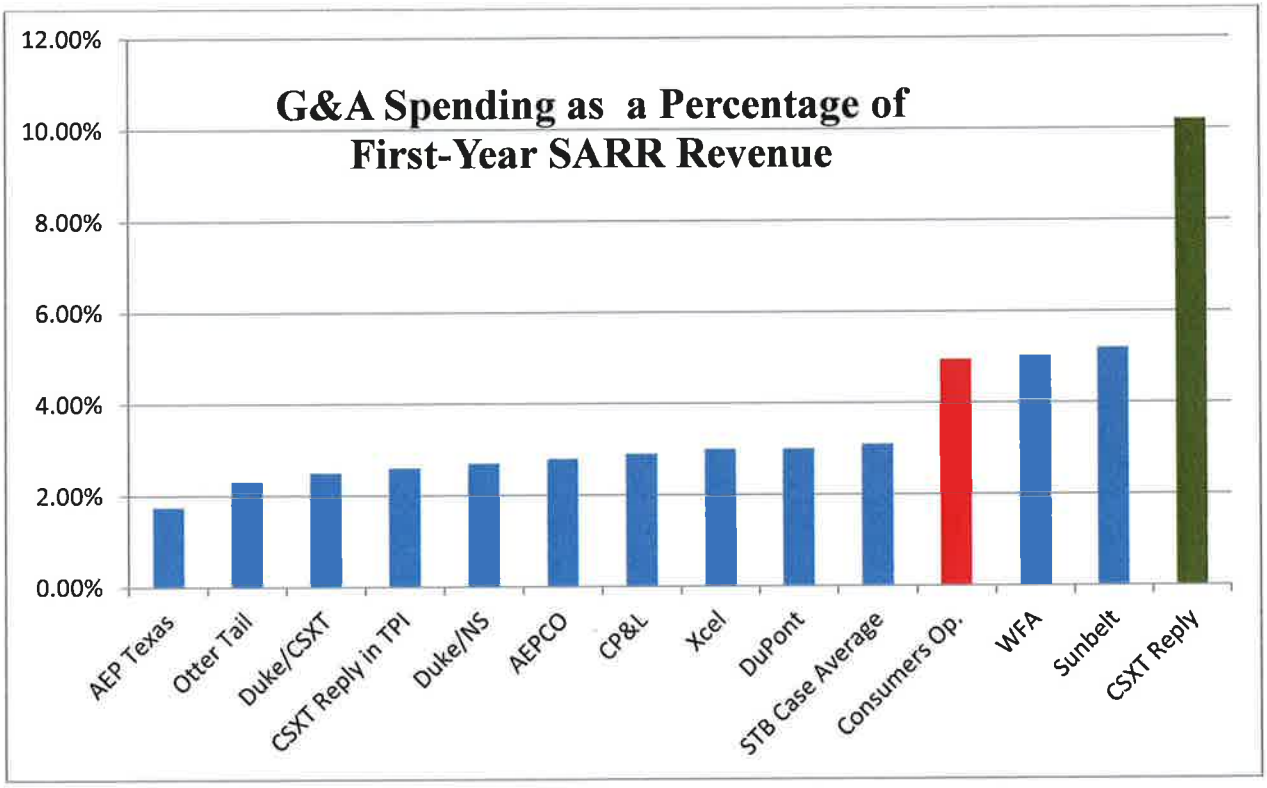


Similarly, CSXT's G&A evidence would yield a "G&A spending as a percentage of SARR revenue" figure that dwarfs the figures previously accepted by the Board. As shown in Tables III-D-8 and III-D-9 below, CSXT argues that the CERR's G&A expenditures should be more than three times higher (as a share of total first-year SARR revenue) than the average figure in the prior STB cases that CSXT identified in *TPI*:

**REBUTTAL TABLE III-D-8**
**BOARD-APPROVED G&A SPENDING IN PAST 10 SAC CASES**

| Case | G&A Spending (in millions) | Revenue (in millions) | G&A Spending as Percentage of Revenue |
|---|---|---|---|
| *Duke/NS* | $13.0 | $487.1 | 2.7% |
| *CP&L* | $13.0 | $453.7 | 2.9% |
| *Duke/CSXT* | $12.6 | $496.8 | 2.5% |
| *Xcel* | $10.4 | $341.5 | 3.0% |
| *Otter Tail* | $13.3 | $581.7 | 2.3% |
| *AEP Texas* | $12.5 | $711.0 | 1.75% |
| *WFA* | $11.0 | $218.4 | 5.0% |
| *AEPCO* | $58.3 | $2,075.8 | 2.8% |
| *DuPont* | $171.7 | $5,768.4 | 3% |
| *Sunbelt* | $18.9 | $362.4 | 5.2% |
| **Average** | – | – | **3.1%** |
| CSXT Reply in *TPI* | $166.5 | $6,475.2 | 2.6% |
| **CERR Opening** | **$6.9** | **$139.4** | **4.95%** |
| **CSXT Reply** | **$11.2** | **$109.4** | **10.2%** |

**REBUTTAL TABLE III-D-9**




The following Rebuttal Table III-D-10 compares the parties' G&A staffing evidence, including the Opening, Reply, and Rebuttal staffing levels:

## REBUTTAL TABLE III-D-10
## Total G&A Staff Comparison

| Position | Consumers Opening | CSXT Reply | Consumers Rebuttal | Difference |
|---|---|---|---|---|
| President and CEO | 1 | 1 | 1 | 0 |
| Administrative Assistants | 1 | 1 | 1 | 0 |
| Manager of Communications | 0 | 1 | 0 | 1 |
| Director of Marketing | 1 | 1 | 1 | 0 |
| Marketing Manager | 4 | 4 | 4 | 0 |
| Manager Marketing Services | 0 | 1 | 0 | 1 |
| Market Manager | 0 | 2 | 0 | 2 |
| Manager Accounts | 0 | 1 | 0 | 1 |
| Vice President-Finance and Accounting | 1 | 1 | 1 | 0 |
| Administrative Assistant | 1 | 1 | 1 | 0 |
| Treasurer | 1 | 1 | 1 | 0 |
| Cash Manager | 0 | 1 | 0 | 1 |
| Controller | 1 | 1 | 1 | 0 |
| Assistant Controller/Manager Revenue | 1 | 1 | 1 | 0 |
| Manager Disbursements | 0 | 1 | 0 | 1 |
| Revenue Accounting Managers | 2 | 2 | 2 | 0 |
| Director Planning and Support | 0 | 1 | 0 | 1 |
| Manager of Budgets/Purchasing | 1 | 1 | 1 | 0 |
| Manager Tax and Financial Reporting | 0 | 1 | 0 | 1 |
| Vice President-Law and Administration | 1 | 1 | 1 | 0 |
| General Attorney | 1 | 1 | 1 | 0 |
| Director-Human Resources | 1 | 1 | 1 | 0 |
| Manager Human Resources | 0 | 1 | 0 | 1 |
| Chief of Security/Police | 1 | 1 | 1 | 0 |
| Assistant Chief | 0 | 1 | 1 | 0 |
| Security Agents | 3 | 11 | 3 | 8 |
| Director Asset Protection | 0 | 1 | 0 | 1 |
| Manager Environmental Control | 0 | 1 | 0 | 1 |
| Administrative Assistant/Claims Specialist | 0 | 1 | 0 | 1 |
| Director-Information Technology | 1 | 1 | 1 | 0 |
| IT Specialists | 5 | 8 | 5 | 3 |
| **Total** | **28** | **53*** | **29** | **24** |

* As noted above, CSXT's Table III-D-19 misstates the number of G&A staff members that CSXT actually proposed, and misstates the total difference in the parties' G&A staffing. *See* CSXT Reply at III-D-99.

### ii. Staffing Requirements

CSXT's proposed G&A staffing is bloated and improper. With the exception of adding an Assistant Police Chief to its Chicago area police force, Consumers declines to accept any of CSXT's proposed staffing additions or modifications. As Consumers describes in greater detail below, CSXT's evidence repeatedly errs by assuming that the senior-most staff member responsible for a given function will be incapable of actually performing substantive work. For example, CSXT assumes that the CERR's President will be unable to handle communications, and likewise assumes that the CERR's Vice President of Finance & Accounting will be unable to perform long-term investment planning. CSXT also assumes that redundant employees are required within different CERR departments, assuming for example, that the CERR's Marketing staff would not perform the function of "customer contact" and therefore would require the assistance of duplicative Customer Service staffing within the Marketing group itself, even though the CERR's Operating personnel already include a Customer Service staff and even though the existing Marketing staff will communicate with the CERR's customers.

Separately, CSXT also seeks to create duplicative managers and/or to create new management positions to oversee unnecessary employees. For example, CSXT proposes to staff the CERR with both a Police Chief and a Director of Asset Protection, and CSXT proposes to add a new "Manager Revenue" position to assist the Controller even though Consumers already had

proposed that the CERR staff include an Assistant Controller. Moreover, CSXT proposes to add a Director Planning and Support to oversee an unnecessary Manager Tax & Financial Reporting.

Consumers addresses each of CSXT's various staffing arguments in turn.

**(a) Executive Department/Board of Directors**

Consumers proposed an Executive Department comprised of a President/CEO, and Administrative Assistant, and a Board of Directors that includes three independent representatives drawn from the CERR's customer group and lenders. In its Opening Evidence, Consumers explained that the CERR's department heads (*i.e.*, the Vice President of Operations, the Vice President of Finance and Accounting, and its Vice President of Law and Administration) would report to the President. *See* Consumers Opening at III-D-46.

In its Reply, CSXT proposes three modifications to this Executive Department and Board of Directors structure.

First, CSXT acknowledges that Consumers correctly identified the "daily oversight" and "external relations" functions of the Executive Department, but CSXT argues that "it is not realistic to think a company with over $100 million in revenue could be run by a single President and a shared Administrative Assistant to handle all of these functions." CSXT Reply at III-D-72. On the basis of this observation, CSXT proposes that "Marketing and Information Technology

have direct reports to the CERR's President." *Id.* at III-D-73. CSXT recites that these two functions are "mission critical" and that customers of the CERR will "want to know that their Marketing contact has a direct line to the President." *Id.* CSXT adds that {

} and CSXT comments that that Information Technology "requires the direct engagement of the President." *Id.*

CSXT's argument is mistaken for a number of reasons. Most notably, while CSXT claims that Consumers' evidence is not "realistic" because the President's responsibilities for direct oversight would be too great, CSXT's proposed solution to that perceived problem is to impose even greater direct oversight responsibilities upon the President. CSXT's recommended solution therefore is illogical and improper. Moreover, contrary to CSXT's suggestion, Consumers has not proposed that the CERR's President and Administrative Assistant would "handle all of these [oversight and external relations] functions." *Id.* at III-D-72. Instead, the CERR's three Vice Presidents (Operations, Finance, and Law/Administration) each would report to the President and each would oversee a department of the railroad. The Director of Marketing and the Director of Information Technology each would report to a separate Vice President, thus ensuring an appropriate level of supervision for each function without creating an excessive number of direct reports for the President. Modifying the CERR structure to create additional direct reports to the President (as CSXT suggests) would contradict the very goal that CSXT claims is essential.

In addition, CSXT's anecdotal claim that customers will "want to know that their Marketing contact has a direct line to the President" (*see* CSXT Reply at III-D-73) lacks any support. CSXT has not performed any survey of the CERR's customers to gauge their preferences as to the lines of supervision available to their Marketing contacts. While CSXT claims that {

}, CSXT fails to identify a single prior SAC case addressing this question in CSXT's favor.[100]

CSXT's Reply evidence also fails to identify any example of a Class II rail carrier (either real-world or SAC) in which the head of Information Technology reports directly to the President. In that regard, {

[100] CSXT's electronic workpapers regarding the {

}

}

Second, CSXT insists that the CERR Executive Department should include a Communications Manager to assist the President with "all of the various communications functions the President must carry out in addition to the operational oversight of the railroad." *Id.* at III-D-73-74. CSXT contends that this individual would be required to deal with the CERR's social media presence on Facebook, Twitter, or LinkedIn, and adds that managing these platforms and managing community, government, and investor communications is even more important "in an intense media environment like Chicago." *Id.* at III-D-74.

Importantly, however, CSXT reports that only seven of the sixteen Class II carriers that it identified as having websites also have a separate social media presence on Facebook, Twitter, or LinkedIn. *Id.* Stated differently, more than half of the Class II railroads that CSXT identified do not have the social media presence that CSXT contends is part of the communication demand on a "21st century railroad." *Id.* Even this statistic may be tilted in CSXT's favor insofar as CSXT does not indicate whether it identified any additional Class II railroads without their own websites. Accordingly, it is evident that this social

media "function" is not essential for the operation of a least-cost, most efficient stand-alone rail carrier that is the size of the CERR.

In addition, CSXT has not identified any real-world rail carrier (let alone a real-world carrier of a comparable size to the CERR) whose staff includes a Communications Manager. Instead, CSXT simply claims anecdotally that such an individual is necessary. Finally, to the extent that the CERR concludes that it is essential to initiate a presence on LinkedIn, Facebook, or Twitter, the Executive Department's Administrative Assistant can create such accounts. For the foregoing reasons, Consumers declines to adopt CSXT's proposed Communications Manager as part of the CERR's staff.

Third, CSXT proposes that the CERR compensate the members of the CERR's Board of Directors. *See* CSXT Reply at III-D-75 and III-D100-101. CSXT reaches this result in an indirect manner. CSXT first insists that outside directors selected from amongst the CERR's customer group and lenders could not adequately perform the necessary oversight and guidance if "none are (sic) truly independent." CSXT Reply at III-D-75. Next, CSXT proposes that the three outside directors therefore should be independent. *Id.* Finally, CSXT explains that "independent directors cannot be expected to serve for free." *Id.* Significantly, however, the logic of CSXT's argument fails at its first step because CSXT does not present any basis for its inference that directors chosen from amongst the CERR's customers and lenders would not be independent.

In fact, contrary to CSXT's argument, it is reasonable to conclude that representatives of CSXT's customer and lender groups would be more – rather than less – vigilant and independent in overseeing the CERR's management. Such a conclusion is far more reasonable than CSXT's assumption that three individuals with no interest in the CERR's management whatsoever (other than in continuing to be paid $10,000 each per year by that same management) would exercise greater independent oversight.

CSXT's Reply also fails to address the precedent cited by Consumers in which the Board routinely has accepted the assumption that SARR directors would serve without compensation. *See* Consumers Opening at III-D-47-48 (and cases cited therein).

**(b) Marketing**

On Opening, Consumers proposed a marketing staff of five individuals, including a Director of Marketing and four separate Marketing Managers. *See id.* at III-D-48. The Director of Marketing reports to the Vice President of Operations. *Id.*

As part of its Opening presentation, Consumers provided "benchmark" comparisons regarding the Marketing function on the basis of SARR revenue. Significantly, Consumers explained that CSXT itself had argued in favor of scaling the Marketing staff in the *TPI* case on the basis of SARR revenues. *See* Consumers Opening at III-D-49 (citing CSXT TPI Reply at III-D-108 ("Mr. Brown's general approach was to use CSXT's staffing as a benchmark for the

[marketing] staffing that the TPIRR would need, after making adjustments for TPIRR's relative revenues . . . ."); *id.* (citing CSXT TPI Reply at III-D-114 ("Mr. Brown has reviewed the real world CSXT staffing and concluded that the most conservative approach is to scale TPIRR's general freight marketing staff to CSXT based on revenue.")). Since a railroad's Marketing staff is responsible for a function that is directly tied to revenues, Consumers' use of total SARR revenues per Marketing staff member as a metric is entirely reasonable and appropriate.

In any event, on the basis of that same revenue-scaling benchmark, CSXT had argued in *TPI* that a single Marketing staff member was needed for each $30.1 million in SARR revenue. *Id.* Applying that same standard to the CERR Opening revenues yields a CERR Marketing staff of approximately 4.6 individuals, or slightly fewer staff Marketing members than the five that Consumers had proposed.

Likewise, as noted above, Consumers explained on Opening that the Board's *Sunbelt* decision included a SARR Marketing staff of nine individuals for a railroad with a full $362 million in revenues and with a complex set of traffic including a substantial volume of carload traffic. *See* Consumers Opening at III-D-50-51. This *Sunbelt* staffing levels equates to one Marketing staff member for every $40.2 million in SARR revenue. Applying that ratio to the CERR's first-year revenues yields a Marketing staff of only about 3.5 employees.

In its Reply Evidence in the instant case, however, CSXT ignores these Marketing benchmarks, other than its introductory "But so what?" response

to the subject of benchmarking generally. *See* CSXT Reply at III-D-69; *but see id.* (in which CSXT acknowledges that "benchmarking can be a useful tool"). These benchmarking comparisons, however, are crucial to understanding the unreasonableness of CSXT's Reply.

CSXT proposed that the CERR's Marketing staff should include a total of nine individuals despite the fact that CSXT contends that the CERR's annual revenues should amount to only $109.4 million. The resulting revenue-to-Marketing staff ratio (that CSXT itself relied upon as a benchmark in the *TPI* case) represents a substantial departure from past STB practice. In particular, CSXT's Reply in the instant case suggests that the Board should deem the CERR's Marketing staff capable of handling only $12.2 million in revenues per individual (*i.e.*, $109.4 million divided by 9 = $12.2 million per staff member). There is no basis for imposing this substantial staffing penalty upon the CERR. To reiterate, CSXT itself submitted evidence in *TPI* indicating that a Marketing staff member could be responsible for nearly two and one-half times as much revenue (*i.e.*, $30.1 million per staff member) and the Board found in *Sunbelt* that a Marketing staff member could be responsible for more than three times as much revenue (*i.e.*, $40.2 million per staff member).

There is nothing about the CERR's Marketing function that makes it *substantially* more onerous on a revenue-per-staff member basis than the Marketing function in either *TPI* or *Sunbelt*. Despite all of CSXT's various efforts to claim that Consumers has failed to dedicate sufficient staffing to the Marketing

function (*e.g.*, Rule 11 issues, the need to create additional rates quickly, the need for customer contact), these functions are standard Marketing functions that the CERR's staff will be capable of handling to the same extent as the *TPI* staff or the *Sunbelt* staff. CSXT's claim that the CERR Marketing staff should have only 30% to 40% of the business-handling "capacity" of the Marketing staffs in these two prior cases is manifestly improper.[101]

CSXT's arguments regarding individual members of the CERR Marketing staff are likewise improper and should be rejected.

First, CSXT argues that the CERR staff should include a Market Manager to account for the volume of traffic that is Rule 11 at Chicago. *See* CSXT Reply at III-D-76-78. CSXT claims that the need to quote Rule 11 rates will impose a burden on the CERR's existing staff. Again, however, CSXT has provided no basis for concluding that this workload in any way will exceed the workload for individual Marketing staff members in *TPI* or *Sunbelt*, let alone exceed that workload by the substantial margin that CSXT assumes. Notably, when describing the Rule 11 marketing burden, CSXT admits that "because of the extreme short haul on the CERR, it may be reasonable to assume that the residual CSXT will initiate most of the marketing work." *Id.* at III-D-77. On the basis of this acknowledgement, CSXT simply argues that "the CERR will still have to

---

[101] *Sunbelt*: $12.2 million/$40.2 million = 30.3%; CSXT *TPI* Reply: $12.2 million/$30.1 million = 40.5%.

review all of the residual CSXT's rate proposals and approve them." *Id.* CSXT has provided no evidence to demonstrate that Consumers' robust staffing proposals for the Marketing function is insufficient to "review" CSXT's rate proposals and "approve" them.

Second, CSXT argues that "implicit" in Consumers' evidence is the presumption that other railroads will handle marketing responsibilities for overhead traffic. *See* CSXT Reply at III-D-77. On the basis of this claim, CSXT insists that the Board previously has rejected this supposed Consumers' argument and CSXT adds a second Market Manager "to address the inevitable need that residual CSXT and CERR will have to quickly create additional rates in response to changes in traffic." *Id.* at III-D-77 (citing *AEPCO 2011*); *id.* at III-D-78.[102] Significantly, however, CSXT can only claim that this argument is "implicit" in Consumers' Opening evidence because Consumers never actually raised such an argument. Accordingly, CSXT's objection appears to be a situation in which CSXT seeks to rely upon favorable Board precedent on a marketing matter and – having failed to find a violation of that precedent in Consumers' evidence – CSXT is reduced to inferring that the theory must be "implicit" in Consumers' case. There is no basis for CSXT's assumption.

---

[102] CSXT adds that the "traffic selection criteria" employed by Consumers will "result in far greater churn." *Id.* at III-D-78; *see also id.* ("CERR will need to quickly recognize when existing CSXT contracts and rate authorities will need to be amended to include an interline rate with CERR.").

CSXT's "greater churn" argument is likewise unavailing. For the reasons set forth in Consumers' Part III-A Rebuttal, CSXT is wrong to claim that Consumers' traffic selection is in any way improper or would require additional effort on the CERR's part to distinguish between CERR traffic and "parallel universe" traffic. Likewise, CSXT is wrong to argue that additional Marketing staff will be necessary to amend contracts to reflect CERR's involvement in interline service. There is no basis in stand-alone theory for requiring a SARR to incur additional expenses in order to modify single-line rail contracts to reflect the insertion of the SARR as a bridge carrier.

Third, CSXT alleges that "Consumers has failed to include the major marketing responsibility of customer contact," and on that basis, CSXT proposes that the CERR staff include a Manager-Accounts. *See* CSXT Reply at III-D-78-79. CSXT acknowledges that Consumers has included customer service staff in its Operations department, but CSXT insists that the role of customer contact from the Marketing staff is of a different nature than customer service, and "involves communications regarding rates, rules, accessorial charges, and maintenance programs that might alter service." *Id.* at III-D-79.

CSXT's argument is incorrect insofar as it seeks to duplicate the functions of the CERR's existing Marketing staff. CSXT claims that the CERR's customers "will require some attention" (*id.*), but that is precisely the function that the CERR's existing Marketing staff will perform. There is no basis for CSXT's illogical assumption that Marketing staff will not devote attention to customers.

Fourth, CSXT proposes to add a Manager of Marketing Services whose responsibility will be to coordinate "ancillary functions" such as service design, interline agreements, forecasting, and customer service within Marketing. *See* CSXT Reply at III-D-79. CSXT also claims that this additional person is needed in order to communicate with the Manager Communications that CSXT proposes to add to the CERR's Executive Department. *Id.* In other words, CSXT insists that one new position is required to communicate with another unnecessary new position that CSXT creates.

CSXT's Reply evidence does not provide any legitimate basis for requiring the addition of a Manager of Marketing Services. In particular, CSXT does not provide any basis for its assumption that non-Marketing functions with the CERR organization will require coordination with Marketing, and even if such coordination were required, CSXT does not provide any basis for its assumption that the CERR's existing Marketing staff would be insufficient to perform that work. Again, Consumers has provided a robust Marketing staff on the basis of CSXT's own revenue-per-staff member metric. There is no basis for alleging that such a robust staff would be incapable of performing any routine Marketing tasks, even to the extent those tasks may involve communication with non-Marketing personnel in the small office environment of the CERR.

### (c) Finance and Accounting Department

On Opening, Consumers proposed a Finance and Accounting Department consisting of eight employees, to be headed by the Vice President-

Finance & Accounting. *See* Consumers Opening at III-D-54-60. The staff for this department included a Treasurer, a Controller, an Assistant Controller, two Revenue Accounting Managers, a Manager of Budgets and Purchasing, and an Administrative Assistant. *Id.* at III-D-54.

**(i) Revenue Scaling**

Consumers also recounted on Opening that CSXT previously had emphasized the value of a revenue-based scaling metric to gauge the reasonableness of Finance and Accounting staff. Specifically, CSXT had argued in its *TPI* Reply evidence with respect to staffing for the Finance and Accounting function that "[e]mployee-to-revenue ratios are a *particularly relevant* means to judge accounting staff levels, because most accounting tasks are a function of the amount of a railroad's incoming revenue and the amount of its corresponding expenses." *Id.* at III-D-54-55 (quoting CSXT TPI Reply at III-D-121 n.274) (emphasis added).

Under CSXT's proposed metric in the *TPI* case, Finance and Accounting staffing should equate to one employee for every $26.76 million in SARR revenue. *Id.* at III-D-55. Consumers' Opening evidence regarding the CERR's Finance and Accounting staff yielded a much more conservative ratio of one employee for every $17.4 million in SARR revenue (*i.e.*, $139.4 million divided by 8 staff members = $17.4 million per Fin. & Acct. staff member). In fact, as Consumers explained on Opening, Consumers had proposed a staffing level for the CERR's Finance and Accounting Department that was more than fifty

percent higher than the level associated with CSXT's own staffing metric from the *TPI* case. *Id.*

CSXT's Reply evidence in the instant case represents a substantial and inappropriate departure from the very metric that CSXT advocated as being "particularly relevant" for judging accounting staff levels. In particular, CSXT's proposed 12-member staffing level for the CERR's Finance and Accounting Department yields a revenue-per-staff member figure of only $9.1 million using CSXT's CERR revenue determination (*i.e.*, $109.4 million divided by 12 staff members = $9.1 million per staff member).

CSXT therefore contends that the CERR requires approximately three times as many Finance and Accounting personnel *per dollar of SARR revenue* than CSXT argued would be necessary for the SARR in the *TPI* case (*i.e.*, $26.2 million divided by $9.1 million = 2.9). Stated differently, CSXT contends that each CERR staff member would be capable of handling only one-third of the Finance and Accounting responsibilities of one of CSXT's TPIRR staff members. There is no basis whatsoever for this substantial disparity regarding a function that CSXT itself contends is subject to revenue-based scaling. Accordingly, the Board should reject CSXT's Reply evidence regarding the Finance and Accounting function in its entirety as unreasonable and inappropriate.

**(ii) Specific CSXT Proposals**

CSXT's Reply evidence advocates the addition of five new Finance and Accounting staff members. Specifically, CSXT urges the Board to add a Cash

Manager, a Manager Revenue, a Manager Disbursements, and Director of Planning & Support, and a Manager Tax & Financial Reporting. CSXT's evidence includes certain errors and omissions in this regard, however.

- CSXT's Reply narrative never explains that CSXT proposes to add a "Manager Revenue" position to the CERR staff. Instead, this position appears only in the table at page III-D-99 of CSXT's Reply and in CSXT's electronic workpapers.
- CSXT's Reply excludes the Assistant Controller that Consumers had proposed on Opening, but CSXT never explains or even acknowledges this exclusion.[103]

Accordingly, CSXT's Reply proposes a net increase of four employees to the CERR's Finance and Accounting staff.

Consumers addresses each of CSXT's various arguments in turn. Consumers emphasizes, however, that each of CSXT's references to CERR staffing being too "slim," "glaring[ly] deficien[t]," "overly ambitious," etc., pertain to a Finance and Accounting Department that is 50% more robust than the staffing level that CSXT itself proposed in *TPI*. Effectively, the question the Board faces is whether a fully staffed Department of eight individuals can handle two-thirds of the Finance and Accounting work that CSXT contended in *TPI* that those same individual should be able to handle. Consumers respectfully submits that the answer to this question is an unequivocal "yes."

---

[103] It may be the case that CSXT simply intended to re-cast the CERR's Assistant Controller position as a Manager Revenue position ({ }), but CSXT's narrative is not explicit in this regard.

First, CSXT argues that the CERR should include a Cash Manager to support the work of the Treasurer. *See* CSXT Reply at III-D-82. According to CSXT, this individual would "assist with day-to-day responsibilities such as credit checks, short-term cash management, and monitoring bank accounts." *Id.* CSXT adds that the inclusion of this Cash Manager would allow the Treasurer to "focus on long-term functions such as investment planning and overall cash flow." *Id.*

Significantly, however, CSXT's arguments in this regard ignore the distinction in Consumers' staffing evidence between the Vice President – Finance & Accounting and the Treasurer. Under Consumers' proposal, the Treasurer would handle short-term cash management, leaving the Vice President available to handle more of the strategic finance issues the CERR will face. As Consumers explained, the Vice President is "responsible for overseeing the finance and accounting functions of the railroad." *See* Consumers Opening at III-D-56. CSXT's approach effectively would strip the Treasurer position of its principal responsibility over short-term cash management in order to justify the inclusion of an additional staff member and would push strategic responsibility down from the Vice President to the Treasurer. There is no basis for assuming that the Treasurer cannot perform the tasks included within that role and no basis for seeking to transfer the Vice President's long-term investment planning role to the Treasurer. Accordingly, Consumers declines to add a Cash Manager to its CERR staffing.

Second, CSXT argues that the Controller's office requires additional support in the form of a Manager of Disbursements. In particular, CSXT proposes

to include its Manager of Disbursements to assist the CERR's Controller with respect to accounts payable and payroll. *See* CSXT Reply at III-D-83 ("CSXT proposes a Manager of Disbursements to handle all accounts payable functions, payroll responsibilities, and any required reporting.").

CSXT, however, ignores the fact that Consumers included an Assistant Controller in its CERR staffing as well as two Revenue Accounting Managers (and a Manager of Budgets and Purchasing). CSXT claims that Consumers provided "little explanation" as to which members of the Controller's office would fulfill the accounts payable and payroll responsibilities (CSXT Reply at III-D-83), but cannot legitimately remove an Assistant Controller from the CERR staffing that Consumers had proposed without a word of explanation and then credibly claim that Consumers has not adequately explained the individual responsibilities of its own CERR staff members.

CSXT's argument also ignores the fact that Consumers provided for the outsourcing of the payroll function on the same basis as accepted by the Board in *DuPont*. *See* Consumers Opening e-workpaper "CERR G&A Outsourcing_Open.xlsx," tab "Outside Services," cell C5 (citing *DuPont* at 98 and NS Reply in *DuPont* at III-D-68).

In any event, Consumers explained the staffing of the CERR's Controller function on Opening, and explained the functions that the Controller's office would perform. In this regard, CSXT acknowledges that in Consumers' evidence, the Controller's office is "assigned responsibility for accounts payable

and payroll." CSXT has not provided any basis for including an additional Manager of Disbursements, particularly insofar as Consumers' existing staff level goes well beyond the "staffing-per-$10 million of SARR revenue" and "G&A expense-per-$10 million of SARR revenue" metrics that CSXT itself previously advocated as being "particularly relevant."

Third, as noted above, CSXT's electronic workpapers include costs associated with a so-called "Manager Revenue" but, other than the summary table on CSXT's Reply page III-D-99, CSXT's Reply narrative never mentions this position or the functions for which it would be responsible. Accordingly, there is no basis for adding a "Manager Revenue" position to the CERR staff.[104]

Fourth, CSXT proposes to add two new employees to handle the same basic responsibilities as the CERR's existing Controller staff. In that regard, Consumers explained on Opening that "members of the CERR Controller function staff will interact with outside audit and tax personnel and will prepare the data and documentation needed by the outside audit firm." *See* Consumers Opening at III-D-59. Consumers added that the CERR will have minimal financial reporting

---

[104] In a related matter, CSXT's Reply narrative claims that the Controller will "need to be vigilant" because of Consumers' traffic selection criteria, but CSXT never specifically argues that an additional employee would be required for this purpose. *See* CSXT Reply at III-D-83. In any event, CSXT's is wrong to argue that there is a need to expend resources to determine which traffic the CERR will handle and which traffic CSXT will continue to handle on a "parallel universe" basis. As noted in Part III-A of this Rebuttal, STB precedent does not require a complaining shipper to engage in this sort of real-time monitoring.

requirements because of its small size, and that it will use financial accounting software to track all of its physical assets and asset replacements. *Id.*

On Reply, CSXT proposes to add a Director of Planning and Support and a Manager of Tax and Financial Reporting to the CERR Finance and Accounting Staff. *See* CSXT Reply at III-D-84.[105] CSXT fails to identify any specific need for these two additional employees other than simply commenting that they are needed to "address the volume of responsibility" supposedly held by the Manager of Budgets and Purchasing, and commenting that the CERR would have "management and data collection responsibilities" even though it will use an outside vendor for all required tax return preparation. *Id.* at III-D-84-85.

CSXT has not provided any legitimate basis for the conclusion that these two additional Controller staff employees will be necessary to assist the outside vendor with its tax work or to assist the balance of the Controller group staff in supervising the outside vendors handling the CERR's tax and audit work.[106]

---

[105] CSXT suggests on Reply that "Consumers lists several functions that will *presumably* be this Manager's responsibility, such as audit management, tax, and financial reporting." CSXT Reply at III-D-84 (emphasis added). Consumers' Opening evidence, however, did not propose this narrow assignment of responsibility, instead indicating that the listed responsibilities would be shared by the entire Controller group (and the outside vendors). *See* Consumers Opening at III-D-59.

[106] CSXT's narrative takes issue with Consumers' estimate of the cost of the outsourced tax function {

### (d) Law and Administration Department

On Opening, Consumers proposed a Law and Administration Department consisting of a Vice President – Law & Administration, a General Attorney, the Security Chief, the Director of Human Resources, the Director of Information Technology, three Security Agents and five IT Specialists. *See* Consumers Opening at III-D-60-61. CSXT raises arguments to a several different aspects of this Department and to its related outsourcing.

#### (i) Legal/Outside Counsel

As an initial matter, CSXT accepted Consumers' proposed in-house legal staffing (*i.e.*, a Vice President Law & Administration and a General Attorney) and accepted that the CERR could "outsource the remainder of its legal expenses." CSXT Reply at III-D-86.

With regard to the outsourcing of a portion of its legal work, Consumers followed standard SAC case practice. Consumers based the CERR's total legal expense upon a published measure of total corporate legal spend as a percentage of company revenues. *See* Consumers Opening at III-D-62-63. In particular, Consumers utilized the 0.5% of revenue figure published for companies of the CERR's size (even though the CERR is not a public company and would not incur legal expenses associated with many of the securities- and disclosure-related issues that public companies must address). *Id.* at III-D-63. In any event,

using that 0.5% metric, Consumers calculated a total CERR legal spend, and then subtracted the CERR's internal legal spend from that total to yield an outside counsel estimate. *See id.* at III-D-63-65 & Consumers Opening e-workpaper "CERR G&A Outsourcing_Open.xlsx," tab "Legal Spend."

In its Reply, CSXT accepts the "general framework" of Consumers' outside counsel estimate. *See* CSXT Reply at III-D-86. CSXT, however, takes issue with Consumers' calculation of the CERR's total internal legal spend, arguing that the compensation of the CERR's Vice President of Law & Administration should not be included in full because "that individual will have administrative responsibilities apart from legal work." *Id.* at III-D-87. CSXT therefore purports to "assign[] half of the cost of the position to the legal spending figure and half to the nonlegal G&A staffing budget" to account for the Vice President's "split" responsibilities. *Id.* CSXT's argument is mistaken and its 50% reduction is arbitrary and improper.

In terms of job functions, Consumers explained on Opening that the Vice President – Law and Administration "functions as General Counsel for the CERR." *See* Consumers Opening at III-D-60. Along with the General Attorney, the CERR's Vice President – Law and Administration "will perform the majority of the CERR's annual legal work including the administration of litigation and claims, real estate issues, and contract matters." *Id.* at III-D-61. While the Vice President will oversee a department that includes IT, security, and human

resources functions, it is evident that as the CERR's General Counsel, the Vice President will devote a substantial amount of time to legal work.

Moreover, CSXT's attempt to impose a strict limit on supposedly acceptable internal legal expenses directly contradicts the published study from which Consumers drew its legal expense metric. In particular, Consumers based its 0.5% revenue metric upon a 2012 Law Department Metrics Benchmarking Study by Corporate Counsel and ALM Legal Intelligence, which reports total legal expenses as a share of company revenue. *See* Consumers Opening at III-D-62-63 (citing Consumers Opening e-workpaper "ALM.pdf"). Significantly, the ALM study applied an extremely broad definition of internal legal expenses when developing its revenue metric, including not only in-house attorney compensation, but also including expenses associated with technology, occupancy, and an allocation of general corporate overhead: "This survey also looks separately at internal and external legal expense. Internal legal expense is reported as a total number, and it is also broken down into the following component parts: *compensation, contract attorneys, occupancy, technology expense, and general corporate overhead allocated to the law department.*" Consumers Opening e-workpaper "ALM.pdf," at 24 (emphasis added).

Consumers' approach to determining total internal legal spend on Opening was extremely conservative as compared with the ALM study from which Consumers derived its 0.5% revenue metric. Consumers' calculation included only the Vice President and General Attorney's: (1) base compensation;

(2) fringe benefits; (3) travel expense; (4) desks; and (5) computers. *See* Consumers Opening e-workpaper "CERR G&A Outsourcing_Open.xlsx," tab "Legal Spend," columns D and E. Consumers' internal legal spend calculation did not include any allocated share of the cost of the West Olive, MI headquarters, any allocated share of the CERR's administrative assistants, or any allocated share of the CERR's various other corporate overhead expenses (*e.g.*, the share of the CERR's IT staff expense incurred to support legal activities, the share of the CERR President's expense associated with overseeing the CERR's legal activities, etc.).

In addition, it is reasonable to conclude that any corporate General Counsel is likely to devote at least some time, and perhaps substantial time, to department management, rather than simply performing legal research, writing briefs, etc. There is no basis for CSXT to suggest that the ALM percent of revenue metric assumes that senior corporate attorneys solely perform such strictly legal work. In fact, the ALM study explicitly confirms that a substantial share of the responding companies' "top legal officer positions" (*i.e.*, 64.6%) also included the "additional title and responsibilities of a Corporate Secretary." *See* Consumers Opening e-workpaper "ALM.pdf," at 22. CSXT's complaint that Consumers improperly included the full compensation of the CERR's Vice President of Law & Administration therefore is inconsistent with the ALM study itself.

Even beyond CSXT's theoretical error, CSXT's actual cost calculations in this regard are replete with errors and inconsistencies, thus rendering CSXT's evidence on this point inadequate and improper:

First, CSXT purports to include 50% of the cost of the position of the CERR's Vice President of Law & Administration in its internal legal cost calculation. CSXT, however, includes *none* of the cost of this position. While CSXT's spreadsheet includes the figure 50% under the "VP" heading, the balance of the "VP" column does not include any cell entries whatsoever. *See* CSXT Reply e-workpaper "CERR G&A Outsourcing_Reply.xlsx," tab "Legal Spend," cells D6 through D13 (including zero dollars for the VP salary, benefits, travel, desk, computer, and supplies). This error led to a substantial overstatement in CSXT's calculation of the CERR's outside legal expenses.

Second, CSXT's electronic workpaper misstates the salary, benefits, and travel expenses for the General Attorney. *See* CSXT Reply e-workpaper "CERR G&A Outsourcing_Reply.xlsx," tab "Legal Spend," cells E8 through E10.[107]

Third, CSXT's electronic workpaper applies the "0.5% of revenue" metric to the $139.4 million in CERR revenues calculated by Consumers on

[107] CSXT actually appears to have included 100% of the Vice President's compensation and benefits in its calculation (albeit under the wrong column and heading) but to have included 0% of the General Attorney's compensation and benefits.

Opening, not to the $109.4 million in CERR revenues that CSXT calculated in Part III-A of its Reply. *Compare* CSXT Reply e-workpaper "CERR G&A Outsourcing_Reply.xlsx," tab "Legal Spend," cell F23 and CSXT Reply at III-A-56. Consumers certainly agrees that CSXT's $109.4 million revenue estimate is flawed, but it is inconsistent and improper for CSXT to advance that figure for CERR revenue purposes while accepting Consumers' $139.4 million revenue figure for purposes of calculating the CERR's total legal spend. The net effect of CSXT's inconsistency in this regard – even ignoring all of CSXT's other mistakes – is to increase CSXT's calculation of the total CERR legal spend by 27.4% (*i.e.*, $139.4/$109.4 = 1.274).

Stated differently, Consumers calculated a total CERR legal spend of $697,101 on Opening, which is 0.5% of $139,420,104. *See* Consumers Opening at III-D-63. CSXT used that same $697,101 figure for its calculation of total outside legal spend (*see* CSXT Reply e-workpaper CERR G&A Outsourcing_Reply.xlsx," tab "Legal Spend," cell F23), but if CSXT had utilized its own Part III-A estimate of the CERR's first-year revenues (*i.e.*, $109.4 million), CSXT would have calculated a CERR total legal spend of $547,003, approximately $150,000 less than CSXT actually calculated. This CSXT total legal spend overstatement directly overstates CSXT's assumed outside counsel expense for the CERR on a dollar-for-dollar basis.

If CSXT actually had performed the outside legal spend calculation in the manner claimed in CSXT's Reply narrative and using CSXT's own CERR

revenue estimate, CSXT would have developed a CERR outside counsel expense on the order of { } rather than the much higher { } figure that appears in CSXT's Reply spreadsheets. {

}

In light of the many errors in CSXT's Reply evidence, and in light of the reasonable and conservative approach that Consumers utilized to develop the CERR's outside counsel expense, the Board should accept Consumers' calculation as the best evidence of record with regard to the determination of the CERR's internal legal spend. Finally, Consumers notes that it has updated its total legal spend calculation and its associated outside legal spend calculation to reflect the CERR's updated Rebuttal first-year revenues of $139.6 million.[108] Consumers therefore calculates outside legal expenses for the CERR of { },[109] a slight increase from Consumers' Opening figure of { }.

**(ii) Human Resources**

On Opening, Consumers proposed substantial outsourcing of the human resources and training functions, to be supplemented by a small in-house

---

[108] In addition, Consumers makes two minor adjustments in this regard. First, Consumers uses annual capitalized computer costs (consistent with CSXT's Reply approach). Second, Consumers corrects its cost of Supplies from Opening. The net impact of these two adjustments is approximately { }.

[109] *See* Consumers Rebuttal e-workpaper "CERR G&A Outsourcing_Rebuttal.xlsx," tab "Legal Spend," cell F19.

human resources staff whose primary responsibility is to "interface with the outside contractor and assure that the CERR has a pool of employees that enables it to engage in ongoing operations." Consumers Opening at III-D-65. In that regard, Consumers proposed that the CERR would staff this function with a Director of Human Resources in order to "manage training, recruiting, compliance, compensation and benefits, employee relations and training since most of these functions will be outsourced. *Id.* at III-D-65-66.

Consumers also explained that its electronic spreadsheets included its outsourcing costs for the human resources and training functions (*see* Consumers Opening e-workpaper "CERR Operating Expense_Open.xlsx," tab "Training"), and that the CERR's staff also would include two additional individuals, *i.e.*, the Manager of Operating Rules, Safety, and Training (Non-Train Operating Staff) and the Engineer of Programs, Budgets, Safety and Training (MOW Staff) whose responsibilities would include "interacting with the outside training vendor and with the Director of Human Resources." *Id.* at III-D-66.

On Reply, CSXT contends that it is necessary to add a second Human Resources position to the CERR's G&A staff; namely, a Manager of Human Resources. *See* CSXT Reply at III-D-90. According to CSXT, Consumers' proposed outsourcing "only reflects costs for start-up expenses such as recruitment and training," and the CERR staff therefore would remain responsible for several different HR functions. *Id.* at III-D-88. These functions, CSXT argues, are too extensive for a single individual to perform.

In fact, however, CSXT's list of internal HR functions includes: (i) functions the CERR will outsource; (ii) functions that fall within the ability of the Director of Human Resources to perform; and/or (iii) functions that are to be performed by other CERR staff members. *Id.* at III-D-88-89 (listing CERR HR functions). Specifically, the functions of "ensuring compliance with federal immigration law" and "ensuring compliance with . . . federal and state laws and regulations" will be performed by the outside vendor as part of the fundamental purpose of the recruitment and hiring outsource service. The function of "setting compensation and benefits" would be performed by the various departmental supervisors throughout the CERR staff as part of their normal functions. Conversely, the functions of interacting with outside vendors, investigating complaints, and administering discipline are all within the primary function and ability of the CERR's existing Director of Human Resources. *See* Consumers Opening at III-D-65.[110]

Finally, CSXT asserts that Consumers' intended outsourcing amounts to $117,041 per year and CSXT objects that $40,000 per year (for all functions other than the training of Conductors and Engineers) would be an insufficient budget for HR outsourcing. *See* CSXT Reply at III-D-89. Other than

[110] CSXT also refers to the supposed HR function of "[a]pproving employees returning to work after injuries . . . ." CSXT Reply at III-D-89. To the extent that this requires any internal CERR HR staff work, the CERR's Director of Human Resources will have the ability to perform that work.

commenting that "[t]his is not sufficient" (*id.*), however, CSXT does not identify a reasonable annual budget for these additional functions. In fact, the $40,000 in outsourced HR expenses per year that CSXT references for non-crew employees is sufficient. On Opening, CERR non-crew employees equaled 106.[111] Applying the CERR attrition rate of { } percent to this count results in non-crew turnover of { } individuals on average.[112] CSXT has no basis for claiming $40,000 is insufficient to support the recruitment and training needs of this small number of individuals.

Consumers respectfully submits that CSXT has not provided adequate justification to require the addition of a full time staff member (with the associated salary and fringe benefit expenses) simply because CSXT comments without support that Consumers' outsourcing budget for HR functions unrelated to the training of either Engineers or Conductors is "not sufficient."

---

[111] *See* Consumers Opening e-workpaper "CERR Operating Expense_Opening.xlsx," tab "Training," cell E10 minus cells E3 and E4.

[112] For attrition rate, *see* Consumers Opening e-workpaper "CERR Operating Expense_Opening.xlsx," tab "DCF Transfer," cell C42.

### (iii) Security/Police[113]

On Opening, Consumers proposed a security staff for the CERR that would include a Chief of Security and three Security Agents (one for each state), who would "interact with local police departments in the area traversed by the CERR's small system." *See* Consumers Opening at III-D-70. Consumers explained that the Indiana agent would have the ability provide assistance, as needed, "from Chicago to the western Michigan area as well." *Id.* Likewise, Consumers indicated that the Chief of Security would oversee the work of the three Security Agents and "again given the small overall size of the CERR system as compared with prior SARR systems – will be able to provide additional security coverage throughout the entire CERR route." *Id.* In addition, Consumers provided for front-desk security for its West Olive, Michigan headquarters on a 24-7 basis through an outsourcing arrangement. *Id.* at III-D-72 (citing Consumers Opening e-workpaper "CERR Outsourcing_Open.xlsx," tab "Outside Services," cell C10 (identifying the CERR's outsourcing costs for this headquarters security function)).

On Reply, CSXT accepts Consumers' evidence that "one Police Agent in Michigan and one Police Agent in Indiana is adequate." CSXT Reply at

[113] CSXT draws a distinction in its Reply evidence between security and police: "Security protects the integrity of the yard by controlling access and patrolling. The police protect trains, lading in trains, and employees, with major priority being the protection of trains." CSXT Reply at III-D-92 n.210. As described below, CSXT argues that both additional police and additional security are required in Chicago.

III-D-95. Moreover, CSXT's accepts Consumers' proposed security arrangement and expense for the CERR's West Olive, Michigan headquarters. *See id.* at III-D-94. CSXT, however, proposes substantial increases to the CERR's staffing, both with respect to railroad police and railroad security. *See id.* at III-D-94-95. In particular, CSXT proposes to add a Director of Asset Protection, an Assistant Chief of Police, and eight additional Security Agents (*i.e.*, police) in Chicago alone. *Id.* In addition, CSXT proposes to implement an outsourced security function at the Barr Yard on the same financial basis as Consumers' West Olive headquarters security. *Id.* at III-D-94. Other than accepting CSXT's proposed Assistant Chief in Chicago, Consumers declines to modify its existing police and security staff. As described in detail below, CSXT's proposed changes are excessive, unsupported, and improper.

In its Reply, CSXT argues that the "security responsibility" for the CERR will be significant because "[t]he CERR will have one large facility in Chicago at Barr Yard and will also have several major interchange tracks where trains could be stopped for long periods of time and will need to be protected." CSXT Reply at III-D-90-91. CSXT states that Chicago has more crime than "suburban Porter" (*id.* at III-D-91), and CSXT adds that "[s]elected CSXT police statistics for 2015 for Chicago also justify the need for appropriate police and security staffing." *Id.*

CSXT's only source for its Chicago police information is a workpaper entitled "CSXT Police Statistics Email.jpg." *Id.* at III-D-91 n. 208.

{

} While Consumers does not dispute that crime occurs in Chicago (and that high levels of crime occur in certain areas of Chicago), CSXT's "evidence" on this point {

}

In any event, CSXT next argues that "every real-world railroad in Chicago (including BNSF, UP, NS, IHB, and CSXT) has a 24/7 police presence at their *major* yards." *See* CSXT Reply at III-D-91 (emphasis added). Specifically, CSXT contends that the railroads operating in Chicago include a widely divergent number of police officers: CSXT (20); UP (20); NS (42); BNSF (20); CN (9); IHB (8). *See* CSXT Reply at III-D-92 (Table III-D-16).

The first point to note regarding CSXT's Table III-D-16 claim regarding railroad police is that it pertains to the real-world carriers' "major"

yards, yet CSXT does not offer any clear guidance as to which real-world yards include a police presence and which do not. Stated differently, CSXT does not offer any guidance as to which yards CSXT regards as being "major" yards. Most importantly, however, CSXT again supports its Chicago police statistics by relying exclusively on {

}

Nevertheless, a detailed review of the actual text of {

}[114] {

[114] The CERR utilizes CSXI's 59th Street Intermodal facility, but the CERR already pays a substantial fee to "CSX Terminals" for security at 59th Street. *See* CSXT Reply at III-A-45 (Table III-A-3) (listing "Terminals – Security" at CSX Terminals' 59th Street Intermodal Terminal as an expense already included by Consumers on Opening).

}.[115] A

comparison of the IHB police staff with the CSXT's proposed CERR staff is even more telling on the basis of the relative size of the carrier's yard operations. In this regard, the IHB's website indicates that the IHB is the "largest switch carrier in the U.S. with 54 miles of mainline track . . . and *266 miles of additional yard and siding track.*" *See* Consumers Rebuttal e-workpaper "IHB Summary.pdf" (emphasis added), also available at http://www.ihbrr.com/about_us.

The IHB's Chicago area yards include the Blue Island Yard (its "primary yard"), which is a "44 class[ification] track hump yard" at Riverdale, IL. *Id.* The extensive Blue Island Yard is located between 127th Street and 146th Street south of Chicago. The IHB's other "major" yards include the Gibson Yard in Hammond, IN, "which only classifies cars of new autos," and the Michigan Avenue Yard in East Chicago. *Id.* The IHB "interchanges daily with 16 other rail

[115] To reiterate, CSXT's Reply insists that the "major priority" for railroad police is the protection of trains, rather than the integrity of a yard. *See* CSXT Reply at III-D-92 n.210.

carriers in Chicago." *Id.* The IHB's other classification yards in the Chicago area include the Argo Yard, the Lake Front Yard, and the Norpaul Yard.[116]

As Consumers explained on Opening, there are substantial differences between the CERR and the IHB. *See* Consumers Opening at III-B-3 ("As explained by Messrs. Orrison and Holmstrom, the CERR is not a terminal railroad such as the Belt Railway Company of Chicago ('BRC') or the Indiana Harbor Belt ('IHB') that operates extensive networks in and around Chicago, including large classification yards such as Clearing Yard or the Blue Island Yard."). Unlike the IHB's 266 miles of yard and siding track, the CERR system includes a total of only 11.29 miles of yard track at Barr Yard, which is the CERR's only yard. *Id.* at III-B-15. Accordingly, the IHB's reported 266 miles of yard and siding track are 23.6 times longer than the CERR's Barr Yard track (*i.e.*, 266 miles divided by 11.29 miles = 23.6). Despite this substantial disparity in the mileage of yard tracks (and despite the disparity in the total number of yard locations), however, CSXT insists on Reply that the CERR must have a *larger* Chicago police force than the IHB maintains.[117] There is no basis for CSXT's extreme police staffing overstatement in this regard.

---

[116] *See* http://www.ihbrr.com/maps.

[117] CSXT's proposed police staffing for the CERR's Chicago operations also exceeds the nine (9)-member CN police staffing level that CSXT { }. *Cf.* CSXT Reply at III-D-92.

As noted above, however, Consumers has elected to add CSXT's proposed Assistant Police Chief in Chicago (*see* CSXT Reply at III-D-95) to remove any potential doubt as to the ability of the CERR police force to perform its required functions (as compared with the IHB police staff on which CSXT relies). This additional individual will help to protect the trains and personnel at Barr Yard. With this Assistant Police Chief as part of the police staff, the CERR's police staffing level will substantially exceed the IHB's police level on a per yard or per yard track-mile basis. Specifically, the three-member CERR police staff – including the CERR's Police Chief, Assistant Police Chief, and Illinois police Agent (even excluding the help available from the CERR's Indiana police Agent) – would amount to approximately 3.76 yard track-miles per police Agent. By comparison, the IHB's reported police staffing level amounts to 33.25 yard/siding track-miles per police Agent. Consumers' proposed Chicago police staffing therefore is approximately ten times more robust than the Chicago police staffing of the IHB. Consumers' proposed police staffing therefore is reasonable and appropriate on the basis of CSXT's own claims.

This same IHB comparison demonstrates that there is absolutely no basis whatsoever for requiring the CERR staff to include the vastly excessive police agent force proposed by CSXT. That 11-member proposed Chicago force (*i.e.*, the Police Chief, the Assistant Police Chief, and 9 police agents dedicated to Chicago alone) would represent approximately thirty-two (32) times the police force that the IHB employs in the Chicago area on a per yard-track mile basis. In

particular, the CSXT proposal would amount to only 1.03 yard-track miles per staff member. On a per mile basis, that staffing is thirty-two (32) times more extensive than the IHB's 33.25 yard/siding track-miles per police Agent.[118]

With respect to the separate subject of yard security, CSXT's arguments likewise are unavailing. As noted above, CSXT proposes to add security at the Barr Yard on the same 24-7 basis as reflected in Consumer's Opening evidence with respect to outsourced security at the CERR's West Olive, Michigan headquarters. *See* CSXT Reply at III-D-94. Consumers' expert witnesses Mr. Orrison and Mr. Holmstrom are familiar with the Barr Yard and each visited this yard on July 6, 2015 during Consumers' tour of CSXT's Chicago operations for purposes of this proceeding. Messrs. Orrison and Holmstrom each observed during their visit that the Barr Yard does not include any fencing or any controlled access point for a security operation. Consistent with this observation, CSXT never claims on Reply that such controlled access exists at Barr Yard. Moreover, as noted above, CSXT never argues – { } – that CSXT incurs any security expenses whatsoever at the real-world Barr Yard. Accordingly, there is no basis for requiring the CERR to incur a security expense at Barr Yard.

[118] Mr. Orrison and Mr. Holmstrom note based upon their extensive experience in Chicago that the location of the IHB's LaGrange yard is much more dangerous than the location of the CERR's Barr Yard, and that the extensive automotive operations at the IHB's Gibson Yard are substantially more likely to be the targets of criminal activity than the CERR's Barr Yard operations.

### (iv) Director of Asset Protection

In its Reply evidence, CSXT proposes that the CERR Law & Administration Department add a "Director of Asset Protection." *See* CSXT Reply at III-D-94. According to CSXT, this individual "will be responsible for overseeing police, security, and environmental functions at the CERR" and "will have oversight of outsourced security contracts." *Id.* There is no need to include this extra staff member.

CSXT's proposed inclusion of this individual represents an effort to include an extra layer of supervision for superfluous staff members (*i.e.*, eight additional unnecessary police officers, an unnecessary Manager of Environmental Control, and an unnecessary security outsource operation at Barr Yard). The CERR's existing Chief of Security will oversee the CERR's police and security functions. This individual will be assisted by an Assistant Police Chief in Chicago, and will work under the supervision of the CERR's Vice President Law & Administration. Notably, CSXT does not make any effort to explain the relative levels of responsibility and reporting as between the CERR's Chief of Police and CSXT's proposed Director of Asset Protection position.[119]

---

[119] CSXT includes an Organizational Chart for the CERR's Law & Administration Department in its electronic workpapers that shows the Director of Asset Protection supervising the Chief of Police {

}

Moreover, the CERR's MOW Engineer will oversee the railroad's environmental responsibilities. Accordingly, there is no need to include a redundant Director of Asset Protection in the CERR's G&A staffing.

**(v) Environmental**

CSXT also argues that the CERR staff must include a Manager of Environmental Control. *See* CSXT Reply at III-D-93-95. CSXT states that such an individual will be "available for any hazardous material or other releases" and will "assist with necessary industrial hygiene functions such as obtaining necessary pollution discharge permits, providing necessary training for environmental regulatory compliance, and disposing of waste." *Id.* at III-D-94-95. CSXT also proposes a $10,000 budget for permit fees and contractor/consultant costs for environmental matters. *Id.* at III-D-95 n.219.

Although CSXT acknowledges that the CERR does not handle any TIH traffic, CSXT contends that the presence of lesser hazards in the CERR's traffic mix warrants a finding that additional responsibilities will exist. *See* CSXT Reply at III-D-93. Consumers, however, already has addressed these responsibilities through its existing staff. In particular, Consumers explained on Opening that the CERR's legal staff "would be available to address any environmental issues . . . ." Consumers Opening at III-D-61. In addition, Consumers provided for the MOW Engineer to "deal[] with other MOW administrative matters involving environmental [matters]." *See id.* at III-D-110.

Consumers also explained in its Opening MOW evidence that derailments were less likely to occur on the CERR than on a Class I railroad such as CSXT "because the CSXT begins operations in 2015 over a brand-new track structure that includes CWR on all of its main tracks." *Id.* at III-D-124; *see also id.* ("The CERR is providing protective drip pans at the location where locomotives are fueled at its Barr Yard locomotive facility" to ensure that "oil emissions from idling locomotives are contained."). Finally, Consumers reported that CSXT had not provided any information in discovery on the cost of environmental clean-ups.[120]

In light of the CERR's existing staffing and expenses for addressing environmental matters, and in light of the nature of the CERR's traffic mix, Consumers declines to add the additional Manager of Environmental Control that CSXT has proposed.

**(vi) Administrative Assistant/Claims**

On Reply, CSXT proposes that the CERR staff should include an additional Administrative Assistant whose functions also could include managing the claims processing responsibility and providing administrative support for the Law & Administration Department as a whole. *See* CSXT Reply at III-D-87-88;

---

[120] CSXT correctly notes (*see* Reply at III-D-94 n.215) that Consumers workpapers inadvertently excluded the $10,000 clean-up costs that Consumers had identified in its Opening narrative at III-D-124. Consumers has added this cost in its Rebuttal workpapers. *See* Consumers Rebuttal e-workpaper "Rebuttal CERR MOW Costs.xlsx," tab "Annual MOW Expenses," cell G25.

*see also id.* at III-D-87 (stating that CSXT's proposed CERR police force would investigate and process claims).

Consumers declines to add this Administrative Assistant/Claims position to the CERR staff. As an initial matter, CSXT has not provided any basis for concluding that an additional Administrative Assistant is needed. Moreover, with respect to the subject of claims, Consumers explained on Opening that its Vice President of Law & Administration and its General Attorney would perform the majority of the CERR's annual legal work "including the administration of litigation and claims . . . ." Consumers Opening at III-D-61.

Consumers added that the CERR's in-house attorneys will provide assistance in investigating claims. Moreover, Consumers explained that the "Chief of Security will be available to provide on the ground support for initial claims investigation" (*id.* at III-D-61 & n.35) and Consumers also applied a mileage-based benchmarking metric from CSXT's *TPI* evidence to demonstrate that the total claims staffing requirement for the CERR (even under CSXT's own evidence) would be 0.348 claims agents. *See id.* at III-D-61-62.

In light of CSXT's reliance on the CERR police Agents to assist with the claims function, and in light of the very low claims staffing requirement based upon CSXT's *TPI* benchmark, Consumers submits that the existing CERR staff members – plus the new Assistant Chief of Police – will be adequate to handle the claims function.

### (vii) Information Technology

On Opening, Consumers' IT witness, Mr. Joseph Kruzich, a former CIO of Kansas City Southern, provided a six-person IT department. While CSXT accepts the basic structure of IPA's IT department, it nevertheless proposes to increase the total personnel by three positions. CSXT's additional positions are unwarranted.

Before turning to the individual staffing decisions, Mr. Kruzich notes that computer technology today is very user-friendly, automated, and self-sufficient. User interfaces have removed the need for large numbers of IT personnel, and manufacturers' customer service diminishes the need for in-house development and maintenance personnel. Moreover, historically, CSXT, just like other Class I railroads, developed much of its own software and equipment as an integrated control strategy, which required more people, because very little tracking, modeling, dispatch, and finance software were available. However, the market for railroad-related applications has changed. Today there is an abundance of rail software programs and applications available to smaller railroads like the CERR. Thus, the CERR does not need anything remotely approaching the level of IT staffing that CSXT does for development of its own software.[121]

---

[121] *See* Pat Foran, *How information technology helps connect the strategic dots at Union Pacific Railroad*, Progressive Railroading (June 2013), http://www.progressiverailroading.com/union_pacific/article/How-information-technology-helps-connect-the-strategic-dots-at-Union-Pacific--36415.

Mr. Kruzich also notes that as KCS's CIO, he employed close to 50 IT personnel that were able to handle all IT functions *in-house*; in other words, there was no outsourcing, such as RMI. KCS is a large railroad covering thousands of miles. The KCS also had a complicated mainframe and other systems that the IRR does not need. Moreover, the systems being managed were far more primitive than today's software and systems. In other words, Mr. Kruzich is well aware of functions that an IT staff would have to cover and how those requirements scale to a smaller railroad. A small railroad with a relatively straightforward operation does not require a large IT staff.

On Opening, the CERR provided one programmer who is responsible for maintaining and upgrading the crew calling, accounting, human resources and dispatchers systems. This employee helps manage the crew calling, dispatching and accounting systems, and also is responsible for developing a corporate information website. The programmer is also responsible for developing any necessary system integration between RMI, accounting, dispatching and other systems.[122] CSXT suggests that most companies would employ a commercial program such as SAP or Oracle as a backend platform. Reply at III.D-44. Without such a system, CSXT argues that a third programmer is needed "in order to develop the additional system enhancements necessary to

[122] *See* Consumers Opening at III-D-69-70.

integrate the inputs and outputs of the various stand-alone systems." *Id.* UP's arguments are without merit.

CSXT proposes one additional programmer specialists to oversee three primary functions: Crew Management, Dispatching, and Oracle Systems.[123] The one programmer specialist proposed on Opening by Mr. Kruzich was responsible for maintaining and upgrading these systems. This was more than adequate since the interface cost for the Crew Calling, Dispatching and Oracle Systems was included in the Capital Cost "Implementation and Training Cost" provided on Opening.[124] Given the size of the CERR, the one programmer provided on Opening is sufficient staffing to provide support for these functions. This staffing level is comparable to what Mr. Kruzich had when Vice President Computer Operations at KCS in the late 1990's. For example, Mr. Kruzich had one IT programmer assigned to Dispatching but that staffer had a significant amount of time to assist with other program projects unrelated to Dispatching.

On Opening, Consumers provided for one full time IT support specialist. The IT support specialist helps users with basic computer problems and provides support to specialized IT functions that are overseen by other support personnel such as the Lead RMI technician. The basic IT support function is staffed for normal business hours when most of the G&A staff are in the

---

[123] *See* CSXT Reply at III-D-97.

[124] *See* Consumers Opening e-workpaper "CERR - Capital Budget (2).xls," tab "Sheet1," rows 12,15, and 17.

headquarters office (*i.e.*, an accounts payable clerk having trouble with Microsoft Word would call the IT support specialist). For after-hours assistance, Mr. Kruzich specified that the CERR's existing IT staff would be on-call – a simple rotation would suffice given that there are six staff members. The senior IT staff can easily assist on a variety of computer issues, as the gateway to such positions usually starts with basic IT support experience.

CSXT proposes to add an additional support specialist located in Chicago based on its theory that Chicago is an independent operating arm of the CERR.[125] This addition is unnecessary. Indeed, Mr. Kruzich strongly disagrees that one IT Help desk be assigned to Barr Yard. This would set up a situation where there is not sufficient work load to support the position at that location. In addition, in today's IT environment, it is commonplace and expected that most IT assistance will be performed remotely by the IT department using standard programs to log into employee computers.

CSXT also throws in two additional, unexplained help desk staffers.[126] These additions are unnecessary because the CERR is a very small railroad compared to the KCS where Mr. Kruzich used one Help Desk position during regular business hours and during off business-hours calls would be directly routed to the on-call technician as described on Opening.

---

[125] *See* CSXT Reply at III-D-97-98.

[126] *Id.* at III-D-98.

Mr. Kruzich does agree with CSXT that the CERR would benefit from adding the RMI Technician and Programmer/Development employees to the help desk team. This would provide a more efficient group that could assist each other in all the assigned activities.

### iii. Compensation

Consumers already had addressed each compensation-related dispute between the parties; namely, the fringe benefit ratio and outside director compensation.

### iv. Materials, Supplies and Equipment

On Opening, Consumers provided for materials, supplies and equipment to support operating personnel (other than maintenance of way personnel) and general and administrative personnel. Materials, supplies and equipment used by these personnel include motor vehicles (automobiles), office furniture, supplies and equipment, building utilities, personal safety equipment, end of trains devices, motorized carts, tools and car part inventories. Costs for this equipment have been included in the calculation of the CERR's annual operating expenses.

CSXT generally agrees with the approach used by Consumers on Opening, but it adds more supplies and vehicles to accommodate its inflated staff figures.

Vehicles. On Opening, the CERR leased a pool of fifteen (15) Ford F150s to support the four members of the Security staff who regularly function in

the field (*i.e.*, the Chief of Security and the three Security Agents) and to support the eleven members of the non-train operating staff who will need the ability to drive to different points along the CERR system (*i.e.*, the Vice President – Operations, the Chief Engineer, the Director of Operations Control, the three Managers of Train Operations, the three Assistant Managers of Train Operations, the Manager of Locomotive Operations, and the Manager of Mechanical Operations).[127] *See* Consumers Opening e-workpaper "CERR Materials and Supplies_Open.xlsx," tab "Automobiles," cell E3 (identifying the CERR's non-MOW vehicle lease expenses).[128]

On Reply, CSXT suggests that 15 shared vehicles are inefficient because the railroad has facilities in different locations.[129] Likewise, CSXT argues that 7 more vehicles are needed – primarily for its oversized security group.[130] CSXT also argues that some employees only need cars.[131]

CSXT's proposal is not logical. First, the CERR, as staffed by Mr. Orrison and Mr. Holmstrom, only requires 15 fleet vehicles. Second, by having one standardized truck that can accommodate multiple passengers, the CERR is ready to move people and even small equipment across the CERR in any weather

---

[127] *See* Consumers Opening at III-D-76.

[128] These vehicles also will be available for use by the CERR's headquarters G&A staff.

[129] *See* CSXT Reply at III-D-64-65.

[130] *Id.* at III-D-65.

[131] *Id.*

conditions. These trucks can also traverse troublesome terrain that a car could not manage. As such, Consumers has continued to retain its fleet of 15 F150s on Rebuttal.

Office Supplies. CSXT adds additional desks for its additional employees, which additions Consumers has largely rejected. CSXT also includes three extra desks for the dispatchers and crew callers to perform non-crew calling and dispatching work.[132] While the costs of three additional desks is minimal, Consumers has rejected these additions because any dispatching or crew calling set-up can easily include additional facilities for car tracing, email, etc. Indeed, Mr. Orrison has personally observed such set-ups. Indeed, in his experience, all dispatcher and crew calling desks that he has seen at CSXT and BNSF have multiple computer monitors that allow the dispatcher or crew caller access into the core railroad operating systems such as train location, consists, car tracing, crew on-duty information, along with the ability to log into an email account and to send and receive instant message and even text messages of voicemails. Likewise, in Mr. Orrison's opinion, it would be inefficient to bifurcate the working environments.

Utilities. CSXT accepts the methodology used to derive utility costs for its buildings.[133] However, CSXT increases the costs to reflect its count of

---

[132] *See* CSXT Reply at III-D-65.

[133] *Id.* at III-D-65-66.

buildings, including a second "headquarters" at Barr Yard.[134] As Consumers rejects CSXT additional staffing, its operating plan, and its second headquarters, Consumers continues to use its Opening costs for utilities.

Personal Safety Equipment. CSXT accepts Consumers' costs for personal safety equipment, but it expands the pool of employees receiving such equipment to include operating department management employees.[135] Consumers accepts these additions, except to the extent that Consumers does not accept the additional positions proposed by CSXT.

End of Train Units. CSXT accepts Consumers' Opening unit costs for EOTs, but adjusts its count for its proposed count of locomotives.[136] Consumers has revised its costs to reflect its Rebuttal locomotive count.

Travel Budgets. CSXT accepts the unit cost per traveler proposed by Consumers on Opening.[137] CSXT proposes to expand the budget to include the Manager – Operating Rules, Safety and Training, the Manager of Locomotive Operations, and its new Manager – Customer Service. Consumers accepts the expansion of the travel budget to the Manager – Operating Rules and the MLO. As Consumers has rejected the new Manager – Customer Service position, it has excluded travel expenses as well.

---

[134] *Id.*

[135] *Id.* at III-D-66.

[136] *Id.*

[137] *Id.* at III-D-67.

Car Inspector Equipment. On Opening, Consumers provided for four inspector carts to be located at Barr Yard.[138] CSXT accepts this proposal but proposes that a fifth cart be provided at West Olive.[139] This addition is unnecessary. The car inspector at West Olive is not under a time pressure to complete the inspection of an empty train and there are no paved roads for the cart. A walking inspection would only take about 2.5 hours. As such, Consumers continues to use four carts on Rebuttal.

CSXT accepts Consumers' cost per inspector cart but claims that Consumers improperly excluded gasoline costs for inspector carts.[140] Contrary to CSXT's claim, however, Consumers did include fuel costs for carts. Consumers identified the total cost per inspector carts as $4,625 on Opening.[141] This total cost reflects $3,579 per cart for payment and $1,046 per cart for gasoline.[142] Because CSXT accepts Consumers' per cart cost of $4,625, it double-counts gasoline costs for inspectors' carts.[143] Consumers rejects CSXT's double counting of inspector cart gasoline costs and continues to use it cost of $4,625 per cart on Rebuttal.

---

[138] *See* Consumers Opening at III-D-77.

[139] *See* CSXT Reply at III-D-67.

[140] *Id.*

[141] *See* Consumers Opening e-workpaper "CERR Operating Expense_Open.xlsx," tab "Summary," cell G196.

[142] *See* Consumers Opening e-workpaper "CERR Materials and Supplies_Open.xlsx," tab "Insp Tools Cart," cell D56.

[143] *See* CSXT Reply e-workpaper "CERR Operating Expense_Reply," tab "Summary," cell G196.

### v. Other

#### (a) IT Systems

On Opening, Mr. Kruzich, developed the CERR's IT system requirements based on the operating plan and G&A requirements. CSXT largely accepts Mr. Kruzich's approach to IT systems, but it does adjust certain costs. CSXT specific adjustments are discussed below.

Total Computer System and Accessories. CSXT increased its computer equipment cost to provide equipment for its proposed workforce.[144] As the CERR is only adding one G&A position on Rebuttal, Mr. Kruzich has rejected CSXT's additional systems, but he has added one additional computer set-up on Rebuttal.

General Accounting (Oracle). On Opening, Mr. Kruzich proposed to use the Oracle Solutions package for its general accounting system.[145] The system offers fully automated solutions to support the complete Financial Control and Reporting process from establishing and managing controls, creating and interfacing transactions from operations sources, transforming ledger balance to account for enterprise allocations and re-measurement to consolidating and reporting results.[146]

---

[144] *See* CSXT Reply at III-D-103.

[145] Consumers Opening at III-D-81.

[146] *See* Consumers Opening e-workpaper "CERR - Capital Budget (2).xls."

On Reply, CSXT proposes to add Oracle modules such as Asset Tracking, Inventory Management and Project Procurement.[147] While these modules can be justified for a Class I Railroad like the CSXT, they are overkill for a very small Railroad like the CERR because, unlike a Class I railroad, the CERR has few assets that require regular tracking; its inventory of materials is not extensive; and it is not involved in projects that require specialized procurement packages. Therefore, these additional modules are rejected.

On Rebuttal, Mr. Kruzich identified an error in Consumers' IT operating budget where the Treasury module did not allow for the Oracle minimum of 4 users. Mr. Kruzich has corrected this in the CERR Rebuttal IT operating budget, which increases the amount by $19,002.[148]

T-1 Lines for RMI. On Opening, Mr. Kruzich included a cost for a T-1 line for communications between the CERR and the RMI host computers.[149] CSXT proposes a back-up T-1 line,[150] which Mr. Kruzich accepts. However, without explanation, CSXT proposes a different cost for the backup T-1 line even though it accepted Mr. Kruzich's cost for the primary T-1 line. This departure is

---

[147] *See* CSXT Reply at III-D-103.

[148] *See* Consumers Rebuttal e-workpaper "CERR – Operating Budget-Rebuttal.xls" row 28.

[149] *See* Consumers Opening e-workpaper "CERR - Operating Budget (2).xls," tab "Sheet1" row 45.

[150] *See* CSXT Reply at III-D-103-104.

unnecessarily duplicative, and Mr. Kruzich has applied his Opening T-1 line cost to both lines.

Oracle Implementation Costs. On Opening, Mr. Kruzich used a vendor's estimated costs for implementing the HR and Accounting modules of the Oracle Software. These costs were $10,000 and $37,985, respectively.[151] CSXT argues these figures are too low and that it received an estimate of $2.125 million to implement this system.[152] Perhaps recognizing that its quote represents a preposterous implementation costs for the CERR, CSXT then argues that it will accept the $10,000 figure for the HR module, and then it proposes to use the four times software implementation cost approved by the Board in *DuPont.*[153] CSXT offers no proof why the four times software implementation cost would apply to this case. The *DuPont* system was colossal and replicated a huge swath of the NS system. It is not surprising that the implementation costs would swell vis-à-vis the cost of the software itself. The CERR is a much simpler railroad and CSXT's alternative costs are not applicable here. Thus, Mr. Kruzich has retained his Opening implementation cost for the Accounting and HR modules.

**(b) Other Out-Sourced Functions**

On Reply, CSXT identifies four (4) changes made to Consumers' Opening other out-sourced expenses. CSXT modifies Consumers' Opening

---

[151] *See* CSXT Reply at III-D-104.

[152] *Id.*

[153] *Id.*

expenses for outside legal expenses, financial audit expenses, building security expenses and hazardous material cleanup expenses.

As discussed above in Section III-D-3-d-i, CSXT incorrectly calculates outside legal expenses and, as a result, Consumers continues with its Opening approach for the calculation of Rebuttal outside legal expenses.

On Opening, Consumers developed outsourced financial audit expenses by applying CSXT's actual cost as a percentage of revenues over a three-year period to CERR revenues.[154] CSXT claimed that Consumers' approach to calculating financial audit costs reflects CSXT economies of scale that could not be realized by CERR. CSXT instead uses an approximation of P&W's audit costs, or $120,000. Consumers' use of CSXT's real-world costs over a three-year period is consistent with the approach accepted by the Board in *Sunbelt*. Specifically, the Board stated in *Sunbelt*;

> [T]hey [the parties] disagree as to the cost of outsourcing financial auditing. NS argues that 0.06% of revenue is an appropriate benchmark, as that figure is the average audit fee for private companies with between $100 million and $499 million in revenue as determined by the Financial Executive Research Foundation. Sunbelt contends that this figure results in overstated costs, and instead uses 0.0257% of revenue, which it derived by calculating the percent of revenue that NS spent on audit fees for the years 2009 through 2011. Sunbelt's use of NS's real-world costs over a three-year period is preferable to the average cost of private companies generally over a one-year period.

[154] *See* Consumers Opening e-workpaper "CERR External Audit.xlsx."

We will accept Sunbelt's evidence as the best evidence of record.[155]

Consumers' approach to developing outsourced financial auditing costs is consistent with the approach accepted by the Board for *Sunbelt*, which like Consumers, involved a small SARR. Consumers continues to use CSXT's actual cost as a percentage of revenues over a three-year period, applied to CERR revenues, to calculate outsourced financial audit costs.

On Reply, CSXT builds office space in Chicago for a headquarters support building.[156] CSXT adds security expenses for this building in outsourced services. The security expenses added by CSXT for the Chicago facility match the West Olive headquarters security expenses used by Consumers on Opening and accepted by CSXT on Reply. Because Consumers is not building the Chicago headquarters support building on Rebuttal, it excludes the security expenses for the Chicago building from its Rebuttal outsourced expenses.

CSXT includes $10,000 in hazardous materials cleanup expenses within its other out-sourced expenses, claiming Consumers excluded these expenses on Opening.[157] Since these expenses are attributable to maintenance of

---

[155] *Sunbelt* at 6.

[156] *See* CSXT Reply at III-F-123.

[157] *See* CSXT Reply workpaper "CERR G&A Outsourcing_Reply.xlsx," tab "Outside Services," cell A23.

way activity, Consumers includes the $10,000 for hazardous materials expenses within its maintenance of way costs.[158]

### (c) Start-Up and Training Costs

On Opening, Consumers used 2012 through 2014 CSXT data provided in discovery to develop a CERR attrition rate of { } percent. This rate was applied to first year startup and training costs to calculate annual recruitment and training costs.[159] On Reply, CSXT claims Consumers' calculation of the CERR attrition rate and resulting ongoing recruitment and training costs are flawed for two reasons. First, CSXT claims that Consumers' use of terminated employees to calculate the attrition rate should also have included CSXT's percentage of deceased and retired employees. Second, CSXT claims that Consumers should have calculated attrition rates by job category rather than on a system-wide basis.[160]

Regarding the types of employees included in the development of attrition rates, the use of retired employees to calculate attrition for the new CERR is improper. It is unreasonable to assume that the newly established CERR will have significant retirement in its first 10 years of operation. For this reason, Consumers rejects the use of retired employees in its calculation of CERR attrition

---

[158] *See* Consumers Rebuttal e-workpaper "Rebuttal CERR MOW Costs.xlsx," tab "Annual MOW Expenses," cell G25.

[159] *See* Consumers Opening at III-D-89.

[160] *See* CSXT Reply at III-D-106.

rates. Likewise, reflecting CSXT's percentage of deceased employees is inappropriate for the CERR. Based on CSXT's own analysis, deceased employees averaged { } percent of all employees over the 2012 through 2014 time period.[161] This percentage would certainly be lower for the CERR given the pool of newly hired employees that would require physicals for onboarding. Even if the CERR's rate was half of CSXT's 0.2 percent rate, it would amount to { } of an employee ({ } times total CERR employees of 161), or not enough to even be included in the CERR attrition rate.

Regarding the use of attrition rates by job category rather than on a system-wide basis, Consumers agrees to calculate attrition rates by job category.

Consumers' Rebuttal attrition rate based on terminated employees by job category results in on-going recruitment and training costs of $138,198 annually.

### (d) Travel Expense

CSXT agreed with Consumers' inclusion of travel costs for all CERR employees at the Director level and higher and accepts the proposed benchmark.[162]

---

[161] *See* CSXT Reply e-workpaper "CSXT 2012-2014 Attrition.xlsx," tab "Summary," average of cells D3 through D17.

[162] *See* CSXT Reply at III-D-106.

### 4. Maintenance-of-Way

On Opening, the MOW plan for the CERR was developed by R. Lee Meadows, Jr., P.E. Mr. Meadows brings considerable hands-on experience with railroad MOW activities, having served in Norfolk Southern Railway's Engineering Department for 33 years including service as Inspector, Assistant to Regional Engineer-Projects, Division Engineer Construction and Maintenance, General Division Engineer, and Division Engineer. He is also an FRA-qualified track inspector.[163]

As explained below, on Mr. Rebuttal, Mr. Meadows has retained the same staffing and equipment for the MOW department. CSXT's Reply evidence proposes to expand the MOW staff by 18 (2 office positions, 9 track positions, and 7 signals positions).[164] As explained in detail below, CSXT's additional staffing is unwarranted.

#### a. General Approach to Developing the MOW Plan

Mr. Meadows's MOW plan includes a field staff sufficient to perform day-to-day inspection and maintenance activities, supported by a managerial/office engineering staff that reports to the CERR's Chief Engineer. As explained on Opening, Mr. Meadows provided a field organization and supervisory/support staff appropriate to each needed maintenance function given

---

[163] Mr. Meadows's detailed Statement of Qualifications is set forth in Consumers Opening Part V.

[164] *See* CSXT Reply at Table III-D-28.

the railroad's geographic scope, terrain, traffic volume and gross tonnages by line segment.[165]

CSXT's Reply purports to identify the major "flaw" in Consumers' MOW plan, namely that Consumers somehow failed to identify and addresses the difference in needs between its so-called urban segment (Chicago) and its Rural Segment (Porter to West Olive).[166] CSXT even presents a table that claims to illustrate these differences.[167] However, not only is the table incorrect in some cases, but these were all known factors in the staffing selected by Mr. Meadows. Of course, CSXT supposedly solves the alleged deficiencies in Consumers plan by proposing more personnel than are needed.

Mr. Meadows was well aware of the differences between the CERR's facilities between 22nd Street/Ogden Jct. and Curtis and those between Porter and West Olive. Just because he did not label his segments "Urban" and "Rural" does not mean his plan was deficient. For example, on Opening, Consumers stated that:

---

[165] Mr. Meadows's development of CERR's field MOW staff is guided by the principle that an efficient, least-cost SARR does not require unionized employees and does not face the same constraints as Class I railroads in terms of the level of supervision required and ability to cross-train. This enables field MOW employees to be utilized in a more versatile manner, such that an employee can perform more than one function where consistent with the level of specialization needed.

[166] *See* CSXT Reply at III-D-107-114.

[167] *See* CSXT Reply at Table III-D-108.

*The sharing of the district between 22nd St./Ogden Jct. and Michigan/Indiana State Line with two crews reflects the practicalities of operating in this territory. Specifically, the area between Barr Yard and Curtis is double track with multiple crossovers, a significant number of interchange tracks, and diamond crossings.* And while, as the senior railroad, the CERR is not responsible for maintaining the diamond crossings, the overall movement of trains through the area, as well on the Blue Island Subdivision, requires some (albeit minimal) down time. *Thus, having two crews in the area enables a quick response to multiple problems. In addition, the sharing arrangement allows for the second crew to assist the first crew as needed or tend to other tasks near 22nd St. or near Porter, etc. In addition, the positioning of the two crews reduces travel times when Chicago traffic might be a factor.*

* * *

The CERR has one Track Supervisor district, reflecting its relatively small size – 160.52 constructed route miles and 215 constructed track miles (including yards and set-out tracks), requiring maintenance.

The Track Supervisor does cover more territory than the Board has accepted in recent cases. However, *the segment between Porter and West Olive, while relatively long (124 route miles) is a light density segment that does not require the addition of a second Track Supervisor.* In addition, there are only 128.5 track miles in the segment, not including set-out tracks. Thus, Mr. Meadows has assigned an Assistant Track Supervisor to cover that territory on a day-to-day basis with input from the Track Supervisor.

The Track Supervisor is assisted by three Assistant Track Supervisors. Two Assistant Track Supervisors are primarily responsible for conducting scheduled routine and special track inspections in accordance with all applicable FRA regulations and are trained and certified by the CERR. *One Assistant*

*Track Supervisor is primarily responsible for the territory between West Olive and Porter and the second Assistant Track Supervisor is primarily responsible for the territory between Ogden Jct./22nd St. and Curtis.*[168]

As for CSXT's Table III-D-24, Mr. Meadows was aware of all of this information and such data is readily reflected in his MOW workpapers and the diagram of the CERR (Opening Exhibit III-B-1). The chart is also problematic in a critical respect. Specifically, CSXT describes the average gross tons per mile per year as 55.7 MGT. However, that is deceptive. Most of this territory is double track. Thus, the average gross tons per ***track*** per year is less than 30 MGT. Likewise, the track miles per route mile figure of 2.5 shown in the table appears to include the Barr Yard tracks and all of the interchange tracks.[169] Thus, based on Reply Table III-D-25, the 2.5 figure appears to reflect 86.5 miles of track rather than the all-important mainline track figure of 60.95 miles. Similarly, the switches per route mile calculation is based on 57 switches, but this includes all lesser used hand-thrown switches, including all of the many switches in the Barr Yard. When adjusted to exclude lesser-used, non-time sensitive, hand-thrown switches and the Barr Yard switches, there are only 39 mainline switches (including mainline connected switches in the Barr Yard).

---

[168] *See* Consumers Opening at III-D-99, III-D-97-98.

[169] Mr. Meadows recognized that the yard and interchange tracks require maintenance, but the yard tracks are lightly used and the interchange tracks are traversed at slow train speeds thereby reducing wear on the track.

CSXT also suggests that its so-called "Urban Segment" has "unusually high[er] maintenance needs per mile" than the "needs of SARR's operating in relatively unpopulated areas."[170] This is nonsensical. The Powder River Basin is a rural area. The maintenance needs of the Joint Line facility there easily outstrip the needs of the CERR or the real-world CSXT over the lines replicated by the CERR.

CSXT also complains that the MOW crews must travel through city streets at low speeds and that somehow the crews will be less productive on a per-mile basis that the rural lines.[171] Again, this argument is nonsensical. The two crews posited by Consumers are located in Barr Yard which is a central point on the CERR. Thus, they are generally driving less than 20 miles to any point on the line. Moreover, even in the heart of rush hour, these crews are unlikely to face more than a one-hour drive. By comparison, the lower density segment is nearly four times as long. CSXT's argument is even more puzzling because CSXT provides for two basic maintenance crews in Chicago and both are located at Barr Yard. In other words, CSXT has the exact same crew set-up as Consumers does in its all-important "urban" area, but it just adds another crew to its "rural" area.

CSXT concludes its introductory portion of its MOW plan by suggesting again that Consumers failed to consider the differences between the

---

[170] *See* CSXT Reply at III-D-113.

[171] *Id.*

two major segments of the CERR.[172] As explained above, CSXT's bluster is flatly incorrect.

**b. MOW Personnel**

The CERR's MOW personnel (employee) requirements are summarized in Rebuttal Table III-D-11 below.

[172] *Id.* at III-D-114.

| REBUTTAL TABLE III-D-11<br>CERR MAINTENANCE-OF-WAY PERSONNEL | | | | |
|---|---|---|---|---|
| **Position** | **Opening** | **Reply** | **Rebuttal** | **Difference (Reply v. Rebuttal)** |
| HQ Office/Supervisory | | | | |
| Track Engineer | 1 | 1 | 1 | 0 |
| Communications & Signals Engineer | 1 | 1 | 1 | 0 |
| Bridge Engineer/Inspector | 1 | 1 | 1 | 0 |
| Public Projects Engineer | 0 | 1 | 0 | 1 |
| Engineer of Programs, Budgets, Safety & Training | 1 | 1 | 1 | 0 |
| Administrative Assistant | 0 | 1 | 0 | 1 |
| Subtotal | 4 | 6 | 4 | 2 |
| Field | | | | |
| Track Supervisor | 1 | 2 | 1 | 1 |
| Assistant Track Supervisor | 3 | 2 | 3 | (1) |
| Track Crew Foremen | 3 | 4 | 3 | 1 |
| Track Crew Members | 6 | 12 | 6 | 6 |
| Roadway Machine Operators | 5 | 6 | 5 | 1 |
| Welders/Helpers/Grinders | 2 | 4 | 2 | 2 |
| Roadway Equipment Mechanic | 1 | 1 | 1 | 0 |
| Smoothing Crew Foreman | 1 | 1 | 1 | 0 |
| Smoothing Crew Member/Machine Operator | 2 | 2 | 2 | 0 |
| C&S Supervisor/Inspector/Technician | 1 | 1 | 1 | 0 |
| Signal Maintainers | 7 | 12 | 7 | 5 |
| Signal Inspector | 0 | 1 | 0 | 1 |
| Communications Technician | 1 | 1 | 1 | 0 |
| Communications Maintainer | 1 | 1 | 1 | 0 |
| B&B Machine Operator | 1 | 1 | 1 | 0 |
| B&B Foreman | 1 | 1 | 1 | 0 |
| B&B Carpenter/Helper & Water Service | 1 | 1 | 1 | 0 |
| | | | | |
| Subtotal | 37 | 53 | 37 | 16 |
| **Total** | **41** | **59** | **41** | **18** |

Consumers' Opening MOW personnel shown in Rebuttal Table III-D-11 equate to 3.92 route miles per employee and 5.27 mainline track miles per employee. *See* Consumers Rebuttal e-workpaper "Rebuttal CERR MOW

Costs.xlsx," tab "MOW Staff Salaries," cells G47, G50. CSXT complains that this ratio is not acceptable vis-à-vis past cases decided by the Board.[173] CSXT's Reply Table III-D-29 purports to demonstrate the deficiencies of Consumers' MOW staffing plan by comparing it with that of *WFA, AEP Texas, Otter Tail, Xcel, Sunbelt*, as well as CSXT's Reply. However, CSXT's comparison is misleading as explained below.

CSXT makes much of the comparison between the Chicago area facilities and the Porter to West Olive facilities, but it fails to take that into account when comparing the ratios proposed by Consumers to those of other cases. Specifically, under Mr. Meadows' carefully considered plan, the Chicago-area track is being serviced or supervised by 33 of the 41 employees in the MOW department. Thus, on a per mainline track mile basis (60.95 track miles), Consumers has 1.85 MOW staff per track mile. Even using all of the track miles, including yard tracks (86.5 track miles), in the Chicago area, Consumers has 2.62 MOW staff per track mile. Thus, as shown in Rebuttal Table III-D-12 below demonstrates, Mr. Meadows has provided far more staff in the CERR's maintenance critical area than that provided in any of the SAC cases (where such extreme difference did not exist) listed by CSXT.

---

[173] *Id.* at III-D-116.

| REBUTTAL TABLE III-D-12<br>COMPARISON OF MOW STAFF | | | | | | |
|---|---|---|---|---|---|---|
| | *WFA* | *AEP Texas* | *Otter Tail* | *Xcel* | *Sunbelt* | Consumers (Chicago) |
| MOW Staff | 97 | 452 | 437 | 166 | 185 | 33 |
| Track Miles | 391 | 1664 | 1485 | 553 | 714 | 86.5 |
| Track Miles-to-MOW Staff | 4.0 | 3.7 | 3.4 | 3.3 | 3.9 | ***2.62*** |

Thus, Mr. Meadows has taken considerable care to ensure that the facilities serving the vast majority of the traffic has far more MOW staff than in other cases. Consider, for example, the *WFA* case. There the complainant was replicating one of the most traffic dense locations in the entire United States, where the SARR was carrying over 100 MGT a year. However, that density allowed for a lower track miles-to-MOW staff ratio. Here, in the most traffic dense segment of the CERR (which is still far less than the *WFA* SARR), Mr. Meadows has provided for 54% more staff per track mile than the *WFA* SARR.

Consumers specifically noted, as described above, that the Porter to West Olive segment would not require the same degree of MOW staffing given that it is only handling 8 MGT annually and the segment has only two sidings. To be sure, it has many signalized grade crossings, but Mr. Meadows assigned three signal maintainers to the area. Thus, Mr. Meadows provided seven MOW staff to serve this segment directly. The core MOW staff is supported by one of the basic maintenance crews out of Barr Yard and other field personnel as necessary. That is more than sufficient given the very modest needs of the segment. As noted below, CSXT has contradicted much of its verbiage about the needs in Chicago by adding another maintenance crew to the Porter to West Olive segment, while

retaining Consumers' two maintenance crews in Chicago. Regardless, Mr. Meadows has not altered his staffing approach as described in more details below.

### c. MOW Organization by Function

As Consumers explained on Opening, the CERR's field MOW organization is dictated by the railroad's geographic scope (route miles), track miles and peak-year traffic volume measured by the gross tons traversing each line segment.[174] In addition, the distances that field forces must travel to cover their assigned territory are considered. The general office MOW staff (which reports to the Chief Engineer) is structured to provide adequate supervisory and administrative support to the field forces, as well as to prepare the annual MOW budget and supervise contractors in their performance of MOW work.

#### i. Headquarters Location

Before addressing particular departments, CSXT complains that having the MOW office staff located with the rest of the CERR's senior management and administrative staff would inefficient because it would too far from the busiest maintenance areas.[175] Thus, CSXT proposes to move the MOW management staff to Barr Yard.[176] CSXT's argument is without merit.

The supervisory staff is not field staff. They do not need to be located in Barr Yard to do their jobs. Moreover, these supervisory personnel also

---

[174] *See* Consumers Opening at III-D-95-96.

[175] *See* CSXT Reply at III-D-116-117.

[176] *Id.*

have to be readily available to other departments because the MOW function must tightly integrate with operational needs. Having the MOW management located at Barr Yard would unnecessarily complicate the coordination between departments. Further, CSXT does not suggest that its senior MOW management are all located proximate to the key areas being maintained. Indeed, CSXT's headquarters is located hundreds of miles from critical CSXT service areas such as Chicago and New Jersey.

CSXT also proposes to add two positions to the headquarters staff: a Public Projects Engineer and an administrative assistant. CSXT proposes that the Public Projects Engineer would be needed in order to handle issues such as highway grade separation negotiations, utility projects and right-of-way projects.[177] CSXT notes that this position was accepted in *Sunbelt*. Consumers rejects the inclusion of this position.

As both noted by Mr. Meadows and CSXT, the majority of route miles on the CERR are contained in the lightly used Porter to West Olive portion of the railroad. Thus, there is practical limit to the number of public projects that would require the attention of the CERR's engineers. Moreover, the *Sunbelt* case is a poor comparison. There the SARR consisted of 714 track miles and MOW personnel totaling 185, more than three times larger than either the 216 track miles and 41 MOW personnel presented in Consumers Opening, or the 59 MOW

[177] *Id.* at III-D-117-118.

personnel in CSXT's Reply. *Sunbelt* becomes an even more inappropriate comparison when considering that, by CSXT's own suggestion, most projects requiring a Public Project Engineer would be contained in the urbanized 22nd Street to Curtis portion of the CERR, which only constitutes a fraction of the total track miles, but the bulk of the personnel to cover such issues. On a railroad the scale of the CERR, Mr. Meadows has determined that any project requiring interaction with government agencies and/or other entities could be handled effectively by a combination of the Chief Engineer, Track Engineer and Bridge Engineer as appropriate.

Consumers also rejects CSXT's inclusion of an administrative assistant in the MOW department. The CERR is small railroad and, like all small railroads, many employees would be cross-trained to handle tasks from multiple departments. Likewise, senior employees would be expected to take on more administrative responsibilities than their counterparts at larger organizations typically would. Such would be the case with G&A Department Administrative personnel and the General Office Staff. Senior General Office Staff members would be responsible for more administrative tasks than in a larger organization, particularly the Chief Engineer. G&A Department Administrative personnel based at the West Olive Headquarters would be called on as required, communicating with employees based at Barr Yard via telephone, email and other commonplace business applications. Moreover, CSXT's inclusion of the administrative assistant is premised on its notion that the MOW management staff

must be located in Barr Yard not in West Olive. Once again, CSXT's relocation is unnecessary, as discussed above, and its attendant additional costs for an assistant should also be rejected.

### ii. Track Department

On Opening, Mr. Meadows provided a 25-person track department. CSXT disagrees in part with Consumers' staffing arguing, as it does in all other phases of this Part III-D, that the CERR needs more staff. As explained below, CSXT misconstrues part of Consumers' staffing; presents illogical new staffing; and simply adds bloat to a department that is already staffed-up, in the most challenging portions of the railroad, with more staff than any SAC case cited by CSXT. Thus, Mr. Meadows rejects the additional staff proposed by CSXT.

As shown in Rebuttal Table III-D-11, CSXT adds one track supervisor, deletes one assistant track supervisor, adds one track foreman, six track crew members, one roadway machine operator, and two welders. These additions add 10 Track Department staff. As Mr. Meadows explains, the CSXT's additions are unwarranted. Below, Consumers addresses the areas of disagreement.

Track Supervisor and Assistant Track Supervisors. Despite a lengthy, but incorrect, discussion by CSXT asserting again that Mr. Meadows did not consider the differences between the 22nd Street to Curtis and Porter to West Olive segment, CSXT then selectively ignores that distinction when developing its

count of Track Supervisors and Assistant Track Supervisors.[178] Despite the fact that both CERR and CSXT agree that the 22nd Street to Curtis section of the CERR would require significantly more labor and maintenance efforts than the longer, but low density segment from Porter to West Olive, CSXT assigns a single Track Supervisor and a single Assistant Track Supervisor to both sections.[179] CSXT justifies the addition of a second Track Supervisor by citing past SAC cases, such as *Sunbelt*, effectively rejecting the notion that a Track Supervisor could be responsible for 200 miles of territory.[180] However, those cases are significantly different in that there were no longer light density segments. Thus, the addition of a second Track Supervisor to oversee the lightly used Porter to West Olive segment would be excessive and wasteful. Additionally, CSXT's plan allots 50% of the track supervisors to the lightly used "rural" Porter to West Olive segment, potentially placing unnecessary and excessive strain on the two supervisors in Barr, should multiple track related issues occur simultaneously.

Conversely, the plan advanced by Mr. Meadows of a single Track Supervisor that will spend most of the time working in Chicago and three Assistant Track Supervisors (with two located at Barr Yard) appropriately accounts for the unique characteristics of both portions of the railroad. Thus, Consumers' plan allows for three supervisory level track personnel to handle

---

[178] *Id.* at III-D-120-123.

[179] *Id* at III-D-122.

[180] *Id.* at III-D-121.

Chicago, but it also provides flexibility for the Porter to West Olive segment. The Track Supervisor would prioritize the daily activities across the entire railroad, maximizing manpower usage and operations safety in the process. Instructions pertaining to the 22nd Street to Curtis segment would be handled by the primary Assistant Track Supervisor for Chicago or his backup. Instructions pertaining to the lightly used Porter to West Olive segment would be the responsibility of the second Assistant Track Supervisor, based in Grand Junction. The third Assistant Track Supervisor would also work directly with the Track Supervisor in addressing issues on an as-needed basis. Ultimately, this arrangement best addresses the unique requirements of the CERR.

Track Crews. On Opening, Mr. Meadows provided for three track crews consisting of a foreman and two track workers. Each track crew includes a road equipment operator that acts as the fourth person of the basic track crew. As explained on Opening, Mr. Meadows also provided two additional roaming roadway equipment operators. CSXT takes issue with Consumers' staffing, arguing that the Board only accepts crews of four people and the roadway equipment could not possibly count as the fourth person because the backhoe is always working it would not make sense or even be dangerous to be moving to and from the equipment.[181] CSXT therefore posits that Consumers has no fourth crew member and must explain why, contrary to precedent, that its staffing should

[181] *Id.* at III-D-123-124.

be accepted.[182] CSXT's argument in favor of more crew members is incorrect, and it also ignores that the basic maintenance staff is support by welders, smoothing gangs, and other personnel.

In *IPA*, the complainant proposed the same approach to basic crew staffing[183] and the railroad agreed with the use of a basic gang with three track crew members and a fourth member that also operates the roadway equipment.[184] Moreover, the CERR is already heavily staffed in the critical areas of operation. Thus, there is no need to add more crew members without an attendant reduction in other machine operators or welders or smoothing gangs.

CSXT also chooses to pay lip service to cross-training, but immediately rejects it in the most useful of situations to the CERR.[185] Indeed, CSXT fails to acknowledge that smaller railroads like the CERR must cross train employees to complete a number of tasks. While Consumers agrees that the backhoe is an important and versatile part of track maintenance, the fact is that not all maintenance tasks require the use of the backhoe. It would be excessive and unrealistic to expect that the backhoe operator would not assist the rest of the track

---

[182] *Id.*

[183] *See* Opening Evidence of Complainant Intermountain Power Agency, *IPA*, at III-D-76 (filed on Dec. 12, 2012 in 42136).

[184] *See* Reply Evidence of UP, *IPA*, at III-D.63 (filed on Apr. 12, 2013)

[185] *See* CSXT Reply at III-D-111 ("Mr. Hughes' analysis was . . . guided by the principle that an efficient, least-cost SARR does not require unionized employees and does not face the same constraints as Class I railroads in terms of the level of supervision required and ability to cross-train.").

crew to conduct maintenance after completing tasks requiring the backhoe, or if the day's work did not require the use of the backhoe at all (commonplace in smaller organization like the CERR). In addition to being cross-trained in other maintenance activities, the backhoe operator would receive adequate and regular training, and be required to wear appropriate personal protective equipment to successfully mitigate the risk of injury when mounting or dismounting the machine in the course of maintenance activities.

CSXT also proposes to add an additional track crew supposedly because it is carefully examining the two distinct segments of the CERR. However, much like CSXT's track supervisor plan, the additional crew does not enhance the MOW requirements of the CERR. Specifically, CSXT adds another crew to the Porter to West Olive segment.[186] This addition is particularly puzzling as CSXT's endlessly repeated message is that the 22nd Street to Curtis segment is the segment that requires more resources. Mr. Meadows again rejects this addition as the Porter to West Olive segment simply does not require that much maintenance as it has only 8 MGT per year and two sidings.

Roadway Machine Operators. CSXT has added one additional roadway operator to work directly with the fourth track crew in its Reply.[187] As

[186] *Id.* at III-D-125.

[187] *Id.* at III-D-126.

Consumers is not adding the fourth crew, it has not added the fourth roadway machine operator on Rebuttal.

Welder/Helper/Grinders. On Opening, Consumers included one two-person welding crew. This crew would assist across the system and be based in Barr Yard. CSXT adds a second crew because it adds a second track supervisor.[188] It then uses that addition to argue that the Board has supported a welding crew per supervisor. CSXT then suggests that the crew has to cover 83 switches, including 57 between 22nd Street and Curtis as justification for another crew. As already explained above, CSXT's count of switches is misleading because there only 39 mainline switches. Moreover, CSXT has not suggested that no other crews can handle simple welding work. Regardless, the critical territory for such work is covered by the crew that Mr. Meadows already provided. Further, given the small number of switches between Porter and West Olive, a full second crew is unnecessary.

The parties agree on the roadway equipment and smoothing crew staffing.

### iii. Communications & Signals Department

On Opening, Consumers provided for a staff of 11 to maintain the signals and communications system. On Reply, CSXT adds six positions.[189]

---

[188] *Id.*

[189] *Id.* at Table III-D-32.

CSXT's reasons for the additions are threefold. First, CSXT claims that the three signal maintainers assigned by Consumers to the Porter to West Olive segment are insufficient because safety of grade crossings may be threatened.[190] Second, CSXT claims to have performed a special study of how many AAR signal units are actually being maintained by a single maintainer in different environments.[191] Third, CSXT adds a signal inspector to perform certain complicated tests that must be performed periodically.[192] As explained below, CSXT's additions are not adequately supported, and CSXT ignores or misconstrues Consumers' evidence.

On Opening, Consumers included three signal maintainers to cover the Porter to West Olive segment. This segment included 145 protected at-grade crossings.[193] These crossings accounted for a large portion AAR Signal Units calculated by Consumers on Opening.[194] Consumers explained that it had selected a slightly higher signal unit count per maintainer than recent cases because this segment is a relatively low density segment.[195] Thus, if an error occurred, the

---

[190] *Id.* at III-D-128-129.

[191] *Id.* at III-D-129-130.

[192] *Id.* at III-D-131-132.

[193] *See* Consumers Opening at III-D-106.

[194] *See* Consumers Opening e-workpaper "CERR Opening C-S Costs.xlsx," tab "Crossing Counts," cells A197 and A198 for counts and tab "AREMA-AAR," cells G35 and G38 for AAR Signal Units.

[195] *See* Consumers Opening at III-D-106-107.

CERR could tolerate a slightly longer disruption if needed. Consumers noted that CSXT has procedures in place for such occurrences.

CSXT twists Consumers' proposal by suggesting that the CERR would not attempt to quickly fix the repair, that Consumers did not model such an incident in the RTC Model, and that Consumers would somehow let the crossing signals degrade, thereby threatening local communities.[196] CSXT's distortions are not realistic and are purposely misleading and inflammatory.

Consumers is not suggesting that maintenance forces would purposely allow active grade crossing protection along on the Porter to West Olive segment to degrade to the point of failure, as CSXT has suggested. Rather, Consumers argues that given the fact that the Porter to West Olive portion features so few trains traversals, that temporary outages of active grade crossing warning equipment would not significantly impact the CERR's operations or the safety of the communities. Indeed, those crossings would not be in any particular danger because the railroad had procedures to ensure the safety of crossing in such circumstances. Thus, it would be impractical and ineffective to overstaff the small railroad with excess signal maintainers, as CSXT has proposed, assigned to that segment of the CERR. Mr. Meadows emphasizes that in the event that a warning device failed, the CERR would dispatch a signal maintainer in a timely fashion to address the issue. Prior to any signal failure, the CERR would implement all

[196] *See* CSXT Reply at III-D-128-129.

appropriate operating rules to ensure that safe operations are maintained in the interim period before a maintainer could arrive and resolve the issue.

All widely-accepted operating standards, including CSXT, have detailed rules to address the action of passing through a grade crossing with failed crossing equipment. These standards closely mimic the procedure proposed by CERR thereby demonstrating an industry-wide acceptance that the activity can be done safely and without any risk to the public or the communities adjacent to the affected railroad.

Mr. Meadows also emphasizes that the three signal maintainers are responsible for less than 50 crossings per person. Moreover, the MOW presentations on signals in SAC cases have become mired in nearly incomprehensible explanations of AAR Signal Units. Interestingly, not one defendant railroad has ever suggested that it assigns signal maintainers on this basis or described a policy that suggested X Signal Units = 1 Signal Maintainer. Mr. Meadows applied his many years of experience in deciding to use 3 signal maintainers in this segment, and he focused more on the work to be done rather than the amorphous AAR Signal Unit. Regardless, the Board has not opined on this question on such a low density segment and Consumers submits its approach is reasonable in light of the traffic and maintenance needs on the segment.

CSXT also increases the count of signal maintainers by reducing the number of AAR Signal Units per maintainer from those Consumers used on

Opening to those that CSXT's expert says he studied and determined.[197] CSXT's purported study must be rejected. A review of the Reply Narrative suggests that CSXT's expert compared an "urban" signal maintainer workload and distances to travel with those of a signal maintainer on a longer, lighter density, "rural" segment. However, a review of the workpaper cited by CSXT reveals a study devoid of any details or proof of the alleged AAR Signal Units per maintainer.[198] The flaws are manifest. The purported study does not provide: (i) the carrier(s); (ii) the territory being covered by the two maintainers; (iii) the types and counts of signals/crossings maintained that person; or (iv) details of how the AAR signal unit counts in either territory counts were determined. In other words, the alleged study is useless.

Based on its flawed study, CSXT expands the signal maintainers by 4 from Consumers Opening by using its unsupported 903 AAR Signal Units per maintainer in "urban" areas and 999 AAR Signal Units per maintainer in the "rural" segment. Compounding its errors, CSXT adds a 12th maintainer as a "relief" maintainer – as if the other 11 maintainers plus their managers could not cover this work.

---

[197] *Id.* at III-D-129-130.

[198] *See* CSXT Reply e-workpaper "Signal Maintainer Capacity Study.pdf."

In light of CSXT's distortions and its unsupported AAR Signal Units per maintainer "study," Consumers has retained its Opening signal maintainer count of 7.

CSXT also adds a Signal Inspector. CSXT notes that this position is responsible for certain work and tests that could not be performed by a signal maintainer.[199] This additional position is not required because Consumers already provided for someone to handle this work – a point that CSXT missed or ignored. Specifically, Consumers stated that:

> The CERR's C&S Supervisor is also the lead signal technician and inspector – covering the few repairs beyond the standard signal maintainer, such as advanced troubleshooting and maintenance on electronic signal equipment. The C&S Supervisor also performs two-year, four-year and ten-year FRA mandated tests with the assistance of a Signal Maintainer. As these tests are infrequent and the total number of signals on the CERR is relatively small, the C&S Supervisor can handle these duties. However, to the extent that troubleshooting duties may interfere with such testing or the C&S Supervisor requires additional assistance, the C&S Engineer can assist with such inspections/tests.

CSXT never disputed this element of Consumers' evidence and it accepted Consumers approach to the management personnel for signals. As such, Consumers has not added CSXT's repetitive position on Rebuttal.

The parties agree on the balance of the C&S staffing.

---

[199] *See* CSXT Reply at III-D-131.

### iv. Bridge & Building Department

The parties agree on the staffing of the bridge and building department.[200]

### v. Misc. Administrative/Support Personnel

The parties agree on one Engineer of Programs, Budgets, Safety & Training.[201]

## d. Compensation of MOW Employees

The parties agree on the base salaries for MOW employees.[202] The parties' differences in staffing and fringe benefits naturally created a difference.

## e. Non-Program MOW Work Performed by Contractors

CSXT generally accepts the approach used by Consumers on Opening. However, CSXT did make several minor modifications. These are addressed separately below.

### i. Planned Contract Maintenance

Track Geometry Testing. The parties agree on the costs for track geometry testing.[203]

Ultrasonic Rail Testing. The parties agree on the costs for ultrasonic rail testing and joint bar inspections.[204]

---

[200] *Id.* at III-D-132.

[201] *Id.* at Table III-D-28.

[202] *Id.* at III-D-132.

[203] *Id.*

Rail Grinding. The parties agree on the costs for mainline rail grinding. CSXT has, however, added { } of additional grinding costs for switches and grade crossings.[205] Consumers accepts this minor addition.

Shoulder Ballast Cleaning. Consistent with the Board's decision in *Sunbelt*, on Opening, Consumers has not included any contract maintenance for shoulder ballast cleaning. *Id.* at 93-94. CSXT did not address this approach. Consumers has not modified its approach on Rebuttal

Yard Cleaning. The parties agree on the costs for yard cleaning.[206]

Vegetation Control. The parties agree on the costs for vegetation control.[207]

Crossing Repaving. The parties agree on the costs for crossing repaving.[208]

Equipment Maintenance. The parties agree on methodology for calculating vehicle and equipment maintenance and fuel costs, and the asset life for vehicles.[209] The parties disagree on the useful life for track equipment. On Opening, Consumers assumed a 20-year useful life and CSXT is arguing for 10-

---

[204] *Id.*

[205] *Id.* at III-D-132-133.

[206] *Id.* at III-D-133.

[207] *Id.*

[208] *Id.*

[209] *Id.* at III-D-133.

years.[210] CSXT posits that 10 years is more realistic because the Bureau of Economic Research set the depreciable life for construction equipment at 8-10 years, and track equipment is similar to construction equipment.[211]

Consumers disagrees with CSXT's assertion that the useful life of track equipment should be set at 10 years. The Bureau of Economic Research may set the depreciable life of construction machinery at 8-10 years, but in the same document referenced by CSXT,[212] the Bureau of Economic Research also determines the useful life of railroad equipment at 28 years. CSXT's own real world experience suggests that the useful life is closer to 28 years than 10. CSXT's equipment documentation provided to Consumers shows that { } purchased in { } are still in service today, { } years later. Additionally, CSXT discovery documents also show { } purchased in { } that are still in service today. Thus, the Consumers 20-year asset life is well supported and Consumers continues to use it on Rebuttal.

The parties disagree on the total costs for equipment due to the 10-year versus 20-year asset life and their differences in crews and related required equipment.

---

[210] *Id.* at III-D-133-134.

[211] *Id.* at III-D-134.

[212] http://www.bea.gov/national/FA2004/Tablecandtext.pdf.

Communications System Inspection and Repair. The parties agree on the methodology for calculating outside communications system inspection and repair costs, but differ on the total cost due to their differing calculation of the initial investment costs.[213]

Bridge Inspections. The parties agree on the costs for outside bridge inspections.[214]

Building Maintenance. The parties agree on the methodology for determining annual outside building maintenance costs, but differ on the annual total cost due to their differing calculation of the initial investment costs.[215]

### ii. Unplanned Contracted Maintenance

Snow Removal. On Opening, Consumers proposed $100,000 per year for contractors to removes snow near the CERR's various buildings. On Reply, CSXT bumped this figure up to $160,000 arguing that it would cost $40,000 per storm (4 storms per year) arguing that there is substantial snow in the area and the equipment that the CERR's in-house personnel would use before resorting to a contractor is not adequate.[216] Consumers accepts the additional contractor costs, but, as explained below, CSXT's assertions regarding the in-house equipment are incorrect.

---

[213] *Id.* at III-D-134.

[214] *Id.*

[215] *Id.* at III-D-135.

[216] *See* CSXT Reply at III-D-136.

Storm Debris Removal. The parties agree on the annual cost for storm debris removal.[217]

#### iii. Large Magnitude, Unplanned Maintenance

Derailments and Clearing Wrecks. The parties agree on the annual cost for derailments and clearing wrecks.[218]

Washouts. The parties agree on the annual cost for washout repairs.[219]

Environmental Cleanups. The parties agree on the annual cost for environmental cleanups.[220]

### f. Contract Maintenance

#### i. Surfacing

The parties agree on the annual costs for surfacing.[221]

#### ii. Bridge Substructure and Superstructure Repair

The parties agree on the annual costs for bridge substructure and superstructure repair.[222]

---

[217] *Id.*

[218] *Id.*

[219] *Id.*

[220] *Id.*

[221] *Id.*

[222] *Id.*

### g. Equipment

#### i. Hi-Rail Vehicles

The parties agree on vehicle types and costs to be used by the CERR crews.[223] However, the total costs differ due to staffing differences. In addition, CSXT added additional snow removal equipment, which, as explained below, Consumers has rejected. Moreover, Consumers has not adjusted its staffing. Therefore, Consumers continues to use it Opening costs.

#### ii. Equipment for Track and Related Work

The parties agree on the various track equipment types and costs to be used by the CERR crews.[224] However, the total costs differ due to staffing differences. In addition, CSXT assumed a 10-year life for this equipment rather than the 20-year life used by Consumers on Opening. As explained above, CSXT's 10-year life approach is inconsistent with its own practices and the Bureau of Economic Research document it cited in support of its modification. Moreover, Consumers has not adjusted its staffing. Therefore, Consumers continues to use it Opening costs.

#### iii. Snow Removal Equipment

CSXT drastically overstates the snow removal equipment required on a railroad the size of CERR. CSXT states that it maintains thirteen jet snow blowers, one AF-1 truck mounted cold air blower and seventeen ballast regulators

---

[223] *Id.* at III-D-137.

[224] *Id.*

to clear snow on the Chicago and Great Lakes Divisions.[225] The Chicago and Great Lakes Divisions of CSXT constitute the core of railroad's operations in the Midwest and include several thousand miles of track in metropolitan Chicago, St. Louis, Indianapolis, Columbus, Cleveland, Detroit and Toledo. Included in the two Divisions are Willard, Barr (replicated, but on a slightly smaller scale, by the CERR) and Collinwood yards, some of the largest yard facilities on the entire CSXT network. At 233.98 total track miles and with only a single, relatively small yard at Barr, the CERR is, by many measures, orders of magnitude smaller than the CSXT Chicago and Great Lakes Divisions. Despite the vastly different characteristics between the 22nd Street to Curtis and Porter to West Olive segments of the CERR, CSXT proposes that the CERR maintain a snow removal equipment fleet consisting of a third the number of jet snow blowers (four) and the same number of air blower trucks as the entire Chicago and Great Lakes Divisions. Given the limited size and scope of CERR operations, CSXT cannot possibly justify such a robust snow removal equipment fleet.

Conversely, CERR's snow removal equipment fleet accurately reflects the size and operations of the railroad. Jet snow blowers are primarily used for clearing yard track and yard switches. In Barr Yard, CERR's sole yard and largest concentration of switches, there are only a small number of switches, most of which are hand operated. Given the relatively small size of Barr Yard, the

---

[225] *Id.* at III-D-138.

snow blower equipped ballast regulator could effectively clear all switches and tracks in the yard in a timely fashion, and as such, the added expense of a jet snow blower is excessive and unnecessary. All CERR mainline switches in the 22nd Street to Curtis segment are equipped with switch heaters, and as a result require minimal, if any, snow clearing operations. On the Porter to West Olive segment, traffic volumes are such that snow fighting crews, equipped with the CERR backhoes can easily clear the switches at the two sidings on the segments. Thus, on Rebuttal, Mr. Meadows has continued to retain the same approach to snow removal equipment it used on Opening.

#### iv. Work Trains

CSXT did not respond to this section.

### h. Scheduling of Maintenance

CSXT did not respond to this section.

### i. Contributions from Michigan DOT

The parties agree on the calculation of the Michigan DOT contributions for the maintenance of road crossings.[226]

## 5. Joint Facilities

On Opening, Consumers calculated that the CERR would incur $1.5 million in first year operating expenses for payments to BRC, NS, and IHB for the use of four (4) joint facilities agreements. On Reply, CSXT claims that the CERR

[226] *See* CSXT Reply at III-D-139.

would need to pay $4.4 million in first year operating expenses to BRC, NS, and IHB for the use of three (3) of the four (4) joint facilities agreements used by Consumers on Opening plus an additional joint facilities agreement with IHB at the Dolton interchange.[227] CSXT also excludes expenses for an IHB trackage rights agreement covering the Blue Island Yard to Calumet Park segment, which was included by Consumers on Opening.

According to CSXT, the difference of $2.9 million between Opening and Reply joint facilities expenses is due to: (1) Consumers failed to include costs for locomotives traversing the trackage rights segments; (2) Consumers understated traffic levels that would operate over the joint facilities; (3) Consumers understated the route miles that the CERR would traverse over a NS trackage rights segment; (4) Consumers omitted expenses for the use of IHB's Dolton interlocker; and (5) Consumers incorrectly used reciprocal rates for the NS trackage rights segments.[228] Each of CSXT's claims and the issue of IHB trackage rights over the Blue Island Yard to Calumet Park segment are discussed below.

**a. <u>Excluded Locomotives</u>**

CSXT claimed that Consumers inappropriately excluded locomotives from car counts or car-miles in calculating expenses under the BRC,

---

[227] The IHB Dolton interchange agreement was excluded on Opening but added on Reply and is separate from the IHB Blue Island Yard to Calumet Park agreement, which was included on Opening and excluded on Reply.

[228] *See* CSXT Reply at III-D-140.

IHB and NS trackage rights agreements.[229] Consumers agrees that car counts and car-miles used to calculate trackage rights should include locomotive and makes this correction on Rebuttal. This correction impacts CERR joint facilities expenses by approximately $25,000 in the first year of CERR operations.[230]

**b. Understated Traffic Levels**

CSXT claimed that Consumers failed to index operating statistics used to develop joint facilities expenses from a base year level to a first year level.[231] Consumers agrees that operating statistics used to develop joint facilities expenses should be on a first-year level and makes this correction on Rebuttal. This correction impacts CERR joint facilities expenses by roughly $275,000 in the first year of CERR operations. [232]

**c. Excluded NS Miles**

CSXT claimed that Consumers failed to include 2.5 miles of NS trackage rights between Pine Junction and Curtis.[233] CSXT said Consumers' position is "that the trains would hop off NS to travel over the CERR for 2.5 miles

---

[229] *See* CSXT Reply at III-D-140.

[230] *See* Consumers Rebuttal e-workpaper "JF Bridge Opening to Rebuttal.xlsx," cell E17.

[231] *See* CSXT Reply at III-D-141.

[232] *See* Consumers Rebuttal e-workpaper "JF Bridge Opening to Rebuttal.xlsx," cell F17.

[233] *See* CSXT Reply at III-D-141.

only to return to the NS line."[234] Opening workpapers cited by CSXT show that this is not the case. Specifically, Consumers did include the 2.5 miles from Pine Junction to Curtis on Opening and does not assume that trains traversing the NS trackage rights "hop off" NS to travel over the CERR for 2.5 miles only to return to the NS line.[235] However, Consumers did understate trackage rights mileage from Curtis to Porter by 2.5 miles.[236] This understatement has been corrected on Rebuttal. This correction impacts CERR joint facilities expenses by roughly $91,000 in the first year of CERR operations.[237]

**d. Omitted IHB Dolton Interlocking Expenses**

On Reply, CSXT claims that Consumers omitted the joint facilities expense that CSXT pays IHB to operate and maintain the interlocker at Dolton.[238] The IHB Dolton interlocker agreement is dated May 25, 1893 and calls for CSXT to pay one-third of the operating and maintenance costs of the interlocking constructed by IHB on Conrail property.[239] Invoicing from IHB to CSXT shows that total costs for the interlocking in 2014 equaled { }, of which CSXT

---

[234] *Id.*

[235] *See* Consumers Opening workpaper "Base Unit Merch Trains v6_Statistics.xlsx," tab "Pivot-Cars by OnSarr OffSARR," cell N5.

[236] *See* Consumers Opening workpaper "Base Unit Merch Trains v6_Statistics.xlsx," tab "Pivot-Cars by OnSarr OffSARR," cell O5. Mileage from Curtis to Porter should be 12.6 miles, not 10.1 miles.

[237] *See* Consumers Rebuttal e-workpaper "JF Bridge Opening to Rebuttal.xlsx," cell G17.

[238] *See* CSXT Reply at III-D-142.

[239] CSXT Reply e-workpaper "IHB 201X.pdf," p.1.

paid { }.[240] CSXT included its 2014 payments in its Reply operating expenses.

An examination of IHB's total costs show that { } percent of the costs are for tower operation labor, { } percent of the costs are for maintenance labor, { } percent of the costs are for materials and { } percent of the costs are for equipment.[241] None of IHB's services are required by the CERR and thus, CSXT's costs for the IHB interlocking agreement should not be included in the CERR's operating expenses.

Consumers accounted for investment in the latest technology communications and signaling equipment at various locations, including the Dolton interchange.[242] Consumers included operating expenses to manage train operations at the Dolton interchange. Specifically, Consumers included dispatch desks at its West Olive headquarters to manage operations, including operations at the Dolton Junction.[243] Consumers also accounts for the maintenance of all of its installed communications and signaling equipment with a staff of 11 communications and signals maintenance personnel.[244] On Reply, CSXT also

---

[240] Consumers Rebuttal e-workpaper "Summary of 2014 IHB201X Expenses.xls."

[241] *Id.*

[242] Consumers Opening e-workpaper "CERR Opening C-S Costs.xlsx," tab "Signal & Comm Counts," line 26.

[243] *See* Consumers Opening at III-D-24.

[244] *See* Consumers Opening at III-D-104.

includes staffing for both dispatchers and communications and signal maintenance personnel.[245] By including expenses for the Dolton interlocking agreement and expenses for dispatching and maintenance staff, CSXT is double counting operating expenses needed to manage traffic flow through the Dolton interchange.

Even if Consumers did not include investment, maintenance and operating costs needed to pass through a particular interlocking at Dolton, it is very difficult to determine what portion of CSXT payments to IHB should be assumed by the CERR. The IHB agreement with CSXT does not identify what interlockers are covered by the agreement – other than a cryptic diagrams of the general area. Nor is it clear what portion of CSXT's traffic is covered by the agreement. The CERR clearly would not assume all of CSXT's costs because the CERR does not move all of traffic that the CSXT does through Dolton. Moreover, CSXT does not suggest what, if any CERR trains, are using the facilities covered by the IHB agreement.

On Rebuttal, Consumers rejects CSXT's inclusion of IHB Dolton interlocking expenses because Consumers has already accounted for the investment, operating expenses and maintenance expenses needed to manage the Dolton interchanges.

---

[245] *See* CSXT Reply at III-D-53 and III-D-115.

**e. Use of NS Reciprocal Rates for Trackage Rights Segments**

On Opening, Consumers relied on trackage rights agreements NS 552 and NS 675 that apply to CSXT movements over NS's Rock Island to Porter segments.[246] Invoices provided by CSXT in discovery show that CSXT paid NS a rate of { } per car-mile in 2014 for trains moving over NS's segments.[247] On Reply, CSXT claims these rates cannot be used by Consumers because they are reciprocal rates. Specifically, CSXT states:

> these two JFAs constitute only two out of dozens of JFAs that are part of an umbrella reciprocal agreement between CSXT and NS that covers more than 1,700 miles.[248]

Consumers now knows that CSXT and NS entered into a July 4, 2002 Letter Agreement ("2002 Letter Agreement") that called for reciprocal rates to be used for a number of agreements, including NS 552 and NS 675. But CSXT provided no evidence or references to the existence of the 2002 Letter Agreement in discovery productions related to NS 552 or NS 675. Thus, Consumers had no way of knowing that these rates were reciprocal in the development of its Opening evidence. Early in the discovery process, CSXT provided Consumers a listing of joint facilities agreements in Illinois, Indiana and Michigan and asked Consumers

---

[246] CSXT incorrectly references the NS 675 agreement as NS 657 at p. III-D-143 of its Reply.

[247] Consumers Opening e-workpaper "Open_ConsumersJointFacCharges2014.xlsx," tab "NS_RockPorter," column K. These figures are based on NS invoices provided in discovery.

[248] *See* CSXT Reply at III-D-143.

to select relevant agreements that it wished to use in its Opening evidence. This listing, which is discovery document "Joint_Facilities_List_IN_IL_MI.xlsx," includes a description for trackage rights agreement NS 552 as follows:

{

} (see cell K355).

Likewise, "Joint_Facilities_List_IN_IL_MI.xlsx" includes a description for trackage rights agreement NS 675 as follows:

{

} (see cell K381).

Neither one of these descriptions mentions reciprocal rates. In addition, CSXT's joint facilities listing excludes any reference to reciprocal rates associated with any NS trackage rights agreements. When CSXT provided Consumers with requested joint facilities agreements based on Consumers' review of CSXT's joint facilities listing, CSXT included, among other agreements, NS 552 and NS 675. These agreements, like other agreements provided by CSXT, included letter agreements and correspondence related to each agreement. However, neither the NS 552 agreement nor the NS 675 agreement provided by CSXT included the 2002 Letter Agreement indicating the application of reciprocal rates. What CSXT did was to provide a copy of the 2002 Letter Agreement elsewhere within its production of joint facilities agreements requested by

Consumers. The 2002 Letter Agreement was provided as "NS 915," an agreement that was not included in CSXT's initial joint facilities listing nor was it requested for production by Consumers. The 2002 Letter Agreement made up seven (7) pages out of the 3,930 pages of joint facilities materials provided by CSXT to Consumers in discovery.[249] Because CSXT did not provide information about reciprocal rates or the 2002 Letter Agreement within its production of the NS 552 and NS 675 agreements, and because CSXT never identified reciprocal rates or the 2002 Letter Agreement in its description of joint facilities, the { } per car-mile rates included in CSXT's invoice files and relied upon by Consumers on Opening is the best evidence of record and should be used for the calculation of NS joint facilities expenses.

CSXT offered two approaches to developing non-reciprocal rates under the NS 552 and NS 675 trackage rights agreements. The first approach, which is used to support CSXT's Reply evidence, is based on the development of market rates following procedures adopted by the ICC in *St. Louis Southwestern Railway Company – Trackage Rights Over Missouri Pacific Railroad Company – Kansas City to St. Louis: Trackage Rights Compensation ("SSW")*. The second

---

[249] Joint facilities materials were provided in discovery documents {

}

approach, which is offered by CSXT should the Board disagree with CSXT's first approach, uses what CSXT claims is the most recent non-reciprocal rates under agreements NS 552 and NS 675. Each of CSXT's approaches are discussed below.

CSXT used what it refers to as the SSW Compensation Methodology to develop rates it claimed Consumers would have to pay to utilize NS trackage rights.[250] CSXT said this methodology was developed in *St. Louis Southwestern Ry. Co. Compensation- Trackage Rights*, 4 I.C.C.2d 668 (1987). CSXT claimed that this approach "is the *only viable* approach to estimate a trackage rights fee absent the reciprocal component."[251] Yet, CSXT followed its evidence for the SSW approach with what it claimed are viable trackage rights rate for use with the NS agreements. Specifically, CSXT suggested the Board consider historical trackage rights rates to calculate NS trackage rights expenses.[252] By its own evidence, CSXT demonstrates that the development of trackage rights based on the SSW methodology is unnecessary because historical rates exist for use in calculating NS trackage rights agreement costs. Because of this, the Board should reject the use of SSW rates as unnecessary.

CSXT anticipated that the Board might not accept its inappropriate trackage rights rates based on its interpretation of the "SSW Methodology," so it

---

[250] *See* CSXT Reply at III-D-150.

[251] *Id.* (emphasis added).

[252] *See* CSXT Reply at III-D-155.

provided an alternative approach to calculating NS trackage rights rates. Specifically, CSXT stated;

> In the event that the Board does not agree that the SSW methodology is the appropriate methodology for calculating the trackage rights fee, the Board should not settle on the charge negotiated in the reciprocal agreement, for the reasons explained above. Instead, the Board could impose a charge agreed to between NS and CSXT at an earlier date.[253]

For the "charges agreed to between NS and CSXT at an earlier date," CSXT chose to use a rate of { } per car-mile, which it says was derived from a 1974 agreement between Penn Central and Chesapeake and Ohio.[254] This 1974 agreement, which according to CSXT only covers the segment from Rock Island to Pine Junction, is sourced by CSXT to Reply workpaper "NS552.pdf,"[255] This workpaper does not include the 1974 agreement nor does it provide support for CSXT's proposed rate of { } per car-mile. However, Reply workpaper "NS552.pdf" does include the NS 552 trackage rights agreement and related letter agreements (excluding the 2002 Letter Agreement) and correspondence.[256] One piece of NS 552 correspondence, a letter dated October 22, 2001 from CSXT to

---

[253] *See* CSXT Reply at III-D-155.

[254] *See* CSXT Reply at III-D-155.

[255] *See* CSXT Reply at III-D-155.

[256] The NS 552 trackage rights agreement refers to a { } *See* CSXT Reply e-workpaper "NS 552.pdf," p.6. { }, which is identified as NS 539 in CSXT's workpapers (*see* CSXT Reply workpaper "NS 552.pdf," at 13 under "Provision"), was not provided by CSXT in discovery or Reply.

NS, includes a proposal to suspend a June 30, 1974 agreement between predecessors of CSXT and NS covering CSXT rights over NS's Rock Island to Pine segment. The reason for the suspension is the existence of a June 1, 1999 agreement, which Consumers presumes is the June 1, 1999 NS 552 agreement, covering the same segment with compensation provisions approximately the same as under the 1974 agreement.[257] Even if CSXT was able to trace the { } per car-mile rate back to the 1974 agreement, this rate was replaced by the NS 552 rate per the October 22, 2001 letter discussed above. So, CSXT's proposed alternative rate of { } per car-mile should not be considered because: (i) its derivation is not provided or supported by CSXT on Reply; (ii) it only covers a portion of the NS segments utilized by CERR (Rock Island to Pine and not Pine to Porter); and (iii) it was replaced by the NS 552 rate.

What is clear from the workpapers provided by CSXT in discovery and Reply is that the joint facilities agreements in place prior to the 2002 Letter Agreement were NS 552 (Rock Island to Pine) and NS 675 (Pine to Porter). These joint facilities agreements were established well before the 2002 Letter Agreement called for the use of reciprocal rates and neither agreement addresses the concept of reciprocity.[258] Should the Board decide that historical rates should be used to calculate NS joint facilities expenses, it should forgo the use of the 1974 rates as

---

[257] CSXT Reply e-workpaper "NS552.pdf," at 14.

[258] CSXT Reply e-workpapers "NS 552.pdf" and "NS 675.pdf."

CSXT suggests and instead use the NS 552 and NS 675 rates in place prior to the 2002 Letter Agreement. Specifically, by using, the NS 552 rate of { } and the NS 675 rate of { },[259] escalating each per the corresponding trackage rights agreement, the Board would arrive at rates equaling { } per car-mile for both agreements at July 1, 2014 levels.[260]

On Rebuttal, Consumers continues to use { } per car miles for NS joint facilities as these rates were the best evidence of record available to Consumers on Opening.

### f. IHB Trackage Rights from Blue Island Yard to Calumet Park

On Opening, Consumers included trackage rights expenses for IHB's segment between Blue Island Yard and Calumet Park. These trackage rights were required because the real-world CSXT operates trains to and from IHB's Blue Island Yard by way of CSXT's interchange with the IHB at Calumet Park.[261] On Reply, CSXT removed the IHB trackage rights expense, claiming these trackage rights are not needed since CSXT removed trains traversing the Calumet Park to Curtis segment. These trains were removed by CSXT because

---

[259] For the NS 552 rate, *see* CSXT Reply e-workpaper "NS552.pdf," at 6. For NS 675 rate, *see* CSXT Reply e-workpaper "NS675.pdf," at 12.

[260] *See* Consumers Rebuttal e- workpaper "Rebuttal_ConsumersJointFacCharges2014.xlsx," tab "NS Rate," columns E and F.

[261] *See* Consumers Opening at III-C-59.

CSXT claims these trains failed to meet CSXT service levels.[262] Since Consumers retains the Calumet Park/Curtis trains as described in Section III- A-1-b above, Consumers continues to include Blue Island Yard to Calumet Park IHB trackage rights expenses on Rebuttal. On Reply, CSXT correctly identified that traffic traveling over this trackage rights segment is the traffic moving between Calumet Park and Curtis.[263] On Opening, Consumers included traffic traveling to and from the Blue Island IHB connector, which is not the same as Blue Island Yard, to calculate trackage rights expenses. On Rebuttal, Consumers uses traffic traveling between Calumet Park and Curtis to calculate trackage rights expenses under the IHB trackage rights agreement. This correction results in a reduction in joint facilities expenses of roughly $75,000 in the first year of CERR operations. [264]

**g. Joint Facilities Summary**

When Consumers includes locomotives in operating statistics (impact of roughly $25,000), indexes operating statistics to first year levels (impact of roughly $275,000), corrects the mileage between Curtis and Porter (impact of roughly $91,000) and restates traffic under the IHB Blue Island Yard to Calumet Park agreement (impact of roughly -$75,000), Rebuttal joint facilities

---

[262] *See* CSXT Reply at III-D-142.

[263] *Id.*

[264] Consumers Rebuttal e-workpaper "JF Bridge Opening to Rebuttal.xlsx," cell H17.

expenses equal $1.8 million in the first year, an increase over Opening expenses of $0.3 million.

**6. Loss and Damage**

CSXT accepts Consumers' methodology for determining loss and damage.[265] The minor difference in costs are attributable to the differing traffic level by commodity posited by the parties.

**7. Insurance**

CSXT accepts Consumers' insurance ratio of 3.75% of operating expenses.[266]

**8. Ad Valorem Tax**

On Opening, Consumers developed CERR's ad valorem taxes for Illinois, Indiana and Michigan in a manner that is consistent with how these taxes are actually developed for the various jurisdictions. Consumers' Opening tax calculation for Illinois relied on a combination of income, cost and equity approaches. Consumers used a cost approach for Indiana taxes and both an income and cost approach for Michigan taxes. Consumers' calculations on Opening resulted in { } in first year ad valorem tax expenses. CSXT accepted the approach used by Consumers on Opening and further accepted Consumers' calculation for Indiana and Michigan taxes.[267]

---

[265] *See* CSXT Reply at III-D-157.

[266] *See* CSXT Reply at III-D-158.

[267] *See* CSXT Reply at III-D-158.

While CSXT generally agreed with how Consumers developed ad valorem taxes for Illinois, it disagreed with how Consumers attributes CERR value to the State of Illinois. Specifically, CSXT disagreed with Consumers' use of CERR route miles to determine CERR value attributable to Illinois, which on Opening reflects 18.2 percent of total CERR value. CSXT claimed that Consumers should be using a factor that incorporates traffic units, revenue, tons originated and terminated, and track mileage.[268] CSXT, after restating Illinois taxes and adjusting its tax calculations to reflect Reply net railway operating income, calculated ad valorem taxes to be $1.2 million in the first year.[269] However, despite its stated position, in its Reply workpapers, CSXT used only train counts and route miles to determine the Illinois factor to apply to total CERR value.[270] Inconsistencies aside, neither approach reflects what the State of Illinois calls for in its property tax code. Illinois property tax code (35 ILCS 200) states

> If any railroad company owns or uses operating property partly within and partly outside of this State, the Department shall determine the value of the entire operating property of the railroad but shall take only that part of the entire value as is represented by the average percentage of (a) the length of all track including main, second and additional main track, side track and turnouts within this State, (b) its gross revenues arising from railroad operations in this State,

---

[268] *See* CSXT Reply at III-D-159.

[269] *Id.*

[270] *See* CSXT Reply e-workpaper "CERR Ad Valorem Taxes_Reply.xlsx," tab "Usage_Factor." The development of train counts is further shown on tab "Usage."

> (c) the reproduction cost of its operating property within this State, as determined by the Interstate Commerce Commission of the United States, or other competent authority, plus additions and betterments, less retirements and depreciation. (35 ILCS 200/11-100)[271]

Thus, the Illinois tax code calls for track miles, revenues and operating property to be used to allocate CERR value attributable to Illinois. Presumably, CSXT's use of train counts is intended to reflect revenues and its use of route miles is intended to reflect property values. While Consumers agrees that route miles are appropriate for reflecting the amount of operating property in Illinois, Consumers does not agree that train counts should be used to reflect revenues. Rather, Consumers believes route miles are appropriate for reflecting revenues for Illinois. The use of route miles to reflect CERR's profitability has already been used by Consumers and accepted by CSXT for the calculation of income taxes. Specifically, the income tax calculation included in both the Opening and Reply DCF models rely on an allocation of income by route miles by state to calculated income taxes for the entire CERR.[272] Consumers retains the use of route miles as the best indicator of Illinois's portion of CERR revenues,

---

[271] *See* Consumers Rebuttal e-workpaper, "35 ILCS 200_11_Property Tax Code.pdf" at 6-7.

[272] *See* Consumers Opening e-workpaper "Exhibit III-H-1.xlsm," tab "Investment SAC," columns Y through AC. *See also* CSXT Reply e-workpaper "Exhibit III-H-1_Reply.xlsm," tab "Investment SAC," columns Y through AC.

trackage and property. After the inclusion of Rebuttal mileage, revenues and operating expenses, first year ad valorem taxes for the CERR equal $1,955,221.

**9. Intermodal Lift Costs**

On Opening, Consumers developed an estimate of lift fees that CSXIT would charge a third-party per lift. The lift fee developed by Consumers equaled { } per lift and includes CSXT's actual costs associated with lifting containers onto railcars.[273] CSXT did not provide any evidence on Reply that develops the cost per lift. Rather, CSXT claimed that Consumers did not properly allocate revenues and develop costs for intermodal traffic originating or terminating at CSXIT's 59th Street intermodal facility. As a result, CSXT treats this traffic as being interchanged with the CSXT at the 59th Street terminal and excludes any intermodal lift expenses from its operating expenses. According to CSXT, because CSXIT is an affiliated company with CSXT, CERR must incur operating expenses and investment costs associated with the 59th Street facility in order to claim originating or terminating revenue allocations.[274]

As is discussed in Section III-A-3.b.iii(c), CSXIT is not an affiliate of CSXT. CSXIT is a third-party service provider to CSXT and other customers. The CERR is procuring lift services from CSXIT and CERR's obligation to CSXIT is to compensate it for lift services.

---

[273] *See* Consumers Opening at III-D-143.

[274] *See* CSXT Reply at III-D-160.

{

}. The agreement specifically states:

{

}.[276]

CERR is handling line-haul rail service to and from the facility for its intermodal traffic. As such, CERR must compensate CSXIT for services it needs to be able to claim line-haul revenues from intermodal shippers. This service from CSXIT is one lift at origin and one lift at destination. CSXT clearly states this service level in its Intermodal Service Directory No. 1, which reads:

> Line haul rates offered by CSXI[277] provide for normal lift provisions at CSXI facilities, which include transferring a container once from a Chassis to a

---

[275] *See* CSXT Reply at III-A-42.

[276] *See* Consumers Rebuttal e-workpaper "Terminal Services Agreement Amended and Restated (CSX-CNSMR-HC-17243 to 17249).pdf" at 6.

[277] Consumers Rebuttal e-workpaper "Directory1-Apr2016.pdf" at page 27, section 7.14. This directory is publically available at http://www.intermodal.com/index.cfm/channel-partners/customer-tools/plan/service-directories/.

railcar at origin, and once from a railcar to a Chassis at destination.[278]

The cost of the service being provided by CSXIT to CERR should reflect only the cost of one lift at origin and one lift at destination. CSXT claims that CERR should compensate CSXIT for all of the 59th Street facility's operating costs even though CSXIT is providing terminal services, such as truck loading and unloading and storage services as well as lift services to other customers.[279] Consumers maintains that its Opening lift cost calculation is an accurate representation of the costs incurred by CERR and continues to rely upon that value on Rebuttal.

---

[278] CSXI, which is CSXT's Intermodal marketing arm, should not be confused with CSXIT which is CSX Terminals and is owned by CSX Corporation.

[279] At Table III-A-3 of its Reply (*see* CSXT Reply at III-A-45), CSXT shows total costs of the 59th Street facility of { }, which is the sum of what CSXT refers to in the table as "Excluded" ({ }) and "Included" costs ({ }). This total is also reflected in CSXT's discovery document "CSXIT Costs and Volume.xlsx," tab "2014," cell C61.

**III-E Non-Road**
**Property Investment**

## III. E. NON-ROAD PROPERTY INVESTMENT

Consumers briefly addressed non-road property investment in Part III-E of its Opening Narrative, indicating that the CERR's non-road property investment costs were addressed elsewhere in its Opening Evidence. CSXT takes a similar approach on Reply.

# III-F Road Property Investment

## III. F. ROAD PROPERTY INVESTMENT

On Opening, Consumers presented feasible and well supported road property investment costs for the CERR. Consumers' Opening costs included significant land acquisition costs for Chicago; real-world costs for common earthwork; and fully supported evidence of other investment categories. As noted herein, Consumers' Opening and Rebuttal road property investment are generally consistent with those presented in other SAC cases.

Consumers also maintains its Opening position with respect to the location of CSXT rail lines being replicated by the CERR, but adds 0.6 route miles consistent with CSXT's Reply to account for the Buffington Connection.[1] As discussed *supra* at III-B-1, this is the only change proposed by CSXT that Consumers is accepting with respect to the CERR's route mileage. Similarly, CSXT proposes additional IHB track in the vicinity of the Dolton interchange and well siding in the vicinity of the Campbell plant. As discussed *supra* at III-B-1, neither one of these modifications is justified based on the RTC model,[2] and as such, is not incorporated by Consumers on Rebuttal.

Not surprisingly, CSXT asserts that Consumers' costs are insufficient and that the CERR requires substantial increases in road property investment. As explained below, CSXT's Reply Evidence is unpersuasive in most respects. For all of the reasons set forth in this Part, the Board should reject

---

[1] *See* III-B-6. Consumers notes that this is different from the total listed by CSXT's land valuation expert, and only accepts the addition of the 0.6 route miles.

[2] *See* III-B-6.

CSXT's road property investment costs and accept those presented by Consumers on Rebuttal, as shown in Rebuttal Table III-F-1.

**REBUTTAL TABLE III-F-1**
**CERR Road Property Investment Costs**
(millions)

| | Item | Consumers Open[/1] | CSXT Reply[/2] | Consumers Rebuttal[/3] | Difference |
|---|---|---|---|---|---|
| 1. | Land | $120.20 | $131.70 | $120.63 | $11.50 |
| 2. | Roadbed Preparation | $30.30 | $82.20 | $36.77 | $51.90 |
| 3. | Track | $186.80 | $252.00 | $209.23 | $65.20 |
| 4. | Tunnels | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. | Bridges | $71.90 | $167.40 | $72.48 | $95.50 |
| 6. | Signals and Communications | $33.80 | $46.50 | $41.97 | $12.70 |
| 7. | Buildings and Facilities | $11.90 | $26.50 | $12.38 | $14.60 |
| 8. | Public Improvements | $3.40 | $11.10 | $3.38 | $7.70 |
| 9. | Subtotal | $458.20 | $717.30 | $499.20 | $259.10 |
| 10. | Mobilization | $9.10 | $36.10 | $10.16 | $26.90 |
| 11. | Engineering | $33.80 | $58.60 | $37.62 | $24.80 |
| 12. | Contingencies | $38.10 | $68.00 | $38.64 | $29.90 |
| **13.** | **Total Road Property Investment Costs** | **$539.20** | **$879.90** | **$585.61** | **$294.29** |

[/1] Consumers Opening e-workpaper "III-F- TOTAL - 2015.xlsx"

[/2] CSXT Reply e-workpaper "III-F- TOTAL - 2015_Reply.xlsx"

[/3] Consumers Rebuttal e-workpaper "III-F TOTAL – 2015 Rebuttal.xlsx"

## 1. Land

On Rebuttal, Consumers adjusts its land valuation to accommodate the additional land required for the 0.6 additional route miles to reflect the Buffington Connection, but otherwise maintains its position on Opening. On Opening, Consumers' real estate expert, Stuart I. Smith of Stuart I. Smith Realty Advisors, LLC, affiliated with US Realty Consultants, Inc., presented extensive land sale records and a detailed report summarizing the CERR's land acquisition costs. CSXT in their Reply essentially dismissed the evaluation by Mr. Smith and substituted its expect land valuation report prepared by Mr. Charles (Sandy) Rex. Given CSXT's refusal to accept or to build on Mr. Smith's valuation, it is surprising that the two appraisals of the CERR's Right-of-Way are remarkably similar. In fact, as summarized in Rebuttal Tables III-F-2 and III-F-3 below, with the exception of Allegan and Ottawa County, MI, Mr. Rex and Mr. Smith arrived at similar figures.

# REBUTTAL TABLE III-F-2[3]
## Comparison of Appraisals from Consumers Opening and CSXT Reply for CERR RoW

**Overview of Appraisal Findings**

| | Smith Appraisal Findings | | | RMI Midwest Appraisal Findings | | |
|---|---|---|---|---|---|---|
| | Value | Mileage (i) | Value/Mile | Value | Mileage (i) | Value/Mile |
| **RoW Segment** | | | | | | |
| Ottawa | $1,154,934 | 13.00 | $88,841 | $6,626,568 | 13.00 | $509,736 |
| Allegan | $2,176,614 | 27.40 | $79,438 | $2,811,076 | 27.40 | $102,594 |
| Van Buren | $1,859,814 | 21.40 | $86,907 | $1,783,658 | 21.40 | $83,349 |
| Berrien | $27,567,210 | 46.40 | $594,121 | $27,578,304 | 46.40 | $594,360 |
| LaPort | $19,406,640 | 23.76 | $816,778 | $18,328,157 | 23.76 | $771,387 |
| Cook | $50,994,900 | 22.90 | $2,226,852 | $60,892,141 | 22.90 | $2,659,045 |
| Total Mainline | $103,160,112 | 154.86 | | $118,019,904 | | |
| **Other Assets:** | | | | | | |
| BRC Alternative @ 25% | $6,138,347 | | | $3,027,025 | | |
| Dolton | $3,846,646 | | | $3,222,536 | | |
| IHB @ 21.42% | | | | $1,024,844 | | |
| Buffington | | | | $455,217 | | |
| Microwave Site | | | | $223,040 | | |
| Barr Yard | $7,033,459 | | | $6,619,726 | | |
| | $17,018,452 | | | $14,572,388 | | |
| **Total CERR** | **$120,178,564** | | | **$132,592,292** | | |

*Notes:*
*(i) some minor variations in mileage may be noted between reports*
*(I) Smith mileage used as denominator in each column*

[3] Consumers Rebuttal Exhibit III-F-1, Stuart Smith Valuation Report ("Smith Rebuttal Report") at 3, Summary Table 1.

## REBUTTAL TABLE III-F-3[4]
## Consumers Rebuttal Land Valuation for CERR RoW

**Rebuttal Table**
**Consumers Rebuttal Land Value for CERR RoW**

| | Value | Mileage | Value/Mile |
|---|---|---|---|
| **RoW Segment** | | | |
| Ottawa | $1,154,934 | 13.00 | $88,841 |
| Allegan | $2,176,614 | 27.40 | $79,438 |
| Van Buren | $1,859,814 | 21.40 | $86,907 |
| Berrien | $27,567,210 | 46.40 | $594,121 |
| LaPort | $19,406,640 | 23.76 | $816,778 |
| Cook | $50,994,900 | 22.90 | $2,226,852 |
| Total Mainline | $103,160,112 | 154.86 | |
| | | | |
| **Other Assets:** | | | |
| BRC Alternative @ 25% | $6,138,347 | | |
| Dolton | $3,846,646 | | |
| IHB @ 21.42% | not included [1/] | | |
| Buffington | $455,217 [2/] | | |
| Microwave Site | included above [3/] | | |
| Barr Yard | $7,033,459 | | |
| | $17,473,669 | | |
| | | | |
| **Total CERR** | **$120,633,781** | | |
| **Rounded** | **$120,630,000** | | |

**Notes:**

**1/** IHB partial ownership is excluded from the Smith Total CERR value. However, we would accept RMI's estimate of value for this segment if incorporated into the RoW.

**2/** Buffington RoW has been revised to accept RMI's valuation of this segment.

**3/** The six microwave sites were included in the initial estimate of value at the appropriate RoW segment. We valued these microwave tower areas at a total of $237,402. This compares with RMI's estimate of $223,040.

[4] Smith Rebuttal Report at 4, Summary Table 2.

CSXT's expert relies on an extensive statistical analysis to arrive at CSXT's valuation of the CERR's RoW. However, as discussed *supra*, this statistical analysis has numerous flaws, the analysis includes hardcoded data and circular references, and it is based on comparable sales that have not been adequately reviewed. Further, the land acquisition cost is not supported by the evidence, and it is not consistent with STB precedent for such valuations. Therefore, on Rebuttal, Consumers only adjusts its Opening land valuation for the CERR RoW by $455,217 to accommodate the Buffington Connection. Below is a discussion of (a) CSXT's erroneous critique of Mr. Smith's appraisal of the CERR RoW; and (b) the significant issues and flaws with Mr. Rex's statistical analysis that invalidate his conclusions and valuation of the CERR RoW.

### a. CSXT's Expert Erroneously Concluded that Mr. Smith's Appraisal of the CERR RoW was Invalid

In preparing his appraisal, Mr. Smith performed a detailed review of comparable sale data and assigned each land segment a value. The "three serious flaws"[5] cited by CSXT are without merit. CSXT alleges that Mr. Smith: (i) did not divide the RoW into small enough land-use segments; (ii) relied on a smaller set of comparable sales that were in some instances farther from the RoW; and (iii) used foreclosures and short sales as part of the comparable sales for the land valuations in Cook County, IL. However, as discussed below, these issues identified by CSXT are primarily due to the different approaches taken by the

[5] *See* CSXT Reply at III-F-5.

experts, and in other instances are due to an inadequate or nonexistent review of Mr. Smith's workpapers.

### i. Dividing the RoW into Numerous Identical Land-Use Segments does Not Result in a More Accurate Valuation

CSXT contends that Mr. Smith's appraisal did not account for the "unique land parcels" along the CERR's RoW and that instead, it is more appropriate to divide the RoW into close to 800 different land segments.[6] This approach on such a small RoW makes little sense, and the end result is an average segment of 2.2 city blocks.[7] Simply dividing the RoW into numerous segments will not yield more accurate results unless there are actually "unique" and different highest and best uses. If there is one gas station in the midst of farmland, this does not change the highest and best use from agricultural land to commercial.[8] Mr. Rex's valuation in several instances divides the RoW into several segments when there is no discernable difference. For example, it does not make much sense to subdivide large sections of rural residential land into upwards of eight separate land use segments:

---

[6] *See* CSXT Rebuttal at III-F-5.

[7] Smith Rebuttal Report at 33.

[8] *See* Smith Rebuttal Report at 5.

**REBUTTAL TABLE III-F-4**
**Example of CSXT's Expert Dividing CERR RoW into Segments with the Same Land Use[1]**

| Unit Value ID | County | Land use | Size Adjustment | Other Adjustment | Per Acre Mean | Per Acre Median |
|---|---|---|---|---|---|---|
| 107 | Van Buren | RURAL RES | 0.60 | | $ 11,630 | $ 9,144 |
| 108 | Van Buren | RURAL RES | 0.40 | | $ 13,967 | $ 11,013 |
| 109 | Van Buren | IND | 12.50 | | $ 5,126 | $ 5,540 |
| 110 | Van Buren | RURAL RES | 5.00 | | $ 4,440 | $ 3,471 |
| 111 | Van Buren | RURAL RES | 3.50 | | $ 5,222 | $ 4,071 |
| 112 | Van Buren | RURAL RES | 0.35 | | $ 14,828 | $ 11,680 |
| 113 | Van Buren | RURAL RES | 2.50 | | $ 6,091 | $ 4,806 |
| 114 | Van Buren | SFR | 0.35 | | | |
| 115 | Van Buren | COM | | No Adjustments | | |
| 116 | Van Buren | IND | 5.00 | | $ 9,398 | $ 10,175 |
| 117 | Van Buren | IND | 1.79 | MIN | $ 18,448 | $ 19,968 |
| 118 | Van Buren | IND | 2.50 | | $ 14,797 | $ 16,017 |
| 119 | Van Buren | RESDEV/MF/MH | | | | |
| 120 | Van Buren | IND | 5.50 | | $ 8,803 | $ 9,508 |
| 121 | Van Buren | RURAL RES | 2.75 | | $ 5,816 | $ 4,605 |
| 122 | Van Buren | RURAL RES | 1.80 | | $ 7,058 | $ 5,540 |
| 123 | Van Buren | RURAL RES | 0.25 | | $ 17,289 | $ 13,616 |
| 124 | Van Buren | RURAL RES | 1.00 | | $ 9,217 | $ 7,275 |
| 125 | Van Buren | RURAL RES | 2.25 | | $ 6,377 | $ 5,006 |
| 126 | Van Buren | RURAL RES | 1.75 | | $ 7,146 | $ 5,607 |
| 127 | Van Buren | RURAL RES | 8.00 | | $ 3,580 | $ 2,803 |
| 128 | Van Buren | RURAL RES | 3.00 | | $ 5,594 | $ 4,405 |

[1] *See* CSXT Reply e-workpaper "CERR Land Valuation_Reply.xlsx," tab "UNITVALUES FULL-REPORT," rows 115-145; CSXT Reply Exhibits III-F-2 at 2 ("Unit Value ID Summary Table – Page 2").

Most problematically, dividing the land into smaller segments allows for several adjustments that further increase the costs. One of the "adjustments" frequently made by Mr. Rex is based on parcel size, even where there is limited sales data or the correlation is almost insignificant.[9] It is understood that smaller

[9] *See generally* CSXT Reply e-workpaper "15-250IndianaSales01042016.xlsx," tabs "Res dev" and "Res dev Graphs."

parcels typically will result in higher land costs, but by dividing the RoW into a high number of segments and applying a series of adjustments to an average parcel size, the price arrived at for a given segment could easily be inflated. As shown in Table III-F-4A below, CSXT's approach resulted in neighboring land segments with the same or similar land use being assigned significantly different costs per acre.

**REBUTTAL TABLE III-F-4A**
**Example of CSXT's Expert Dividing CERR RoW into Segments with the Same Land Use[1]**

| Unit Value ID | County | Land use | Size Adjustment | Conclusion Value Per Acre | Per SqFt |
|---|---|---|---|---|---|
| 121 | Van Buren | RURAL RES | 2.75 | $ 5,800 | $ 0.13 |
| 122 | Van Buren | RURAL RES | 1.80 | $ 7,060 | $ 0.16 |
| 123 | Van Buren | RURAL RES | 0.25 | $ 17,300 | $ 0.40 |
| 124 | Van Buren | RURAL RES | 1.00 | $ 9,220 | $ 0.21 |
| 125 | Van Buren | RURAL RES | 2.25 | $ 6,380 | $ 0.15 |
| 126 | Van Buren | RURAL RES | 1.75 | $ 7,150 | $ 0.16 |
| 127 | Van Buren | RURAL RES | 8.00 | $ 3,580 | $ 0.08 |
| 128 | Van Buren | RURAL RES | 3.00 | $ 5,600 | $ 0.13 |

[1] *See* CSXT Reply e-workpaper "CERR Land Valuation_Reply.xlsx," tab "UNITVALUES FULL-REPORT," rows 115-145; CSXT Reply Exhibits III-F-2 at 2 ("Unit Value ID Summary Table – Page 2").

Unlike Mr. Rex, Mr. Smith only divides the CERR RoW into segments when there is an appreciable difference in highest and best use, as opposed to isolating the occasional house or gas station.[10] Likewise, where there is a small patch of agricultural land among residential property, the land is classified as residential instead of agricultural. So while Mr. Smith uses fewer

[10] *See* Smith Rebuttal Report at 5.

land segments, his approach is not contrived and focuses on the highest and best use of the land comprised by the CERR's RoW.[11]

### ii. Consumers' Expert Focused on Quality as Opposed to Quantity of Comparable Sales

CSXT takes issue with the number of comparable sales used by Mr. Smith and claims that Mr. Rex was unable to review this data.[12] While it is undisputed that Mr. Smith relies on fewer comparable sales for his valuation, this disparity simply results from a difference in the manner in which the experts approach the sales data. With respect to CSXT's claim of data being unreviewable, it appears that Mr. Rex either did not have the workpapers that accompanied Mr. Smith's report, or failed to review the spreadsheets that were in the accompanying tabs in the same worksheet that contained the land valuation.[13] Both of these issues are addressed more fully below.

In comparison to Mr. Rex, Mr. Smith ultimately relies on fewer comparable sales but his valuation is demonstrably more reliable. Mr. Smith's approach was to sort through a large amount of data to arrive at sales that were the most similar to the property being valued, and in some instances, this approach requires going some distance from the CERR RoW. In comparison, Mr. Rex uses more sales data, but does not screen this data sufficiently to determine if, in fact,

---

[11] *See id.*

[12] *See* CSXT Reply at III-F-12 ("The only reference to particular sales used in the analysis is by inference from the maps provided in the report....").

[13] *See* Consumers Opening e-workpaper "Land Valuation Worksheet.xlsx."

each data point actually represents a comparable sale. Mr. Rex still ends up with fairly small sample sizes after sorting the sales by land use, [14] and this results in the statistical outliers and miscategorized sales that skew his results. By instead focusing on a few truly representative sales, Mr. Smith is able to insure that the comparable sales match the land segment at issue and can make adjustments to account for any dissimilarity in use or location. It should be noted that Mr. Rex, like Mr. Smith, sometimes was required to go fairly far from the CERR's RoW to find comparable sales,[15] but again, Mr. Rex's focus on quantity instead of quality results in these comparable sales frequently not resembling the land segment being valued.[16]

CSXT also erroneously reports that Mr. Smith's data was impossible to verify,[17] and that "[t]he Smith report provides no rationale or calculations to explain the conclusions in the appraisal."[18] CSXT's assertion is incorrect. Mr. Smith includes the relevant calculations in the same worksheet as the land

---

[14] *See generally* CSXT Reply e-workpapers "15-250IndianaSales01042016.xlsx," tab "Res dev" (four sales); "15-250OttawaSales12142015.xlsx," tabs "Rural res" (eight sales) and "Ind" (ten sales).

[15] Strangely, the location factor applied by Mr. Rex did not correlate well with the proximity to the RoW. For example, Mr. Rex classifies a sale that was 20 miles away from the RoW in the same location category as a property that was "virtually on-top of the RoW." *See* Smith Rebuttal Report at 29 and Figure 1.

[16] *See* discussion of pricing errors in Smith Rebuttal Report at 26-30.

[17] *See* CSXT Reply at III-F-12 ("Most problematically, it is not possible to verify any of the sales in the Smith report because no recording information was provided by Smith.").

[18] *See* CSXT Reply at III-F-12.

valuation, with the second tab even labeled "Blended Calcs Chicago,"[19] and the CERR RoW segments are clearly assigned latitude and longitude coordinates.[20] Additionally, Mr. Smith includes sales data corresponding to these segments that indicate the MLS number, the address, and the parcel identification numbers. In fact, as discussed *supra*, it is evident that Mr. Rex fails to adequately review even his own sales data used for the statistics insofar as several instances exist in which a total price listed for one parcel is in fact a multiple-parcel sale, and there are several examples where Mr. Rex misclassifies a given property.[21] Only Mr. Smith presented comparable sales data that is clearly documented and properly reviewed.

### iii. Foreclosures and Short Sales were Correctly Used as Comparable Sales for the Land Valuations in Cook County, IL

Mr. Smith appropriately uses foreclosure and short sales as part of his comparable sales data because these types of sales are not isolated in nature or character. If an area has a significant number of foreclosures or short sales, the valuation will necessarily be affected by these sales. In fact, Mr. Rex's data and conclusions also support the conclusion that Cook County, Illinois has depressed market conditions.[22] As such, Mr. Smith does recognize it was a foreclosure and

---

[19] *See* Consumers Opening e-workpaper "Land Valuation Worksheet.xlsx."

[20] *See* Consumers Opening e-workpaper "Land Valuation Worksheet.xlsx," tab "Overall Pricing."

[21] *See* Smith Rebuttal Report at 26-30.

[22] *See* Smith Rebuttal Report at 6-7.

would appropriately give it less weight as a comparable sale, but Mr. Smith does not purposefully exclude this data because it is indicative of market conditions.[23]

### b. CSXT's Land Valuation is Invalid

Mr. Rex's land valuation relies on a flawed statistical analysis that incorporates non-comparable sales data. Mr. Rex also fails to introduce credible costs for acquisition. As discussed below, there are numerous flaws with Mr. Rex's land valuation analysis, and as such, Mr. Smith's Rebuttal Report should be relied upon for the final CERR RoW costs.

#### i. CSXT's Expert Performed a Flawed Statistical Analysis

Mr. Smith used a simple average as a statistical tool when evaluating the comparable sales.[24] However, statistics need to be carefully applied when there is a limited data set. Despite the fact that Mr. Rex used more sales data, there was still a relatively small sample size for most of the land use categories. This necessitated a careful application and finesse, but Mr. Rex instead blindly applies a best-fit line to the data and then "adjusts" the comparable sales using the equation generated from this best-fit line.[25] An arithmetic mean is then calculated

---

[23] *See id.*

[24] *See generally* "Land Valuation Worksheet_Rebuttal.xls" (example at tab "2-4 unit Blue Islnd_Coldon," cells Z & AA).

[25] For example, the residential development land use category for Indiana only had four comparable sales, but Mr. Rex still performs the same statistical analysis and "adjusts" the comparable data for parcel size. *See* CSXT Reply e-workpaper "15-250IndianaSales01042016.xlsx," tab "Res dev."

based on the adjusted sales price data.[26] To generate the value for each land segment, Mr. Rex then applies these same corrections to the adjusted arithmetic mean based on the characteristics of the underlying property.[27] As discussed *infra* and as illustrated by Rebuttal Table III-F-3, this results in neighboring properties being assigned very different costs even when there is no significant change in the underlying land use.

In theory, the statistical approach used by Mr. Rex could work, but the adjustments made to the comparable sales data in the first instance by Mr. Rex are mostly contrived or are unsupported by the data. For example, Mr. Rex frequently applies a location adjustment, which would naturally either be based on the proximity to the RoW or at least to the same general location, but instead, it appears that Mr. Rex uses the term "location" loosely, such that several locations that are geographically disparate would be grouped together.[28] Not surprisingly, this grouping of data results in data essentially being divided by price, and when this data is plotted there is a correlation. Upon inspection, this correlation falls apart when Mr. Smith re-plots the data and removes the statistical outliers. As explained by Mr. Smith:

> To illustrate the problem, the statistics and $R^2$ analysis were re-performed excluding the outlier sales of $17.91 psf and $8.66 psf. Consistent with

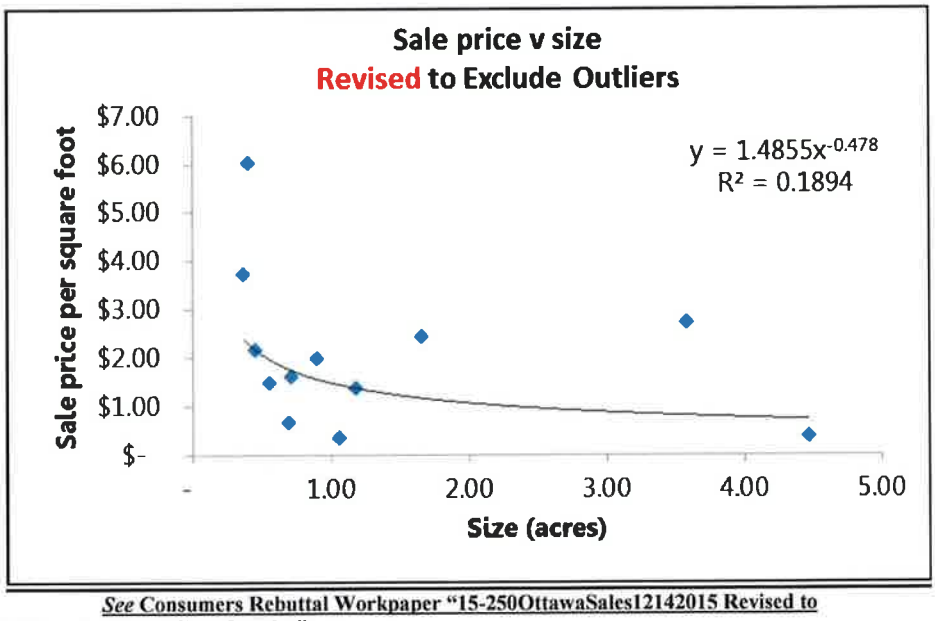
---

[26] *See* CSXT Reply e-workpaper "15-250IndianaSales01042016.xlsx," tab "Com" at cell AB34.

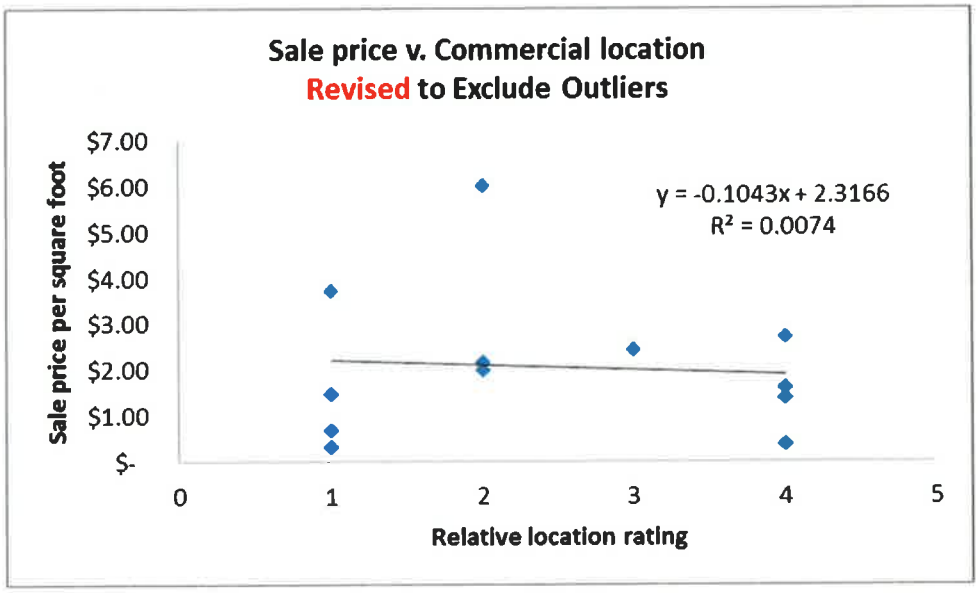
[27] *See* CSXT Reply e-workpaper "CERR Land Valuation_Reply.xlsx," tab "UNITVALUES FULL – REPORT," columns D and E.

[28] *See* Smith Rebuttal Report at 24 and Figure 1.

RMI's approach, the Sale Price v. Size was plotted first, and subsequently we replotted the relationship between Sale Price v. Location. As the charts below illustrate, this analysis by RMI was performed on a small enough data set that the removal of outliers changed the output and results of their analysis.




*See* Consumers Rebuttal Workpaper "15-250OttawaSales12142015 Revised to Exclude Outliers.xlsx," tab "Com Graphs."




*See* Consumers Rebuttal Workpaper "15-250OttawaSales12142015 Revised to Exclude Outliers.xlsx," tab "Com Graphs."

> As evidenced by the charts above, there was not enough data or a strong enough correlation to justify the adjustments made by RMI to the comparable sale data. This is clear from the recalculated $R^2$, the coefficient of determination which is less than 1% for Sale Price v. Location. That is to say, that less than one-percent of determination can be related to location. Clearly there must be another determinant in making adjustments to prices not considered in the RMI analysis.

As Mr. Smith demonstrates, Mr. Rex relies on weak statistical correlations that hinge on a small enough data set that the removal of outlier data makes the entire house of cards fold. Mr. Rex could have performed this analysis if he had in the first instance reviewed the data, removed outliers or bad data, and then only used correlations based on a logical relationship such as neighborhood or parcel size. Instead, Mr. Rex's misapplication of contrived and unsupported adjustments results in an initial skewing of the comparable sales data, which Mr. Rex then adjusts a second time to generate the values for the land segments.[29] The net effect is that Mr. Rex's initial adjustment error is compounded and therefore the values assigned to the individual land segments are not supported by the underlying comparable sales data.[30]

### ii. CSXT Does Not Explain its Calculations

Several of Mr. Rex's workpapers are incomplete with improperly labeled units and side notes. Moreover, most, if not all, of Mr. Rex's workpapers include hardcoded data and contain circular spreadsheet references making it impossible simply to revise Mr. Rex's worksheets. For example, it was not

---

[29] *See* CSXT Reply e-workpaper "CERR Land Valuation_Reply.xlsx," tab "UNITVALUES FULL – REPORT," columns D and E.

[30] *See* discussion *infra* at III-F.a.i. and Rebuttal Table III-F-4.

possible to determine where in the worksheet the mean price of the adjusted data was adjusted to fit the land segment. Consumers understands, at least in theory, how CSXT was making its adjustments; however, there are several references made within Mr. Rex's materials that when traced back, lead to hardcoded values.[31] This defect makes the analysis performed by Mr. Rex less than transparent, and in fact, transforms what should be a fairly straightforward statistical analysis with simple best-fit regressions being used in Excel into a black-box model. Therefore, while the underlying methods Mr. Rex uses theoretically were valid, the flawed execution of those methods makes them less than transparent and unreviewable, and as such, this CSXT analysis should be rejected by the Board.[32]

### iii. CSXT's Expert Failed to Perform an Adequate Review of the Comparable Sales Data and the Underlying Property of the CERR

Mr. Smith makes no qualms that he did not highlight the "McMansions" or "one-offs" along the RoW because these are not representative of highest-and-best use.[33] However, Mr. Rex uses a more fine-grained approach,

---

[31] For example, all of the following values within Mr. Rex's "CERR Land Valuation_Reply.xlsx," were hardcoded: all cells in tab "UV Worksheet;" the "Conclusion" values in tab "UNITVALUES," column H; the per acre mean and median values in tab "UNITVALUES-report," columns F and G; and the mean, median, and conclusion values listed for 1/1/2013 in tab "UNITVALUES FULL – REPORT," columns P, Q, and R. *See* Consumers Rebuttal workpaper "CSXT Reply Evidence Procedural Violations Complete List.xlsx," level "New GP Violations," rows 91-94.

[32] *See* Sunbelt at 104.

[33] Smith Rebuttal Report at 5.

which can be done, but requires a careful analysis and a study of the underlying land - something that Mr. Rex fails to do. As discussed in Mr. Smith's Rebuttal Report, the prices CSXT assigned to individual land segments are not always credible when the underlying property of the CERR is checked.[34]

Mr. Rex's statistical analysis relies on a limited sample size, and thus, it was necessary for Mr. Rex to perform a careful review of the comparable sales. Mr. Rex did not perform such a careful review, and outliers therefore are included in Mr. Rex's calculations such that his valuation of the CERR's RoW is invalid. Specific examples identified by Mr. Smith include:

> Instrument Number 3500[35]: "The sale price of this property is listed as $43,050 on 1/8/2010. However, an online search of the public property sales records indicates that the forfeiture sale price for this property on 4/22/2015 was $2,504."
>
> Instrument Number 5070[36]: Property listed as rural residential when it is listed by Ottawa County as commercial.
>
> Instrument Number 12639[37]: "Acreage listed in the RMI report is less than 25% of the actual acreage....Therefore, the initial sale price per acre should be $5,290 instead of $22,658."[38] This land is also actively farmed and should not have been used as a comparable sale for Residential land underlying the CERR.
>
> Instrument Number 12683[39]: Acreage is incorrect and Mr. Rex failed to use the most recent sales data that is publicly available online. This

---

[34] *See* Smith Rebuttal Report at 26-30.

[35] Smith Rebuttal Report at 7.

[36] Smith Rebuttal Report at 18.

[37] Smith Rebuttal Report at 16.

[38] *Id.*

[39] Smith Rebuttal Report at 14-15.

property is listed as acreage when based on a review of aerial maps on Google Earth, this property is improved land with a residence and is actively farmed.

Instrument Number 19185[40]: Listed acreage for this sale is understated by approximately 50%. "[T]he initial sale price per acre should be $33,287 and not $65,696...." This property is also listed as industrial when it should have been classified as farmland.

Instrument Number 24729[41]: Land is listed as industrial when it "is clearly farmland and should have been classified as agricultural land."

Instrument Number 35213[42]: Acreage listed is incorrect by over 50% making it so the statistical analysis incorporated a data point with a cost per acre that was more than double what was supported by this sale. Additionally, instead of being classified as rural residential it should have been classified as agricultural land.

Instrument Number 36587[43]: This property is listed as industrial when the existing and ongoing use is commercial.

Instrument Number 37944[44]: Listed acreage for this sale is understated by approximately 50%, the sale was part of a multi-parcel transaction, and one of the parcels was improved.

#### iv. Acquisition Costs are Not Supported by the Record or STB Precedent

CSXT's acquisition cost of 16% is unsupported by the evidence and is inconsistent with STB precedent.

CSXT states that Mr. Rex did "not consider all the acquisition costs that would be encountered today in the assemblage of the corridor. The only costs

---

[40] Smith Rebuttal Report at 10-11.

[41] Smith Rebuttal Report at 8.

[42] Smith Rebuttal Report at 19.

[43] Smith Rebuttal Report at 11.

[44] Smith Rebuttal Report at 13.

included are those considered by the STB for rate case purposes."[45] But CSXT fails to cite to evidence proving that it incurred these title, survey, appraisal, negotiation, or closing costs on a per parcel basis, and also has denied Consumers the ability to review information that would make it possible to refute these costs. Consumers on Opening explained how CSXT failed to properly link the "Deed Index.xlsx" with the "Val Map Index IL IN MI.xlsx," making it impossible to perform an adequate review of the deed records. In fact, because of this failure by CSXT, which CSXT does not dispute, Consumers was unable to identify easements and potentially exclude significant costs from the land valuation.[46] Given that Consumers was denied the ability by CSXT to adequately review this information,[47] it is not permissible for CSXT on Reply to insist it should be able to add acquisition costs.[48]

At a total of $20.8 million, these acquisition costs equate to "roughly 16% of the total land value assessed for the CERR,"[49] and represent an additional cost per acre of $10,511.[50] These costs defy all logic, and like the other statistical applications in Mr. Rex's land valuation, a blanket one-size-fits-all pricing scheme

---

[45] CSXT Reply at III-F-18 n. 36.

[46] Consumers Opening at III-F-9.

[47] Consumers as a consequence was unable to identify the easement locations and to exclude or refute these costs on Opening. Consumers Opening at III-F-9.

[48] CSXT Reply at III-F-21.

[49] CSXT Reply at III-F-21.

[50] CSXT's acquisition costs of $20,818,184/CSXT's total acreage of 1,980.62.

does not reflect common sense. Much of the RoW passes through residential areas, particularly Chicago. It is evident that the cost of a house survey is more in the range of $300 to $800 rather than $2,500. Similarly, the cost of a house appraisal is in the range of $300 to $400 rather than $4,500. Thus, these two items alone would be $600 to $1,200 per residential parcel not the $7,000 estimated by Mr. Rex. Additionally, in many comparable transactions, these settlement fees are split between buyer and seller, further magnifying the difference between Mr. Rex's costs and actual fees found in the market.

That aside, these costs are not on the same scale of acquisition costs previously allowed by the Board. In *Sunbelt*, the Board accepted NS's additional acquisition costs of $823,100,[51] when the total acreage (excluding easements) was 6,936 acres,[52] and the total real estate costs were $219,931,502.[53] As a percentage, the acquisition costs were 3.7%,[54] and the cost per acre was $1,187.[55] Likewise, in *DuPont*, the Board accepted NS's acquisition costs of $111,960,000,[56] when the total acreage (excluding easements) was 94,169 acres,[57] and the total real estate

---

[51] *Sunbelt* at 103-104.

[52] *Sunbelt* at 97.

[53] *Sunbelt* at 97 (excluding easements at $431,000).

[54] $8,233,100/$219,931,502 = 3.7%

[55] $8,233,100/6,936 acres = $1,187/acre

[56] *DuPont* at 140-141.

[57] *DuPont* at 142.

costs were $5,323,836,000.[58] As a percentage, the acquisition costs were 2.1 %,[59] and the cost per acre was $1,189.[60]

The reason for this departure from the costs in *DuPont* and *Sunbelt* can likely be explained by the possible disconnect or miscommunication between CSXT's experts, Messrs. Rex and Matthewson. Previously, in *DuPont*, Mr. Matthewson, as here, performed a cost estimate on a per parcel basis.[61] However, the same expert also provided a conservative estimate of the number of parcels along the RoW as being "9,000 parcels, which is over ten acres per parcel."[62] Mr. Matthewson justified this per parcel cost as being approximately equal to the "average acreage of the valuation units" as determined by the land valuation expert.[63] As explained by NS, "Mr. Matthewson's assumption conservatively attributes only one parcel per valuation unit."[64] In conjunction with estimating the number of parcels, Mr. Matthewson developed the costs, which as here, contemplate boundary surveys, title work, appraisal, negotiations with landowners, and closing costs."[65]

---

[58] *DuPont* at 145.

[59] $111,960,000/$5,323,836,000 = 2.1%

[60] $111,960,000/94,169 acres = $1,189/acre.

[61] *See DuPont*, NS Reply at III-F-287; CSXT Reply Exhibit III-F-1 at 151.

[62] *See DuPont*, NS Reply at III-F-287.

[63] *See DuPont*, NS Reply at III-F-287-288.

[64] *Id.*

[65] CSXT Exhibits III-F-1 at 151-152; *DuPont*, NS Reply at III-F-289.

In the present case, Mr. Rex does not follow what was previously done by Mr. Matthewson in *DuPont*, and instead performs a per parcel count of all parcels from the valuation maps.[66] The problem is that in several instances, these numbers appear to correspond to the section boundaries of the quadrangle map. *See id.* Given that the predecessor railroads were installing track over 100 years ago, it is unlikely that they were dealing with as many owners or had nearly the number of transactions as contemplated by Mr. Rex. In fact, using Mr. Rex's parcel count, there would be a change in ownership or a transaction warranting these fees every 0.9 acres, which is significant given that Mr. Matthewson had estimated his costs in *DuPont* on an average parcel being over ten acres.[67] The costs by Mr. Matthewson contemplate transaction costs, and as such, Mr. Rex's counting of parcels overstates the total number of transactions resulting in illogical and excessive acquisition costs, that at roughly 16%, clearly represent a barrier to entry.

CSXT's own workpaper shows a different calculation for land. This workpaper appears to indicate that CSXT has no legitimate basis for its estimate:[68]

---

[66] *See generally* CSX _ValMap_22467.pdf; CSX _ValMap_22468.pdf; CSX _ValMap_22470.pdf.

[67] *DuPont*, NS Reply at III-F-287.

[68] CSXT Reply e-workpaper "Acquisition cost summary.xlsx," columns N-Q, rows 17-27.

| | | | |
|---|---|---|---|
| $ 131,001,984 | Total ATF | | |
| | | | |
| 4,493 | parcels | | |
| $ 12,850 | acquisition cost per parcel | | |
| $ 57,735,050 | Total acquisition costs | | |
| | | | |
| | | | |
| 44% | | | |
| | | | |
| $ 188,737,034 | | | |

### c. Conclusion

While Mr. Rex performed a statistical analysis for CSXT's land valuation of the RoW, the Board should reject that analysis because the comparable sales that Mr. Rex relies on are not representative of the land segments being valued. Mr. Smith, as part of his independent review, carefully analyzed sales data to identify comparable sales that were the best evidence for the cost of the land segments being valued. Mr. Smith used his experience and judgement, but relied on good data, something that Mr. Rex failed to do in the first instance before performing his statistical analysis. The Board should accept Mr. Smith's approach and his expertise over the black-box model that Mr. Rex uses to produce a valuation of the CERR. For the above reasons, the Board should adopt Mr. Smith's valuation of the CERR RoW as the best evidence of record.

## 2. Roadbed Preparation

Rebuttal Table III-F-5 below shows the parties' Opening, Reply, and Rebuttal roadbed preparation costs.

Rebuttal Table III-F-5
**Comparison of CERR Roadbed Preparation Investment Costs**[1/]
($ in thousands)

| Item | Consumers Opening | CSXT Reply | Consumers Rebuttal |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| **1. Clearing and Grubbing** | $2,354 | $2,149 | $2,358 |
| 2. Earthwork | | | |
| a. Common | $12,642 | $26,240 | $11,337 |
| b. Loose Rock | $66 | $69 | $66 |
| c. Solid Rock | $295 | $303 | $295 |
| d. Borrow | $7,415 | $28,030 | $12,674 |
| e. Land for Waste Excavation | $0 | $7,705 | $0 |
| f. Subtotal - Earthwork | $20,418 | $62,346 | $24,372 |
| 3. Drainage | | | |
| a. Lateral Drainage | $202 | $203 | $203 |
| 4. Culverts | $1,146 | $2,725 | $1,179 |
| 5. Retaining Walls | $4,442 | $11,247 | $6,627 |
| 6. Rip Rap | $251 | $283 | $283 |
| 7. Relocation of Utilities | $40 | $1,484 | $40 |
| 8. Topsoil Placement/Seeding | $27 | $27 | $27 |
| 9. Surfacing for Detour Roads | $199 | $199 | $199 |
| 10. Environmental Compliance | $48 | $48 | $48 |
| 11. Fine Grading | $1,146 | $1,476 | $1,435 |
| **12. Total** | **$30,274** | **$82,187** | **$36,771** |

[1/] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," Tab "Rebuttal Summary."

The major areas of difference in the development of these costs include Consumers' use of MDOT unit costs; CSXT's configuration changes that result in utility relocation and additional retaining walls; and CSXT's calculation of costs for land for waste quantities. Each of these issues, along with CSXT's other modifications to Consumers' Opening evidence, is discussed below.

### a. Consumers' Use of Contractor Bid Data from the Michigan Department of Transportation for Certain Earthwork Costs Should be Accepted by the Board

On Opening, Consumers used Michigan Department of Transportation ("MDOT") data from 2010-2015 in order to calculate various CERR unit costs. On Reply, CSXT makes numerous attempts to dismiss Consumers' use of the MDOT data for CERR unit costs. CSXT claims that Consumers' MDOT evidence does not follow the "Board precedent that R.S. Means construction cost data are the most reliable and appropriate evidence to use for earthwork costs."[69]

CSXT goes on to claim that "[i]n *DuPont* and *SunBelt* the Board turned away arguments that Means costs should be replaced with so-called "Trestle Hollow" costs.[70] CSXT contends that the Board rejected the use of Trestle Hollow costs in *DuPont* and *Sunbelt* simply because those costs were not R.S Means costs. This is a biased and improper interpretation of the STB's decision. In the *DuPont* decision, the Board states that "[a]s NS argues, and we agree, the size, scope, and geographic and topographic diversity of the DRR make the use of Means more appropriate than the extrapolation of costs from a single project."[71]

---

[69] *See* CSXT Reply at III-F-24.

[70] *Id.*

[71] *See* Consumers Opening e-workpaper "42125 DuPont v. NS 2014.03.24 ID_43717 CORRECTIONS TO DECISION.pdf." at page 149.

Consumers' utilization of MDOT data suffers from none of the Board's issues with the Trestle Hollow costs in *DuPont*. MDOT unit costs are derived from multiple real world construction projects in the same geographic region with the same topographic diversity, utilizing Consumers tiered determination of MDOT costs, as that of the CERR.[72]

### i. R.S. Means is Only One Source for SARR Earthwork Unit Costs

CSXT claims that Consumers' references to the Board's 2007 decision in *WFA I* and its 2011 decision in *AEPCO*, in which the Board accepted unit costs from actual construction projects and did not rely upon the Means Handbook, do not support Consumers use of MDOT data.[73] CSXT states that "[u]nlike the evidence and circumstances in *WFA I* and *AEPCO 2011*, (1) the MDOT projects are highway projects that were not constructed by CSXT and are not part of the CSXT or CERR system; (2) the MDOT Contractor Costs vary in size and scope in comparison to the CERR."[74] CSXT further states that "[i]n both *WFA I* and *AEPCO 2011*, due primarily to the projects' proximity to the route being replicated by the SARR and the fact that the proffered costs were from

---

[72] *See* Consumers Opening at III-F-13-14 for discussion on the tier system Consumers utilized on opening to allow for the inclusion of unit costs with a similar geographic region and topographical make up as the CERR.

[73] *See* CSXT Reply at III-F-26.

[74] *Id.* at III-F-26-27.

larger projects conducted by the defendant itself on a Class 1 railroad system,"[75] the Board accepted an alternative to R.S. Means unit costs.

However, CSXT fails to acknowledge what is included in R.S. Means unit costs. R.S. Means unit costs are not specific to Class I railroad system construction. In fact, the R.S. Means handbook consists of various types of projects that take place throughout the country. R.S. Means reaches out to manufacturers, dealers, distributors, etc. across the United States in an effort to determine costs for various projects when compiling the Means Handbook each year. There is no reason to rely upon the Means Handbook costs that were "not constructed by CSXT and are not part of the CSXT or CERR system" and consist of work that takes place throughout the country when there is MDOT data available that relates specifically to the geographical region and topography of the CERR.

Further, *WFA I* and *AEPCO* are not the only cases in which the Means Handbook was not completely relied upon in determining roadbed preparation unit costs. The complainant in *West Texas* used quotes from outside vendors to develop the grading unit costs. The defendant railroad did not agree with this approach and instead relied upon Colorado Department of Transportation ("CODOT") unit costs. The Board accepted "WTU's unit costs for earthwork as reasonable, because they are based upon actual quotations obtained from the construction industry and recognized compilation services. While we do not

[75] *Id.* at III-F-27.

question the estimates in the CODOT publication, WTU is entitled to choose the low-cost bidder for earthworks."[76] This is further support that the Means Handbook should not be the "rule-of-thumb" just because it has been accepted in previous cases. Just as in *WTU*, the CERR is entitled to choose the low-cost bidder for earthworks, which in this case is the MDOT.

### ii. Means Costs Do Not Reflect Economies of Scale (Not Economies of Density)

On Opening, Consumers argued that "[t]he Means Handbook costs are very conservative for this application because they are based on an average of costs for projects of all sizes from around the country and assume a unionized workforce. There is no way to scale the Means Handbook unit costs to be commensurate with a project the size of the CERR, or to accurately estimate the impact of using non-union labor."[77]

On Reply, CSXT claims that "Consumers is mistaken. The Means Handbook specifically discusses how factors affecting costs are handled and explains that the size and scope of work will have a significant impact on cost. Means goes on to caution that smaller sized projects will likely incur costs higher than those reported in its estimating guide."[78] Significantly, however, CSXT does not include the exact wording from the R.S. Means pages it claims to cite as proof

---

[76] *See West Texas* at 704.

[77] *See* Consumers Opening at III-F-10.

[78] *See* CSXT Reply at III-F-27-28 (footnotes omitted).

for its statement. The cited R.S. Means handbook page in the section "Factors Affecting Costs" actually reads:

> "Costs can vary depending upon a number of variables. Here's how we have handled the main factors affecting costs…Size of Project – The size, scope of work, and type of construction project will have a significant impact on cost. Economies of scale can reduce costs for large projects. Unit costs can often run higher for small projects."[79]

CSXT excludes the language in which Means cautions that larger projects would have reduced costs and only includes the statement that smaller projects would have increased costs, implying to the Board that Consumers would have higher costs.

CSXT further offers numerous examples where it believes that R.S. Means, through the larger equipment, would account for economies of scale. In the 1984 paper titled "Economies of density vs economies of scale: why trunk and local service airline costs differ" published in the Rand Journal of Economies, it is noted that there is a "crucial distinction between returns to density (the variation in unit costs caused by increasing transportation services within a network of given size) and returns to scale (the variation in unit costs with respect to proportional changes in both network size and the provision of transportation services)."[80] This distinction of definitions can be extrapolated to this case by changing the wording

---

[79] *See* CSXT Reply e-workpaper "RS Means Info.pdf" at page 4 (highlighting added in Rebuttal).

[80] *See* Consumers Rebuttal e-workpaper "Economies of Density vs Economies of Scale_1984.pdf" highlighted passage on page 2.

of "transportation services" to "equipment size", and "network of a given size" to "project of a given size." Restated for this case, returns to density (or economies of density) are the variation in unit costs caused by increasing equipment size within a project of a given size. CSXT Reply figure III-F-1 shows that a project of a steady size (*i.e.*, not increasing total cubic yards of excavation) would benefit from a decreased unit cost by using a larger shovel, which is a demonstration of the economies of density in R.S. Means. While returns to scale (or economies of scale), on the other hand, are the variation in unit costs with respect to proportional changes in both project size and equipment size. This is where R.S. Means costs do not account for the economies of scale, as there is no mechanism for decreasing unit costs for a variation in project size provided in the Means Handbook.

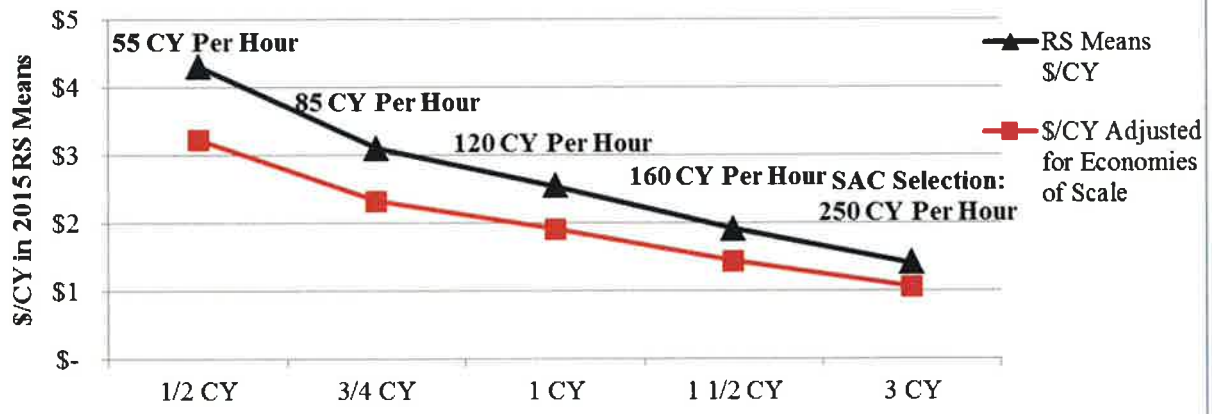
CSXT's Reply Figure III-F-1 details extensively how changing the selection of equipment to a larger sized shovel from R.S. Means allows the CERR to experience economies of density, but does not experience economies of scale as Consumers stated in Opening. R.S. Means' costs do not reflect the economies of scale realized in large projects, which are different than the economies of density CSXT describes on Reply.

In fact, in materials included within CSXT's own Reply workpaper, the R.S. Means Handbook describes the absence of economies of scale in its unit costs. In particular, the R.S. Means overview notes that "[t]he material prices in RSMeans cost data books are 'contractor's prices.' They are the prices that contractors can expect to pay at the lumberyards, suppliers/distributers

warehouses, etc. Small orders of specialty items would be higher than the costs shown, while very large orders, such as truckload lots, would be less."[81] Again, the R.S. Means handbook notes that it does not fully account for the economies of scale in its unit costs.

Figure III-F-1 below demonstrates the difference between the economies of density vs. economies of scale found in R.S. Means.

**Figure III-F-_**
**Example of Economies of Density vs Economies of Scale**
Bulk Excavating of Common Earth with Shovel




1/ See Consumers Rebuttal e-workpaper "Means Economies Graph_Rebuttal.xlsx"

In Figure III-F-1 above, Consumers has adjusted R.S. Means unit costs assuming a hypothetical 25% discount to show the difference between economies of density and economies of scale. As noted in the front of the R.S. Means book, large orders/projects would expect to see a lower price than that quoted in R.S. Means.

[81] *See* Consumers Rebuttal e-workpaper "RS Means Info.pdf" at page 2 (highlighting added in Rebuttal).

On Reply, CSXT stated that "the unit costs from Means previously adopted by the Board are tailored specifically to the assumptions underlying the earthwork quantities reported in the Engineering Reports themselves and with the assumptions in the formulas used to adjust the Engineering Report quantities to modern day specifications."[82] This is a misleading statement by CSXT. The formulas used to adjust the Engineering Report quantities to modern day specifications were first introduced in *WPL* "to reflect differences between the specifications for the early 1900's railroad and for EWRR."[83] These formulas adjust the Engineering Report quantities to modern roadbed specifications, and have nothing to do with unit costs, R.S. Means or otherwise. While the cost selected from R.S. Means for common earth has a similar haul distance to that included in the ICC Engineering Reports, that similarity does not require the use of R.S. Means when using the formulas to adjust the Engineering Report quantities. As noted by Consumers in Section III-F-2.a.i., the Board has accepted non-R.S. Means unit costs in *WFA I* and *AEPCO,* which were applied to the ICC Engineering Report quantities and adjusted in the same manner employed by Consumers in the instant case.[84]

---

[82] *See* CSXT Reply at III-F-29.

[83] *See* Consumers Opening e-workpaper "WPL 091301 decision.pdf" at page 80.

[84] *See* Consumers Rebuttal e-workpaper "42088 WFA.Basin v. BNSF_OPENING VOL 2 OF 2.pdf"; *see also id.* at 41("The earthwork quantities contained in the ICC Engineering Reports are based on design specifications less stringent that those for modern day construction, and therefore need to be adjusted."); *id.* at 44 ("Once the adjusted earthwork quantities per mile were

Neither the economies of density found in the R.S. Means Handbook nor the use of R.S. Means unit costs in previous maximum rate cases refutes Consumers' use of MDOT unit costs in this case.

### iii. CSXT's AFE Argument Regarding Earthwork Projects is Meritless

In addition to the Opening MDOT support for earthwork unit costs, which shows that the Means Handbook should not be relied upon when calculating CERR common excavation costs, Consumers also reviewed CSXT's own invoices provided by CSXT in discovery as further support that earthwork unit costs are lower than Means. Consumers found a CSXT invoice[85] for work done at Casky Yard in Kentucky which contains a common excavation unit cost of { }.[86] In

---

developed, it was necessary to calculate the total earthwork requirements and costs for the LRR."); *id.* at 54 (the "unit cost for common earthwork is derived from documents provided by BNSF in discovery."); Consumers Rebuttal e-workpaper "WFA_Basin 9_10_07 38254.pdf" at 93 ("The parties agree on the unit costs for common excavation...Accordingly, we apply the agreed-upon unit cost.").

[85] CSXT points out in its Reply evidence at III-F-30 that it provided a list of 8,064 AFE projects and Consumers "only" selected 12 projects that contained earthwork costs and of those 12 only one contained unit costs for common excavation. What CSXT fails to point out is that Consumers requested information for 241 projects that it deemed relevant to the CERR based on CSXT's lengthy AFE project list with limited one-sentence descriptions. From the 241 projects that Consumers selected, i.e., guessed would be relevant based on limited information, CSXT produced nearly 750 AFE files and over 14,000 pages of invoices. It is from this universe that Consumers could "only" find one invoice that contained common earthwork unit costs. If CSXT had more information regarding common earthwork unit costs, then it should have provided it in discovery and Consumers would have included it in its Opening evidence.

[86] *See* Consumers Opening e-workpaper "A42192 Invoice 18.IPM_7825681.pdf" page 135.

addition to the invoice above, CSXT also provided an Authorization for Expenditure ("AFE") spreadsheet for the same project in discovery.[87]

CSXT attempts to refute Consumers' claim that CSXT's invoice is support for earthwork unit costs that are lower than Means unit costs by artificially inflating the CSXT AFE excavation unit cost of { }[88] per cubic yard. CSXT claims that "[t]he Casky Yard AFE also includes a large lump sum amount for "Misc Grading" that works out to an average cost of { } per cubic yard when spread over all of the cubic yards of excavation reported in the AFE."[89] In order to calculate this { } per cubic yard unit cost, CSXT took the "Misc Grading" lump sum amount of { }[90] and divided it by the sum of the cubic yards for "Excavation, Used as Fill" ({ }),[91] "Excavation, Waste" ({ }),[92] and "Excavation, Rock" ({ }).[93]

The first issue with CSXT's critique is that there is nothing in the AFE spreadsheet, or in any other evidence provided by CSXT, that defines what is

---

[87] *See* Consumers Opening e-workpaper"A42192 A41492 AA 04-29-14 Casky KY - Proposed Inspection yard AFE.xls" tab "AFE Detail."

[88] CSXT incorrectly references this value as { } per cubic yard in its Reply testimony at III-F-30.

[89] *See* CSXT Reply at III-F-30-31.

[90] *See* Consumers Opening e-workpaper "A42192 AA 04-29-14 Casky KY - Proposed Inspection yard AFE.xls" tab "AFE Detail" cell M12.

[91] *Id.* at cell G15 and I15.

[92] *Id.* at cell G16 and I16.

[93] *Id.* at cell G18 and I18.

included in the lump sum "Misc Grading" category. CSXT assumes that the lump sum payment is related to the quantity of the three different excavation categories listed above, which total { } cubic yards. There is no way of knowing the quantity involved in the "Misc Grading" category, whether it should be expressed in cubic yards, or whether this category is even related to the three excavation categories included in the AFE.

The second issue with CSXT's approach is that CSXT simply spread the "Misc Grading" lump sum cost across the quantities from the three separate and distinct excavation categories equally. CSXT's approach does not take into account the fundamental differences in each of the three excavation categories it uses for the sum of the quantities. The "Excavation, Rock" category has a unit cost of { }, as compared to the "Excavation, Waste" unit cost of { } and the "Excavation, Used as Fill" unit cost of { }. Rock excavation is more expensive than waste excavation, and if the grading category "Misc Grading" were in fact proportionally related to the excavation categories, the rock excavation would account for a larger proportion of that lump sum total cost. CSXT ignores this fact and simply assumes that all quantities would represent the calculated unit cost of { }. Consumers was demonstrating that the unit cost for ***common*** earthwork found in CSXT's own invoices was lower than Means. These other grading categories found in the AFE that CSXT relies on to artificially inflate its own unit cost should have no bearing on that demonstration.

The third defect in CSXT's analysis is that it relies solely upon the CSXT AFE, which is essentially an estimate, and not on the actual invoice CSXT received from the contractor that performed the work and that Consumers relied upon in its opening evidence.[94] The actual CSXT invoice clearly shows that CSXT paid a unit cost of { } per cubic yard for "Earthwork – Common Excavate."[95] The only other earthwork category provided in this 319 page invoice is for "Earthwork – Rock Excavate," which is listed at a cost per cubic yard that is much higher than the common earthwork unit cost. "Misc Grading" is not found on the invoice, nor is any other grading category found on the invoice that would affect the common earthwork unit cost.

### iv. Consumers Has Accurately Represented the MDOT Data

CSXT makes several claims that Consumers excluded various pieces of the MDOT unit costs that would need to be included if the MDOT data were to be used to calculate CERR unit costs.[96] CSXT's inclusion of these supposed missing pieces leads to a MDOT earth excavation unit cost greater than that found in the Means Handbook. CSXT's analysis of the MDOT data is nothing more than an attempt to artificially inflate MDOT unit costs in an effort to persuade the

---

[94] *See* Consumers Opening at III-F-25.

[95] *See* Consumers Opening e-workpaper "A42192 Invoice 18.IPM_7825681.pdf" page 135.

[96] *See* CSXT Reply III-F-2.a.iv, pages 31-36.

Board that Means is a better approach than MDOT. Consumers discusses CSXT's flawed MDOT unit cost analysis below.

**(a) Consumers is Clear on Which Projects Were Determined to be Similar to the CERR Construction**

On Reply, CSXT states that "[b]ecause all of the MDOT projects reviewed by Consumers are highway projects, it is not clear how Consumers determined which projects were similar to the CERR construction."[97] As noted above in Rebuttal section III-F-2.a.i, R.S. Means unit costs are not based solely upon railroad construction projects. R.S. Means unit costs are based upon general earthwork construction, which confirms that earthwork for a highway project is similar in scope to that of earthwork for a rail project. If CSXT believes that MDOT unit costs should not be utilized because the MDOT construction projects were not similar to the CERR construction, then it has no basis to use R.S. Means unit costs either.

Furthermore, on Opening, Consumers detailed how it arrived at the tiered mileage system utilized to ensure that the selected MDOT projects were of similar geographical and topographical regions to the CERR in both the narrative[98] and supporting workpapers.[99] Consumers assigned the various projects to one of three tiers: projects that took place within 30 miles of the CERR line were

---

[97] *See* CSXT Reply at III-F-32.

[98] *See* Consumers Opening III-F-13-14.

[99] *See* Consumers Opening e-workpaper "Methodology for Developing MDOT Unit Costs.docx."

assigned to Tier I; Tier II consists of projects that fall between 30 miles and 100 miles of the CERR line; and Tier III consists of MDOT projects with work done outside of 100 miles of the CERR line. Therefore, MDOT unit costs are a better indicator of CERR unit costs which were performed in the CERR region as opposed to R.S. Means unit costs which are based on national averages.

### (b) Embankment Should Not be Included in Earth Excavation Unit Costs

On Reply, CSXT claims that the MDOT earth excavation unit costs developed by Consumers in its Opening evidence did not include all of the necessary components of railroad roadbed construction. CSXT argues that "[i]f the MDOT contractor bids data were used as the source for CERR common excavation unit prices, the cost for building embankment would need to be added to the cost of excavation to be comparable with the adjusted common excavation quantities derived from the Engineering Reports."[100] CSXT calculates an MDOT "Embankment, CIP"[101] weighted average unit cost of $3.27.[102] CSXT's calculated $3.27 unit cost was based on the 19 Tier I & II projects identified by Consumers and used in calculating the Opening MDOT earth excavation unit cost

[100] *See* CSXT Reply at III-F-34.

[101] Embankment, CIP refers to Embankment, Compacted In Place.

[102] *See* CSXT Reply at III-F-34 and Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Reply Analysis" cell I27.

of $2.41. CSXT then multiplies this $3.27 embankment unit cost by 70 percent to arrive at an embankment unit cost of $2.29.[103]

CSXT's inclusion of embankment as part of earth excavation is an incorrect interpretation of MDOT unit costs. Embankment should not be included in the MDOT earth excavation unit costs. As Consumers explained on Opening, the MDOT Specifications state that the excavated material is the property of the contractor and contractors must "[c]ompact the subgrade to at least 95 percent of its maximum unit weight and to a depth of at least 10 inches..."[104]

In fact, CSXT's own evidence demonstrates that embankment unit costs should not be included in the calculation of the MDOT excavation unit cost. In its calculation of the Wayne County unit costs it deemed necessary to include in the total excavation cost, CSXT did not include any additional embankment cost. CSXT calculates an earth excavation unit cost of $6.78 for Wayne County and includes Wayne County in its final MDOT earth excavation unit cost.[105]

CSXT follows Consumers' Opening approach in calculating the Wayne County excavation unit costs, and does not include embankment in the Wayne County calculations. CSXT stresses the supposed importance of including embankment unit costs with earth excavation unit costs to replicate the Means

---

[103] *See* Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Reply Analysis" cell Z9.

[104] *See* Consumers Opening at III-F-27.

[105] *See* Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Reply Analysis" cell D15.

Handbook, but then when calculating Wayne County earth excavation costs, CSXT completely ignores the embankment unit costs. This disregard for embankment, when calculating earth excavation for Wayne County, refutes CSXT's claim that both should be included in the CERR's earth excavation unit costs.

While Consumers stands behind its MDOT earth excavation unit cost of $2.41 from Opening and believes the Board should accept this unit cost, Consumers corrected CSXT's Reply MDOT excavation unit costs that include Embankment CIP should the Board see the need to include it. In CSXT's calculation, it develops the earth excavation and embankment CIP unit costs separately and then merely adds them together.[106] This approach of combining excavation unit costs is incorrect because it does not take into account the quantities involved in each component. For example, if a construction project contains an earth excavation component for 100,000 cubic yards at $2.00/cy and also contains an embankment CIP component of 1,000 cubic yards at $4.00/cy, then under CSXT's Reply methodology, the total common earthwork unit cost would be $6.00/cy ($2.00/cy + $4.00/cy = $6.00/cy). However, when the discrepancy in the quantities involved in each of those components is taken into

[106] *See* Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Reply Analysis" column Z.

account by utilizing a weighted average, then that same total common earthwork unit cost would be $2.02/cy.[107]

If embankment CIP should be included as part of the CERR common excavation unit cost, then a combined embankment CIP/earth excavation weighted average unit cost should be calculated for each project. On Rebuttal, Consumers calculates a weighted average MDOT excavation/embankment unit price of $2.75.[108] Based on the evidence presented above, Consumers continues to believe its Opening excavation unit cost of $2.41 should be accepted. However, if the Board decides that embankment CIP should be included in the MDOT earth excavation calculations, Consumers believes that a unit cost of $2.75 should be used.

**(c) Mobilization Adjustments to Excavation Unit Costs Should Not be Included**

On Reply, CSXT argues that "[i]n addition to embankment bid items that were ignored by Consumers, the MDOT data included a separate line item for mobilization," and that "[i]f the MDOT contractor bids data is used as the source for CERR common excavation unit prices, the excavation costs and the cost for building embankment would need to be increased by the amount by which the average project mobilization percentage exceeds the 2.7 mobilization percentage

---

[107] Earth excavation ($2.00/cy x 100,000 cy) + Embankment CIP ($4.00/cy x 1,000 cy) ÷ total cubic yards (100,000 + 1,000) = $2.02/cy

[108] *See* Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Tier Calculations-Exc-Emb" cell Z17.

assumed by Consumers, or 4.9 percent"[109] This notion by CSXT is completely absurd, and is nothing more than an attempt to increase the MDOT unit costs.

Mobilization is not a unit cost specific item. Mobilization, as shown in the MDOT standard specifications, is a lump sum pay item for preparatory work and operations, including movements of personnel, equipment, supplies, and incidentals to a project site, as well as the establishment of the Contractor's offices, buildings and other facilities to support the work site.[110] CSXT provides no evidence that the mobilization costs for an entire project affects the unit cost of one component of that project.

If adjusting actual bid prices by the difference in mobilization percentages used were in fact appropriate, CSXT would also alter its proposed through plate girder unit cost used in III-F-7, which is sourced from a Texas DOT publication, similar to the Michigan DOT data used by Consumers. CSXT provides a September 2015 Texas statewide average lowest bid unit price as the source for through plate girder and this same document shows that the average mobilization percentage is 6.3%,[111] however, CSXT does not alter the through plate girder unit cost by the difference in the Texas mobilization and the CERR mobilization.

---

[109] *See* CSXT Reply at III-F-34.

[110] *See* Consumers Opening e-workpaper "MDOT 2012 Standard Specifications for Construction.pdf" page 118.

[111] *See* Consumers Rebuttal e-workpaper "TPG Unit Cost (Page 10 of 34)_Mobilization Percentage.xlsx," tab "Table 1," cell O1701, which is an excel conversion of the CSXT Reply e-workpaper "TPG Unit Cost (Page 10 of 34).pdf."

Further proof that mobilization should not be included in the earth excavation unit cost can be found in the Means Handbook that CSXT's utilizes on Reply. The Means Handbook provides a brief description of excavation stating that "[w]hen equipment is rented for more than three days, there is often no mobilization charge by the equipment dealer."[112] CSXT's argument that excavation unit costs should be adjusted to include mobilization is completely unfounded and should be dismissed by the Board.

**(d) Wayne County Should Not be Included**

On Reply, CSXT makes the argument that the MDOT unit costs used by Consumers were not representative of the urban areas that the CERR traverses in Illinois and Indiana. CSXT claims that "Consumers has blindly assumed that the cost of excavation experienced in building highways in rural Michigan is representative of the cost of common excavation in the more urban areas that the CERR traverses in Illinois and Indiana."[113] This statement is a mischaracterization of Consumers' Opening evidence.

In order to account for the difference in costs throughout Illinois and Indiana on Opening, Consumers applied the Means Handbook location factors to its earth excavation unit cost of $2.41. When applying the location factors, Consumers arrived at an MDOT unit cost of $2.51.[114] CSXT claims that

---

[112] *See* "Means Handbook Excavation Reference Table.pdf."

[113] *See* CSXT Reply at III-F-35.

[114] *See* Consumers Opening at III-F-29 and Consumers Opening e-workpaper "CERR Grading_Opening.xlsm" tab "Total Cost Summary" cell P8.

Consumers' approach of applying the Means Handbook location factors to the MDOT unit cost results in lower unit costs than would be necessary for Illinois and Indiana, as Consumers' approach "mixes apples and oranges by applying the Means Location Factors to the MDOT bid cost data for excavation in Illinois and Indiana."[115] CSXT's argument has no merit. In fact, CSXT follows the exact same approach (or accepts Consumers' Opening cost which followed the same approach) of indexing non-Means unit costs by the Means location factors in 10 separate places in its Reply evidence, see Rebuttal Table III-F-6 below.

**Rebuttal Table III-F-6**
**CSXT Use of Non-Means Unit Costs with Means Location Factor Index in Reply 1/**

| | CSXT Reply Section | CSXT Reply Page | Unit Cost Item |
|---|---|---|---|
| | (1) | (2) | (3) |
| 1. | III-F-2-f-v | III-F-65-66 | Utility Relocation |
| 2. | III-F-3-b-iii | III-F-76 | Subballast |
| 3. | III-F-3 | Workpaper | Switch Heaters |
| 4. | III-F-5 | III-F-87 | Bridges |
| 5. | III-F-5-c-v | III-F-104 | Through Plate Girders |
| 6. | III-F-5-c-vi | III-F-107 | Truss |
| 7. | III-F-5-d | III-F-107 | Highway Overpass |
| 8. | III-F-7-d | III-F-129 | Locomotive Shop |
| 9. | III-F-7-i | III-F-132 | Air Compressor Building and Yard Air System |
| 10. | III-F-8-c | III-F-137 | At-grade Crossings |

1/ *See* Consumers Rebuttal e-workpaper "Use of Means Location Factor for Unit Costs.xlsx," tab "Table"

Specifically, in CSXT's III-F-2 calculation of utility relocation unit costs in its grading spreadsheet, CSXT used the Means City index for Chicago to

[115] *See* CSXT Reply at III-F-35 n.67.

index a unit cost from a National Council on Electricity Policy Report.[116] In addition, in Section III-F-5-c-v of CSXT Reply, CSXT added a Texas Department of Transportation ("DOT") bid for through plate girders, and adjusted this Texas DOT unit cost using the R.S. Means location factor to reflect a unit cost that is applicable to the CERR.[117] These are two examples of the exact same location factor methodology that CSXT claims that Consumers misused in developing excavation unit costs using the MDOT data.

CSXT argues that to represent the urban areas of the CERR, the unit costs for Wayne County must be included in the MDOT earth excavation unit costs. CSXT calculates an earth excavation unit cost of $6.78 for Wayne County and includes Wayne County in its final MDOT earth excavation unit cost.[118] CSXT notes that Wayne County encompasses Detroit, but CSXT offers no additional explanation for the claim that Wayne County's unit cost is superior to a location factor adjusted unit cost. The MDOT project locations Consumers selected and analyzed on Opening run along the same shore of Lake Michigan as the areas in Illinois and Indiana that the CERR is replicating. Wayne County, on the other hand, borders Lake St. Charles, Lake Erie and Canada. CSXT offers no proof that the topography and the excavation needs of the projects in Wayne

---

[116] *See* CSXT Reply e-workpaper "CERR Grading_Reply.xlsm" tab "Cottage Utility Reloc" cell C5 through G5.

[117] *See* CSXT Reply e-workpaper "Bridge Costs_Reply.xlsx," tab "Bridge Costs by Type Summary," Row 36.

[118] *See* Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Reply Analysis" cell D15.

County are more similar to those in Illinois and Indiana than the projects Consumers selected. As shown by CSXT's own use of an R.S. Means Location Factor Index to account for the indexing of a non-R.S. Means cost to be applicable to the CERR throughout its Reply evidence, Consumers stands behind its Opening methodology, and does not believe Wayne County DOT data needs to be included in calculating the common excavation unit cost.

**(e) The Winning Bid Is The Important Bid**

As discussed on Opening, Consumers only used the MDOT unit costs that were submitted by the vendors that were awarded MDOT contracts. While there are multiple vendors bidding on each project, which leads to multiple unit costs, Consumers was only concerned with the vendor awarded the contract to ensure the CERR would incur the same costs as actually incurred by the vendors performing the MDOT work.

On Reply, CSXT claims that Consumers "does not explain why only the winning bid amounts would be relevant...Excavation represents an average of only 3.4% of the bid dollars analyzed by Consumers. As such, the bid price for excavation did not drive the determination of the successful bidder...[T]here is no reason why the average excavation bid price is any less relevant than the average of the winning bid price selected by Consumers."[119] In fact, there is a very important reason why the average winning bid price for excavation is more relevant than the average of the bid price for excavation from all bids. The

[119] *See* CSXT Reply at III-F-35-36.

winning bid prices consist of the contractors that actually performed the work. This ensures that the CERR is incurring the same costs as those that real world contractors charged the state of Michigan. The other bid prices were submitted to MDOT, but MDOT did not accept these bids and these contractors did not perform any actual work, therefore their costs do not reflect the cost of any actual construction.

In summary, CSXT presents numerous improper positions seeking to escalate the MDOT unit costs. Consumers believes the Board should accept its use of the MDOT as a source for CERR unit costs.

**b. Clearing and Grubbing**

CSXT accepts Consumers' clearing and grubbing quantities developed based on ICC Engineering Reports.[120] The difference in total costs for clearing and grubbing is attributable to the difference in unit costs used. On Opening, Consumers used the MDOT database to develop a CERR clearing and grubbing unit cost of $3,329 per acre.[121] On Reply, CSXT claims that Consumers' methodology should be rejected and the Means Handbook should be used to calculate the unit cost used for clearing and grubbing.

As support for its Opening unit cost, Consumers referenced a CSXT invoice provided in discovery that showed CSXT had a bid for a 300 acre clearing

---

[120] *See* CSXT Reply at III-F-38.

[121] *See* Consumers Opening at III-F-20 and Consumers Opening e-workpaper "CERR Grading_Opening.xlsm" tab "Total Cost Summary" cells P24 and P25.

and grubbing project in KY with a unit cost of { } per acre at 1Q15 levels.[122] On Reply, CSXT responds that "a detailed review of the AFE invoice data produced by CSXT shows that CSXT was billed by the contractor a cost of { } per acre for clearing and grubbing."[123] CSXT fails to acknowledge, however, that the unit cost of { } from the invoice was for only 40 acres of clearing and grubbing, not the 300 acres from the AFE bid, which was originally cited by Consumers. This difference in unit cost based on the difference in acres cleared and grubbed supports Consumers' position that the MDOT data is more reliable. The difference in the bid price per acre and the invoice price per acre shows that when clearing and grubbing, there are significant economies of scale in unit cost per acre. As the CERR will be clearing 513 acres and grubbing 194, the initial bid for 300 acres is far closer than the invoice for 40 acres.

On Reply, CSXT criticizes Consumers' use of a single unit cost for clearing and grubbing by stating that "[w]ithout information identifying the ratio of clearing only versus clearing and grubbing from the MDOT data, [CSXT footnote: "Consumers did not provide any such information in its evidence"] it is impossible to determine if the undifferentiated unit cost from the MDOT data is appropriate to estimate costs of clearing operations and clearing and grubbing operations along the entirety of the CERR."[124] In calculating its Opening MDOT

---

[122] *See* Consumers Opening at III-F-17.

[123] *See* CSXT Reply at III-F-39.

[124] *See* CSXT Reply at III-F-40.

clearing and grubbing unit cost of $3,329 per acre, Consumers calculated the MDOT unit cost for "Clearing", "Grubbing", and "Clearing and Grubbing" separately.[125] In other words, Consumers calculated the differentiated unit costs for the three categories before utilizing a weighted average of all three to arrive at a total "Clearing and Grubbing" unit cost. CSXT's argument therefore indicates that CSXT failed to perform an adequate review of Consumers' Opening workpapers. As shown in Consumers' Opening MDOT Clearing & Grubbing calculations, no MDOT bids in Tier I and Tier II had a line item for "Grubbing" alone. As such, Consumers utilized the weighted average of "Clearing & Grubbing" actives to apply to both acres of clearing and acres of grubbing.

As none of CSXT's claims holds any merit as to why MDOT unit costs are not relevant to the CERR, Consumers continues to utilize the MDOT unit costs on Rebuttal.

**c. Earthwork**

**i. ROW Quantities**

On Reply, CSXT accepts Consumers' methodology for developing excavation and embankment quantities from the ICC Engineering Reports, with the exception of a valuation segment CWI-3-IL.[126] On Opening, Consumers had mistakenly categorized the ICC engineering report quantity for "Embankment, hauled from Dune Park, Ind." from valuation segment CWI-3-IL as Excavation:

---

[125] *See* Consumers Opening e-workpaper "MDOT Clearing & Grubbing Unit Costs.xlsx" tab "Tier Calculations."

[126] *See* CSXT Reply at III-F-42.

Common and not Embankment: Common. CSXT corrects this oversight on Reply, which Consumers accepts in Rebuttal.[127]

### ii. Yard Quantities

On Reply, CSXT accepts Consumers' yard earthwork quantities calculated using ICC Engineering Reports.[128] In addition, CSXT adds yard quantities for a locomotive turntable and bad order set out track at Barr Yard.[129] As described in Part III-B, Consumers rejects these track miles in Barr Yard, and therefore has not added the associated yard grading quantities.

### iii. Segments with Partial CSXT Ownership

As discussed in Part III-B, on Reply, CSXT falsely claims that the CERR must account for partial ownership of the IHB lines the CERR replicates via trackage rights. On Rebuttal, Consumers continues with its Opening position and does not include investment costs for IHB lines.

### iv. Total Earthwork Quantities

Table III-F-7 shows a comparison of earthwork quantities proposed in each round of evidence.

---

[127] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," Tab "Eng Report Grading Inputs," Cell S7.

[128] *See* CSXT Reply at III-F-43.

[129] *Id.*

Rebuttal Table III-F-7
**Comparison of CERR Earthwork Quantities 1/**

| Item | Consumers Opening | CSXT Reply | Consumers Rebuttal |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| **1. Common Excavation** | 5,042,044 | 4,536,059 | 4,521,670 |
| 2. Loose Rock Excavation | 5,246 | 5,274 | 5,246 |
| 3. Solid Rock Excavation | 18,072 | 18,169 | 18,072 |
| 4. Borrow | 716,135 | 1,254,240 | 1,224,039 |
| **5. Total** | **5,781,497** | **5,813,743** | **5,769,028** |

1/ *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," Tab "Rebuttal Summary."

### v. Earthwork Unit Costs

The main driver behind CSXT's excessive roadbed preparation costs is CSXT's use of the Means Handbook costs rather than the real world MDOT costs that Consumers used in Opening. CSXT attempts to validate its approach in Reply with a discussion of Means Handbook costs and a critique of the MDOT costs. Consumers responded to CSXT's various MDOT claims in Section III-F-2.a. above. The evidence presented by Consumers shows that the MDOT, as a real world example of recent construction in the area surrounding the CERR, is preferable to Means Handbook costs.

### (a) Common Excavation

On Opening, Consumers used MDOT data from 2010-2015 in order to calculate an earth excavation unit cost of $2.41.[130] Consumers analyzed over 1,000 projects listed in the MDOT construction cost database to determine earth excavation unit costs in Michigan for projects that were similar to the CERR construction.[131] On Opening, Consumers identified 21 MDOT projects that took place within 100 miles of the CERR and required earth excavation.[132] Based on the 21 MDOT projects Consumers calculated a 1Q15 indexed unit cost of $2.51 per CY for common excavation.[133]

As discussed above in Section III-F-2.a.iv, CSXT made many baseless attempts to inflate Consumers' MDOT unit cost. On Reply, CSXT presents an additional argument against the use of MDOT unit costs. CSXT claims that the MDOT data is flawed and that it understates earthwork costs for the CERR due to the fact that "the MDOT bid data projects average approximately 50,000 cubic yards of excavation per mile, while the earthwork quantities for the CERR average approximately 30,000 cubic yards per mile. The higher concentration of earthwork volumes on MDOT projects allows for increased

---

[130] *See* Consumers Rebuttal e-workpaper "MDOT Excavation Unit Costs_Reply Analysis_Consumers.xlsx" tab "Tier Calculations" cell Z17.

[131] *See* Consumers Opening at III-F-26.

[132] *Id.* at III-F-26-27.

[133] *Id.* at III-F-29.

production from earthmoving equipment and likely results in lower haul distances, resulting in lower MDOT costs per unit."[134]

CSXT discusses the Means Handbook economies of density. CSXT provides no support, and there is no mention in the Means Handbook, that shows the cubic yards of excavation per mile has any effect on the costs that make up the various Means Handbook projects. Thus, CSXT provides no support as to why Means should be used over MDOT. The Means Handbook unit costs are also made up of various sized projects that take place throughout the country, whereas MDOT projects are specific to the CERR region.

On Reply, CSXT also discusses its calculation of R.S. Means based common excavation unit cost, which includes an 80/20 sheepsfoot roller to steel wheel roller ratio for compaction.[135] This 80/20 ratio argument is addressed in section III-F-2 Loose Rock excavation below.

As discussed above in Sections III-F-2.a.iv.(b), III-F-2.a.iv.(d), and III-F-2.a.iv.(c), CSXT's claimed "corrections" to MDOT unit costs for common excavation including "(1) Additional cost for embankment (2) Substitution of bid prices from Wayne County for CERR lines in Illinois and Indiana (3) Adjustment of bid prices to reflect the higher mobilization percentages included in MDOT contractor bids,"[136] are baseless and should be rejected by the Board. On Rebuttal,

---

[134] *See* CSXT Reply at III-F-44-45.

[135] *Id.* at III-F-45-46.

[136] *Id.* at III-F-47.

Consumers continues to utilize its Opening MDOT common earthwork unit cost of $2.51 per CY.

**(b) Loose Rock Excavation**

CSXT accept Consumers' unit cost for loose rock excavation with two modifications. First, CSXT modifies the R.S. Means average compaction calculations and second, CSXT adds a swell factor calculation. As explained below, Consumers rejects both of these modifications in Rebuttal.

On Reply, CSXT falsely claims that the ratio Consumers used in the development of the R.S. Means compaction unit cost is impractical. This ratio is also used in CSXT's common excavation and solid rock excavation calculations. On Opening, Consumers proposed a 50/50 split for embankment compaction between a smooth drum vibrating roller and a sheepsfoot roller. Without any support or justification CSXT states that "[w]hen embankments are initially constructed, the terrain is uneven. Steel wheel rollers are almost impossible to maneuver on uneven surfaces because the smoothness of the steel drum causes them to slide downhill."[137] Based on this statement, CSXT proposes to replace Consumers 50/50 split with a 20/80 split between smooth drum vibratory roller and a sheepsfoot roller.[138]

---

[137] *See* CSXT Reply at III-F-45.

[138] *Id.* III-F-46.

CSXT claims that smooth drum rollers are impossible to maneuver on uneven surfaces are completely baseless. In fact nearly every major soil compactor brochure contains language discussing the use of smooth drum rollers on uneven terrain or at significant grades. Volvo, in all of its compactor models, offers its trademarked "No-Spin" differential,[139] which provides "increase[d] traction and precludes tire slippages, improving gradeability, performance and productivity." These brochures contain photos of smooth drum rollers operating on uneven terrain and at grade, examples of which are shown in Figure III-F-8.[140]

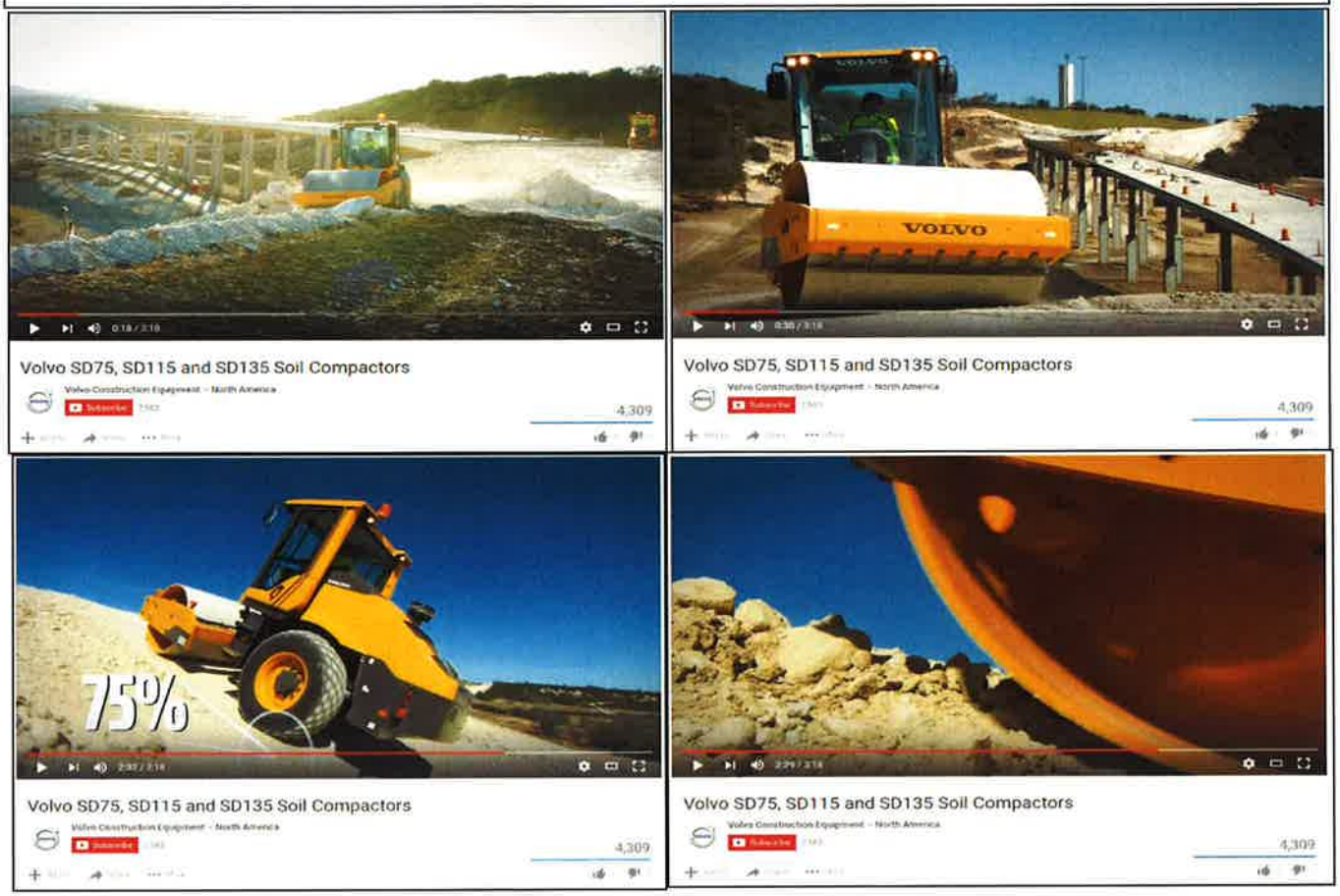
Figure III-F-8
**Volvo Smooth Drum Roller Photos**


[139] *See* Consumers Rebuttal e-workpapers "Volvo SD45 Compactor Product Brochure.pdf" page 2 highlighted in yellow, and "Volvo SD75 Compactor Product Brochure.pdf" page 2 highlighted in yellow.

[140] *See* Consumers Rebuttal e-workpaper "Volvo SD75 Compactor Product Brochure.pdf" page 2.

In addition to Volvo's brochures, Volvo's promotional video shows smooth drum rollers operating at grade and in uneven terrain.[141] Figure III-F-9 below displays still frames from this video that demonstrates the various terrain where smooth drum rollers operate.

Figure III-F-9
**Volvo Promotional Video Smooth Drum Roller**




[141] *See* Consumers Rebuttal e-workpaper "Volvo Construction Equipment_Soil Compactors Promotion Video Link.docx" for link to video.

In addition to Volvo, brochures for Caterpillar soil compactors notes that they are "built around the exclusive Cat dual pump propel system, two pumps provide separate dedicated flow to drum drive motor and rear axle motor for exceptional gradeability and traction in forward and reverse."[142] The "[t]wo propel pump system has dedicated pumps to drive the heavy-duty, high-torque rear wheel and drum motors independently. Should the drum or wheels begin to spin, the non-spinning motor still receives hydraulic flow, allowing continuous tractive efforts especially useful in loose underfoot conditions."[143]

Again these brochures contain photos,[144] seen in Figure III-F-10 below, that show smooth drum compactors operating at grade without "sliding downhill."

---

[142] *See* Consumers Rebuttal e-workpaper "CAT_CS34.pdf" page 1 highlighted in yellow.

[143] *See* Consumers Rebuttal e-workpaper "CAT_CS54.pdf" page 6 highlighted in yellow, and "CAT_CS533E.pdf" page 7 highlighted in yellow.

[144] *Id.*

Figure III-F-10
**Caterpillar Smooth Drum Roller Photos**


The "[t]wo propel pump system has dedicated pumps to drive the heavy-duty, high-torque rear wheel and drum motors independently. Should the drum or wheels begin to spin, the non-spinning motor still receives hydraulic flow, allowing continuous tractive efforts especially useful in loose underfoot conditions."[145] Again these brochures contain photos,[146] seen in Figure III-F-10 below, that show smooth drum compactors operating at grade without "sliding downhill."

[145] *See* Consumers Rebuttal e-workpaper "CAT_CS54.pdf" page 6 highlighted in yellow, and "CAT_CS533E.pdf" page 7 highlighted in yellow.

[146] *Id.*

Furthermore, in its description of its soil compactors Dyanapac states: "Both the smooth & padfoot drum with drum drive offer excellent gradeability even on steep slopes. The infinitely variable hydrostatic propulsion system provides efficient power transmission, to both drum and wheels. Vertical oscillation on the center hitch provides excellent stability over uneven terrain."[147]

These are but a few real-world examples[148] that demonstrate how smoothly drum rollers operate on uneven terrain. CSXT's claims to the contrary are baseless.

In fact in *AEP Texas,* the Board agreed that AEP Texas' 50/50 split of smooth drum rollers and sheepsfoot rollers was appropriate as "BNSF has not shown that AEP Texas' mix of equipment would not be capable of compacting the soil. Therefore, we use AEP Texas' cost figures for common excavation."[149] CSXT provided no evidence to show that Consumers 50/50 split is not capable of compacting the soil along the CERR. Therefore, Consumers continues to utilize the 50/50 split from Opening on Rebuttal.

In addition to the changes to the compaction ratio, CSXT argues on Reply that loose rock excavation unit costs in R.S. Means should be subject to a

---

[147] *See* Consumers Rebuttal e-workpaper "Dynapac_CA134_CA144.pdf," page 2.

[148] *See* Consumers Rebuttal e-workpaper "Additional Soil Compactor Quotations.docx", for additional examples and specifications from other manufacturers of smooth drum rollers

[149] *See* Consumers Rebuttal e-workpaper "AEP Texas 9_10_07 36778.pdf" decision page 81, pdf page 88.

swell factor.[150] Specifically CSXT claims that "R.S. Means shows that its excavation unit costs are in BCY [bank cubic yards] and that the cost per unit for a 22 CY hauler are reported as LCY [loose cubic yards]. The density difference for two types of materials is 27% for loose rock quantities (using a 1.27 swell factor)."[151] CSXT tries a new spin on the same argument that failed in both *Sunbelt* and *DuPont.*[152] In *DuPont* and *Sunbelt* the carrier, NS, argued that the ICC Engineering Report quantities were in BCY, while the hauling unit cost was in LCY.[153] In the *Sunbelt* decision that rejected the NS proposed swell factor the Board stated that:

> "NS does not cite any support for its claim that the Engineering Reports record earthwork quantities in bank cubic yards, and the fact is not self-evident. "Bank" means in place, undisturbed, natural ground, and the Engineering Reports address earthwork in its post-construction state."[154]

---

[150] *See* CSXT Reply at III-F-49.

[151] *Id.* At III-F-55.

[152] *See* Consumers Rebuttal e-workpaper "42130 SunBelt v NS STB Maximum Rate Decision.pdf" at page 126, STB decision page 116, which stat that the STB will "reject its [NS's] additional costs stemming from hauler distance and from a shrinkage and swell factor." *See also* Consumers Opening e-workpaper "42125 DuPont v. NS 2014.03.24 ID_43717 CORRECTIONS TO DECISION.pdf" at page 185, which states that "[t]he Board will reject NS's adjustment for swell because we agree with DuPont's assessment that Means' earthwork costs already account for the costs of swell."

[153] *Id.*

[154] *See* Consumers Rebuttal e-workpaper "42125 DuPont v. NS 2014.03.24 ID_43717 CORRECTIONS TO DECISION.pdf" at page 184.

On Reply, CSXT mischaracterizes the Board's decision by only focusing on the final portion of the Board's assertion in *Sunbelt* that "ICC Engineering Report quantities 'address earthwork in its post-construction state,' i.e., its final or compacted/embanked state (ECY)."[155] CSXT then attempts to make the same argument it has in *DuPont* and *Sunbelt* by replacing its use of BCY in those cases with ECY in this case. However, The Board made it very clear in the rest of the *Sunbelt* and *DuPont* decisions that CSXT did not focus on that RS Means fully accounts for the swell of soil. As the Board cited in the *Sunbelt* decision "NS's adjustments are unnecessary because Means costs are based on the specific type of earthwork, thereby accounting for shrinkage and swell associated with that use."[156] The Board re-iterated this same sentiment in the DuPont decision that "[t]he Board agrees that Means reflects work being done and it is a standard industry practice to bid on earthwork in its compacted state, which would already account for swell."[157] The Board has made it clear, that regardless of the compacted state, "Bank" or "Embanked", no adjustment to the R.S. Means units costs are necessary to account for swell.

This point is further emphasized in the very same workpaper CSXT uses to make its argument that the swell factor needs to be accounted for in Means

---

[155] *See* CSXT Reply at III-F-54, footnotes omitted.

[156] *See* Consumers Rebuttal e-workpaper "42130 SunBelt v NS STB Maximum Rate Decision.pdf" at page 126, STB decision page 116.

[157] *See* Consumers Rebuttal e-workpaper "42125 DuPont v. NS 2014.03.24 ID_43717 CORRECTIONS TO DECISION.pdf" at page 185.

unit costs. Specifically, the Ringwald's Means Heavy Construction Handbook states, "BCY is the unit of preference in discussing earthwork of any kind. On heavy construction jobs, the cubic yard figure for which a contractor is paid a unit price is almost always in BCY. Nothing extra is paid for the loose or compacted states occupied by the same BCY throughout the course of the job."[158] CSXT's workpapers clearly demonstrate that "nothing extra is paid" for the various states of compaction that occur during an earthwork project. Therefore, as the Board has previously ruled and as demonstrated in CSXT's workpapers, no adjustment to the RS Means units costs are necessary to account for swell.

For the reasons discussed above, Consumers continues to use its Opening R.S. Means loose rock excavation unit costs in Rebuttal.

**(c) Solid Rock Excavation**

On Reply, CSXT accepts Consumers unit cost for solid rock excavation with two modifications. First CSXT modifies the RS Means average compaction calculations and second CSXT added a swell factor calculation. As explained in Section III-F-2.c.v.(b) above, Consumers rejects both of these modifications on Rebuttal, and continues to use its Opening solid rock unit costs.

[158] *See* CSXT Reply e-workpaper "Swell and Shrinkage - Ringwald, Means heavy Construction Handbook.pdf" at page 2.

### (d) Embankment/Borrow

On Opening, Consumers used the MDOT database to develop a borrow unit cost indexed to 1Q15 of $10.35 per CY.[159] CSXT claims that "Consumers' four MDOT projects account for a scant 6,360 cubic yards of borrow compared to over a million cubic yards of borrow on the CERR. As such, Consumers' MDOT sample is not representative and therefore not a reliable source for CERR borrow costs."[160] Based on economics of scale CSXT's argument is moot.

By definition, borrow is material that is brought in from outside a project, meaning soil material that is purchased from elsewhere and, as noted in the R.S. Means Handbook CSXT cited, when purchased in large quantities there are often cost savings. In 2013, the State of Louisiana conducted wetlands conservation and restoration project where "[a]pproximately 9,300 feet of beach and dune will be rebuilt using nearly 2 million cubic yards of dredged sand, and 150 acres of marsh habitat will be rebuilt using nearly 1 million cubic yards of dredged material."[161] The reports final quantities and pay amounts table show that 2.7 million cubic yards of beach and dune fill were brought in at a calculated unit cost of $7.85 per cubic yard, and 1.4 million cubic yards of marsh fill were

---

[159] *See* Consumers Opening at III-F-35.

[160] *See* CSXT Reply at III-F-49.

[161] *See* Consumers Rebuttal e-workpaper "West Belle Pass Louisiana Restoration Project Report_5015680-1.pdf" page 1, highlighted in yellow.

brought in at a calculated unit cost of $3.25 per cubic yard.[162] This demonstration shows that Consumers' Opening unit cost of $10.35 per cubic yard was a conservative estimate of borrow costs to the CERR, which would require considerably more borrow than found in the MDOT projects Consumer relied upon.

It is unrealistic for CSXT to expect Consumers to find projects the size of CERR for comparison purposes in MDOT or elsewhere. Projects requiring more than 1,000,000 cubic yards of borrow are not everyday occurrences. In fact, when looking through CSXT's AFE documents provided in discovery, Consumers was only able to find five projects that required borrow.[163] Of the five projects, Consumers was then able to find two invoices for which CSXT was billed.[164] Of these seven instances of borrow found by Consumers while going through discovery provided by CSXT, none of them showed a borrow quantity greater than 40,000 cubic yards.

In addition, CSXT claimed that Michigan represents a small portion of the total cubic yards of borrow needed, since the majority of the CERR borrow quantities are found in Illinois and Indiana according to the ICC engineering

---

[162] *See* Consumers Rebuttal e-workpaper "West Belle Pass Louisiana Restoration Project Report_5015680-1.pdf" page 6, highlighted in yellow and red box for calculations.

[163] *See* Consumers Opening e-workpaper "CSXT Invoice Unit Cost Summary.xlsx" tab "CSXT AFE Project Data" rows 18, 27, 31, 34, and 36.

[164] *See* Consumers Opening e-workpaper "CSXT Invoice Unit Cost Summary.xlsx" tab CSXT AFE Project Data" rows 31 and 34.

reports. Thus, the MDOT borrow unit cost should not be used.[165] Again, CSXT's claim has no merit. Similar to the common excavation unit cost discussed above in section III-F-2.a.iv.(d), Consumers applied the Means Handbook location factor to the MDOT borrow unit cost. This leads to an increase in the MDOT borrow unit cost based on location and ensures that the CERR borrow unit cost is taking into account the higher construction costs in Illinois and Indiana.[166]

### (e) Land for Waste Excavation

On Opening, Consumers noted that since the MDOT specifications state that earth excavation is "the property of the Contractor", Consumers would not need additional land for waste quantities.[167] However, on Reply, CSXT claims that this assertion is "irreconcilable with the narrow right of way that Consumers posits for its SARR."[168]

As Consumers noted on Opening, the contractor would own the waste material and not the CERR. As such, the contractor has free reign to use the wasted material in other projects or to sell this material for profit. The size of the right of way would have no impact on the need or lack thereof for the CERR to purchase land for waste quantities.

---

[165] *See* CSXT Reply at III-F-50.

[166] *See* Consumers Opening e-workpaper "CERR Grading_Opening.xlsm" tab "Unit Costs" cell BF75.

[167] *See* Consumers Opening at III-F-35.

[168] *See* CSXT Reply at III-F-51-52.

In addition, CSXT land for waste quantities unit costs should be rejected if the Board decides to calculate costs for land for waste quantities. In its calculation of the unit cost for land for waste quantities, CSXT attempts to artificially inflate the costs by using an average cost per acre of land along the CERR instead of an average cost per acre of rural land, per Board precedent in *DuPont* and *Sunbelt.*[169] Using CSXT Reply files, this difference in unit cost is { } per acre for the average of all land along the CERR, comparted to { } per acre for the average of rural land along the CERR.[170] Should the Board include land for waste quantities, which Consumers continues to argue against, it should utilize the Rebuttal revised average rural land calculation of { } per acre, which has been included in the Rebuttal Grading.[171]

### (f) Total Earthwork Cost

The Rebuttal total earthwork cost associated with constructing the CERR is $36.8 million.[172]

---

[169] *See DuPont* at 170, "Because we find that DuPont's approach to placing waste excavation in rural land sites is feasible, we will recalculate NS's land costs based upon its rural land unit costs and not its average unit land costs." And *Sunbelt* at "With waste volume occurring primarily in rural areas, the cost for waste areas would be more correctly based on rural land costs than on the urban acreage NS would have us include in the average land cost."

[170] *See* Consumers Rebuttal e-workpaper "CERR Land Valulation_Reply_with Rural vs Urban per acre calculations.xlsx," tab "Summary," cell P24 and cell P22.

[171] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," tab "Unit Costs," cell M72.

[172] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," tab "Rebuttal Summary," cell K27.

### d. Drainage

#### i. Lateral Drainage

CSXT accepts Consumers' lateral drainage costs and quantities.[173]

#### ii. Yard Drainage

Yard drainage costs at Barr Yard are discussed in site development costs in part III-F-7.

#### iii. Culverts

Consumers on Opening presented culvert inventories based on information provided by CSXT in discovery.[174] Consumers substituted two culverts for one bridge.[175] The total cost for culverts on Opening was $1.15 million.[176] CSXT on Reply more than doubles the costs for the culverts, at $2.73 million, disagreeing with the unit and quantity costs.[177] CSXT rejects the conversion of the one bridge to culverts and corrected the bedding costs from Means.[178] CSXT also takes issue with Consumers' proposed method of construction, adding costs for excavation, bedding material, and trench backfill.[179] Consumers accepts the revised Means cost for bedding, which increases the total

---

[173] *See* CSXT Reply at III-F-56.

[174] *See* Consumers Opening e-workpaper "CULVERT COST WORKSHEETS.xls," tab "CULVERT COST SUMMARY."

[175] Consumers Opening at III-F-39.

[176] *See* Consumers Opening e-workpaper "CULVERT COST WORKSHEETS.xls," tab "CULVERT COST SUMMARY," cell AF196.

[177] *See* CSXT Reply e-workpaper "III-F TOTAL_Reply.xlsx," cell F6.

[178] CSXT Reply at III-F-57-62.

[179] CSXT Reply at III-F-57-62.

culvert costs to $1.18 million, but rejects all of the other modifications and additional costs proposed by CSXT.

### (a) Culvert Unit Costs

Consumers' engineers reject CSXT's methods and additional costs for trenching excavation. CSXT's trenching excavation costs are based on the embankment being constructed first, before the area is trenched and the culverts installed. Consumers' engineers propose to instead proceed using the more cost-conscious, logical, and real-world method that requires first excavating the bedding area, then installing culverts, and lastly constructing the embankment. This approach is consistent with STB precedent.[180] Therefore, Consumers rejects the proposed construction methods and the additional costs for trenching excavation.

### (b) Culvert Installation Plans

CSXT claims that Consumers underestimated the amount of bedding material required for construction of the culverts. This assertion is incorrect. Consumers' engineers provided for bedding materials and costs that are consistent with CSXT's proposed methods. [181] Notably, Consumers' engineers, just like CSXT's engineers, call for the crushed rock to surround the CMP to the

---

[180] *See generally SunBelt* at 121-122.

[181] The engineering drawings for the CMP pipe and the box culverts both show the location of the bedding and backfill material, and include the formulas used by Consumers' engineers for excavation and bedding quantities. *See* Consumers Opening e-workpapers "RCP Bedding Detail.pdf" (box culverts); "CMP bedding detail.pdf" (CMP culverts).

springline.[182] Therefore, Consumers rejects any additional costs for bedding materials.

Consumers also rejects CSXT's additional trench backfill costs, because like the trenching excavation costs, these are unnecessary. As previously explained, it makes the most sense to install the CMP before constructing the embankment. The detail for the CMP pipe also specifically states that the backfill from the springline of the CMP to the surface will be covered under earthwork costs.[183] Therefore, Consumers rejects CSXT's trench backfill costs.

### (c) Culvert Quantities

CSXT alleges that Consumers engineers improperly converted a bridge to a culvert,[184] when in fact CSXT previously listed this "bridge" as two 10ft x 10ft box culverts.[185] Therefore, Consumers engineers reject this proposed change to the bridge list.

CSXT also alleges there is a problem of using CMP pipe for all culverts when in fact, as designed by Consumers' engineers, there is no problem. Consumers' engineers accept CSXT's cleansing velocity for the pipe of three (3) feet per second ("fps") and CSXT's friction coefficient of 0.024 for CMPs and 0.012 for all non-CMP culverts. However, CSXT uses the wrong formula for

---

[182] *See* Consumers Opening e-workpaper "CMP bedding detail.pdf."

[183] *See* Consumers Opening e-workpaper "CMP bedding detail.pdf."

[184] *See* Consumers Opening "Culvert Cost Worksheets.xlsx," tab "Culvert Cost Summary," row 85 (MP CG 85.90).

[185] *See* Consumers Rebuttal e-workpaper "CSX Track Chart MP CG85 to CG 90.pdf."

calculating flows for a CMP to obfuscate the issue, and exaggerates the effects of water backing up on the embankment suggesting it will be a "complete washout."[186] In fact, Consumers' engineers determined that using the CMP pipe would at the most add 1 foot of water backing up onto the embankment.[187]

CSXT engineers in correcting Consumers' culvert quantities made assumptions because there was no data in some instances to determine culvert length, number of barrels, or delivery area. But as admitted by CSXT, this is because the list CSXT provided for culverts did not include this information.[188] If this data does not exist and was not produced as part of discovery, CSXT engineers may not now make self-serving guesstimates and present them as well-reasoned corrections.

### (d) Total Culvert Costs

Consumers on Opening had a total cost for culverts of $1.15 million. CSXT is proposing to increase the total culvert costs that Consumers had on Opening from $1.15 million[189] to $2.73 million.[190] On Rebuttal, Consumers has revised upwards the costs to $1.18 million, but does not adopt CSXT's costly construction methods or change the number and size of culverts.

---

[186] CSXT Reply at III-F-59.

[187] *See* Consumers Rebuttal e-workpaper "III-F Culvert Narrative.pdf."

[188] *See* CSXT Reply at III-F-62 ("Consumers has not included quantities for culverts from the CSXT inventory list that did not have a given length, size, number of barrels, or delivery area.").

[189] *See* Consumers Opening e-workpaper "CULVERT COST WORKSHEETS.xls," tab "CULVERT COST SUMMARY," cell AF196.

[190] *See* CSXT Reply e-workpaper "III-F TOTAL_Reply.xlsx," cell F6.

### e. Other

#### i. Side Slopes

CSXT accepted Consumers' average side-slope ratio of 1.5:1.[191]

#### ii. Ditches

CSXT accepted Consumers' specifications of side ditches having trapezoidal sections with cuts two feet wide and two feet deep for all locations.[192]

#### iii. Retaining Walls

CSXT accepted Consumers' unit costs for retaining walls, but makes three changes to Consumers' quantities.[193] First, in Opening, Consumers stated in its narrative its intention to use a conversion of 1.54 of Masonry quantities to convert ICC engineering report masonry quantities to gabion baskets.[194] However, as pointed out by CSXT on Reply, Consumers inadvertently used the non-converted quantities in the calculation of total costs. Consumers corrected this problem in Rebuttal.[195]

Second, CSXT noted that retaining walls along the BRC line replicated by the CERR between 76th Street and 79th Street are visible on google earth. However, CSXT falsely stated that it was required to use its own retaining wall quantity calculations in lieu of ICC Engineering Report information.

---

[191] *See* CSXT Reply at III-F-62.

[192] *Id.* at III-F-63.

[193] *Id.*

[194] *Id.*

[195] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," tab "total Cost Summary," cell A19.

According to the 1913 Chicago & Western Indiana Railroad Annual Report "five main tracks were elevated between 73rd and 77th Streets, and retaining walls constructed on the west side of the right-of-way between 72nd and 74th Streets and between 76th and 79th Streets."[196] The ICC Engineering Reports submitted by Consumers in Opening for valuation Segment CWI-3-IL have a date of inventory of June 30, 1918, which confirms the retaining wall quantities are in fact included in the ICC Engineering Reports.[197]

In Opening, Consumers did not include these quantities because they fall under the subheading "Clearing Yard" in the ICC Engineering Report, which the CERR was not replicating. However, in Rebuttal, Consumers agrees that these particular retaining walls are on the main line which the CERR is replicating. Therefore, Consumers added the ICC Engineering Report quantities for the retaining walls and included the subsequent additional costs for the additional retaining walls in the same manner as other ICC Engineering Report retaining wall quantities produced in Opening.[198]

Finally, in Reply, CSXT added retaining walls for the Clark Road flyover.[199] As described in Section III-F-5.d, Consumers rejected CSXT's added

---

[196] *See* Consumers Rebuttal e-workpaper "CWI_1913 Annual Report.pdf" at page 8.

[197] *See* Consumers Opening e-workpaper "ICC Engineering Reports_CERR_opening.pdf" at PDF page 42.

[198] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," tab "Eng Report Grading Inputs," excel row 8 through 13.

[199] *See* CSXT Reply at III-F-64.

flyover and therefore will not be including the additional quantities for these retaining walls.

### iv. Rip Rap

CSXT accepted Consumers unit costs for rip-rap, as well as quantities for rip-rap for non-culvert rip-rap.[200] However, CSXT increases the total amount of rip rap for the construction of culverts because it proposes to increase the total number and size of the culverts.[201] Consumers rejects this increase in rip rap quantities because Consumers does not agree that the number and size of the culverts should be revised upwards.[202]

### v. Relocating and Protecting Utilities

CSXT accepted Consumers' unit costs for relocating and protecting utilities but adds additional costs for relocating two high power electric lines at Cottage Grove Avenue.[203] As described in Section III-F-5.2.d, Consumers is rejecting CSXT's added overpass over Cottage Grove Avenue and therefore has not included these additional costs in Rebuttal.

However, should the Board accept CSXT's relocation of the high power electric lines at Cottage Grove Avenue, the Board should restate the costs calculated by CSXT in its Reply evidence. By CSXT's own admission the unit costs provided are "typical cost per mile for constructing **new** high transmission

---

[200] *Id.* at III-F-65.

[201] *Id.*

[202] See discussion *infra* in Part III-F.2.d.ii.

[203] *Id.* at III-F-65.

overhead electric lines,"[204] while the CERR would simply need to elevate the existing towers without replacing the lines. In addition the cost to replace the 0.8 miles of high power transmission lines, CSXT also, without any explanation, added the costs to replace 120 utility poles in 0.8 miles.[205] Not only has CSXT provided no explanation why 120 utility poles need to be replaced, CSXT has also not cited how their unit cost of $820 per pole[206] was developed.

In the event the Board accepts the Cottage Grove Utility relocation, it should only accept costs for raising the existing line. For various reasons, raising existing power poles has become a more common practice and the method used has been streamlined to allow for raising an existing structure while leaving the line in service.[207] Therefore, in Rebuttal, Consumers conservatively calculated the cost to fully rebuild the 4 towers being raised using R.S. Means unit costs from the ground up at a total cost of $70,564,[208] should the Board deem this cost necessary.

---

[204] *Id.* with emphasis added.

[205] *See* CSXT Reply e-workpaper "CERR Grading_Reply.xlsm," tab "Cottage Utility Reloc," cell F4.

[206] *See* CSXT Reply e-workpaper "CERR Grading_Reply.xlsm," tab "Cottage Utility Reloc," cell C4.

[207] *See* Consumers Rebuttal e-workpaper "Articles on Increasing the Height of Transmission Towers Carrying Energized Lines.pdf"

[208] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," tab "Cottage Utility Reloc," cell G19.

### vi. Seeding/Topsoil Placement

CSXT accepted Consumers' embankment protection quantities and seeding costs.[209]

### vii. Fine Grading

CSXT accepted Consumers' fine grading unit costs, but in Reply added fine grading quantities for yard track and second main track.[210] In Rebuttal, Consumers accepts CSXT's additional fine grading quantities, but corrects CSXT's additional quantities for second main track, as CSXT's calculation for valuation segment CWI-3-IL did not account for the CERR's 25% ownership and instead assumed 100% ownership.[211]

### viii. Subgrade Preparation

CSXT accepted Consumers' exclusion of additional subgrade preparation costs.[212]

### ix. Surfacing for Detour Roads

CSXT accepted Consumers' costs for surfacing detour roads.[213]

---

[209] *See* CSXT Reply at III-F-66.

[210] *Id.* at III-F-53.

[211] *See* Consumers Rebuttal e-workpaper "CERR Grading_Rebuttal.xlsm," tab "Road Grading," cell CW18.

[212] *See* CSXT Reply at III-F-56.

[213] *Id.* at III-F-66.

### x. Construction Site Access Roads

CSXT did not address this section in its Reply narrative, nor did it add costs in Reply. Therefore, CSXT implicitly accepted that no costs are needed for construction site access roads.

### xi. Environmental Compliance

CSXT accepted Consumers' costs for environmental compliance.[214]

## 3. Track Construction

### a. Geotextile Fabric

On Reply, CSXT agrees with Consumers' geotextile specifications and unit costs.[215] However, CSXT adjusts the geotextile quantities for the additional turnouts and crossing diamonds it proposes.[216] On Rebuttal, Consumers rejects the CSXT revised configuration and therefore did not include additional geotextiles, except for the minor inclusion of the Buffington Connection .[217]

### b. Ballast

Consumers on Opening provided quantities and costs for ballast, and used transportation costs consistent with {

}[218] CSXT on Reply accepts the methods

---

[214] *Id.*

[215] CSXT Reply at III-F-67; Consumers Opening at III-F-47-49.

[216] CSXT Reply at III-F-67.

[217] Consumers Rebuttal e-workpaper "2015 OTM Worksheet_Rebuttal .xlsx," tab "Total Cost Summary," row 263.

[218] Consumers Opening at III-F-49-50; Consumers Opening e-workpaper "UP Rail Transportation Costs.pdf."

Consumers used for calculating the ballast quantities and the ballast costs, but takes issue with Consumers' on-line and off-line transportation rates. Consumers on Rebuttal maintains its position on Opening with respect to the transportation rates, but does adjust upwards its ballast quantities for the addition of the Buffington connection and to correct a spreadsheet error.[219]

### i. Ballast Quantities

Consumers accepts CSXT's revisions to the ballast quantities for the Grand Rapids and Fremont subdivisions that were a result of a spreadsheet error.[220] Consumers also increases the total ballast quantities to accommodate the addition of the Buffington Connection.[221]

### ii. Ballast Pricing

Consumers on Opening sourced the ballast from quarries in Ironton, MO and from Findlay, OH.[222] For transportation from the quarries to the railhead Consumers used {

---

[219] Consumers Rebuttal e-workpaper "2015 Ballast & subballast Worksheet_Rebuttal .xlsx," tab "Grand Rapids – PORTER TO WAVERLY," cells F4 and F5, tab "Fremont – WAVERLY TO WEST OLIVE," cells F4 and F5, and tab "TOTAL COST SUMMARY," rows 7 and 8, columns G and H; CSXT Reply at III-F-68.

[220] *Id.*

[221] Consumers Rebuttal e-workpaper "2015 Ballast & subballast Worksheet_Rebuttal .xlsx," tabs "Total Cost Summary" & "Barr-VERMONT TO PINE," cell B14.

[222] Consumers Opening at III-F-49 & III-F-51.

}[223] and the $0.035 per ton-mile that has previously been accepted by the Board. Consumers also provided a quote from Ohio Track that included the transportation of the ballast from the railhead to the point of installation.[224] CSXT on Reply accepts Consumers' quarry locations and ballast price, but rejects Consumers' transportation rates.

### (a) Material Transportation From Supplier to Railhead

CSXT disputes the interline courtesy rate Consumers uses to transport ballast off-line on the UP track. Consumers is entitled to rely on a known transportation rate provided by CSXT in discovery. CSXT claims that the use of this interline rate would be improper because the CERR does not already exist and because it is not a member { }[225] There is no basis for CSXT's objection.[226]

{

---

[223] Consumers Opening at III-F-49-50; Consumers Opening e-workpaper "UP Rail Transportation Costs.pdf."

[224] *See* Consumers Opening e-workpaper "Ohio Track Cost Estimate.pdf."

[225] *See* CSXT Reply at III-F-70-71.

[226] CSXT also argues that "Consumers has provided no evidence that the predecessor CSXT railroads benefitted from such a courtesy," but in several instances, which is why the CERR includes diamond costs, CSXT or its predecessors was not the most senior railroad. *See* CSXT Reply at III-F-70.

}

The AFE relied on by Consumers for the off-line rate is also better evidence of a ton-mile rate because it is an example of a rate that was actually charged and paid.[227] In comparison, the quote provided as evidence by CSXT was a ballpark guess provided by an aggregate supplier for a "confidential project order of magnitude study" and was for the transport of 130-140,000 tons of ballast.[228] Therefore, not only was the made-for-litigation bid generated in a non-competitive situation and is not a rate that was actually paid or charged, but it involved no economy of scale. The CERR requires 1.9 million tons of ballast, and it is likely that for an order that large, the rate would be significantly lower.

Lastly, the price used by CSXT is on the high-end of the range provided by aggregate supplier's ballpark estimate.[229] Instead of { } it should be { } because the quote provided an upper range of { }[230]

---

[227] Consumers Opening e-workpaper "UP Rail Transportation Costs.pdf."

[228] *See* CSXT Reply e-workpaper "Vulcan Ballast Transportation Quote.pdf."

[229] *See* CSXT Reply e-workpaper "Vulcan Ballast Transportation Quote.pdf."

[230] *See* CSXT Reply e-workpaper "Vulcan Ballast Transportation Quote.pdf."

CSXT also disputes the $0.035 ton-mile rate, stating that because this was rejected recently in *DuPont*, that it should be rejected here, and that the { } used by Consumers as evidence supporting the $0.035 rate should be discounted. What CSXT fails to mention is that while the Board disallowed the $0.035 rate in *DuPont* and *Sunbelt*, the carrier was the only party to submit new evidence of a rate that was not simply indexed from a previous STB rate case.[231] CSXT also fails to mention that in *Sunbelt*, the Board accepted NS's rate stating that "a recent cost example is superior to a historically updated cost for this purpose."[232] Here, the AFE that CSXT is disputing is from 2015 and is the most recent cost evidence. Additionally, the fact that this { } was provided by CSXT as part of discovery provides sufficient evidence that the $0.035 ton-mile rate is not outdated and is a conservative estimate.

For the above reasons, Consumers continues to use its Opening transportation rates.

**(b) Ballast Material Distribution Along the CERR Right-of-Way**

CSXT tries to argue that Consumers did not include on-line transportation costs for ballast because the quote provided does not specify where

---

[231] *See DuPont* at 193; *SunBelt* at 135.

[232] *SunBelt* at 135.

[233] *See* Consumers Opening e-workpaper "UP Rail Transportation Cost.pdf" at 2.

the delivery points are located "or how far apart they are spaced."[234] However, it is of no consequence that the quote does not spell out the distances or include a map as to where these are located. The fact is that the quote states as item no. 4 that "[m]aterial transportation from delivery points is included in the quote."[235] The quote specifies "points," not "point," therefore the quote clearly contemplates multiple destinations. The quote is also for installation of other rail materials, so this is not from a supplier that is unaware that this is for the construction of track. Further, Consumers is providing on Rebuttal a copy of the phone log that was made by Consumers' engineers to Ohio Track requesting the bid.[236] From the phone log, it is clear that Ohio Track understood that there installation costs would include transportation of the materials from the railhead to the point of installation.[237]

### iii. Subballast

#### (a) Subballast Quantities

Consumers and CSXT agree on the method for estimating the subballast quantities.[238] CSXT on Reply corrects a spreadsheet error and adjusts the quantities upwards to account for the changes CSXT proposes to the CERR

---

[234] CSXT III-F-74.

[235] *See* Consumers Opening e-workpaper "Ohio Track Cost Estimate.pdf."

[236] *See* Consumers Rebuttal e-workpaper "Ohio Track Phone Log.pdf."

[237] *See id.*

[238] CSXT Reply at III-F-75; Consumers Opening at

configuration.[239] On Rebuttal, Consumers accepts CSXT's correction for the spreadsheet error, but only increases the subballast quantities to account for the addition of the Buffington Connection.[240]

**(b) Subballast Material Costs**

CSXT accepts Consumers' material and transportation costs for subballast.[241]

**(c) Subballast Material Placement Costs**

CSXT accepts Consumers' costs for subballast placement.[242]

**iv. Ties**

On Opening, Consumers used an AFE provided by CSXT as part of discovery for tie unit costs and for total mileage.[243] Although Consumers suspected that the AFE included transportation costs, Consumers nevertheless added separate transportation costs in order to be conservative.[244] Consumers used the same transportation rate for ties that it used for ballast, with { } per ton-mile on the UP and 0.035 per ton-mile on NS.[245] On Reply, CSXT accepts

---

[239] CSXT Reply at III-F-75.

[240] Consumers Rebuttal e-workpaper "2015 Ballast & subballast Worksheet_Rebuttal .xlsx," column B.

[241] CSXT Reply at III-F-76; Consumers Opening at III-F-52-53.

[242] CSXT Reply at III-F-76.

[243] Consumers Opening at III-F-54; Consumers Opening e-workpaper "AFE-IL, Utica-BIF 92.pdf."

[244] Consumers Opening at III-F-54-55.

[245] Consumers Opening e-workpaper "2015 OTM Worksheet .xlsx," tab "TIE COST," rows 23-24 & 35-36.

Consumers' unit cost and spacing for the ties, but disputes the total mileage and Consumers' transportation rate for ties.[246] On Rebuttal, Consumers adjusts the costs to correct for spreadsheet errors identified by CSXT, but maintains its position on Opening with respect to total mileage and transportation costs.

CSXT disputes Consumer's assumption of a $0.035 per ton-mile rate for off-line transportation but this price is not "outdate," as suggested by CSXT and as discussed *supra*. *See* CSXT Reply at III-F-2. The $0.035 is supported by the evidence of the { } which was submitted for the record.[247] Further, the AFEs produced by CSXT for ties did not allow Consumers to generate a transportation rate. It is improper for CSXT to rely on evidence in support of a rate that was not available to Consumers on Opening.

Rather than CSXT supplying a quote that aligns with the AFE such that it uses the same supplier, CSXT instead introduces evidence based on a quote obtained from a supplier that is 590 miles from Chicago. The quote specifically states that "[t]he $6000 is a slightly high estimate to cover fuel surcharges and any miscellaneous charges such as Switch charges."[248] Clearly, this is not the best evidence of record. Further, it is an example of an instance in which CSXT provided information as part of discovery that specifically did not include transportation costs, Consumers relied on this evidence and tried to make

---

[246] CSXT Reply at III-F-76-77.

[247] *See* Consumers Opening e-workpaper "UP Rail Transportation Cost.pdf" at 2.

[248] CSXT Reply e-workpaper "Mccord Tie Transportation Quote.pdf"

reasonable assumptions, and then CSXT on Reply introduces evidence with costs that are unreasonable.

### c. Rail

Consumers on Opening used new 115# Continuous Welded Rail ("CWR") for the construction of the CERR from Porter to West Olive, and new 136# CWR for the higher mainline tracks from Ogden Jct. to Curtis and the BRC track.[249] Consumers used information provided by CSXT in discovery for the rail material prices and approximate distances that the 1,400 foot long CWR segments would need to be shipped.[250] Consumers determined that from the welding facility in { } that a rail train would be required. CSXT accepts the rail material prices and the source of the rail, but rejects Consumers use of new 136# CWR on "high density" curves, and rejects Consumers transportation costs.

#### i. Rail Quantities

Consumers rejects the use of premium rail on "high density" curves. This railroad will operate at slower speeds, in the 35 mph range, and although it has tonnages ranging from 43.8 to 66 MGT on its line from UP/Ogden to Curtis, Indiana, the lower speeds and medium range tonnages do not require the use of premium rails in the curves as proposed by CSXT. The degree of curves and recommended tonnages to use premium rail as provided by CSXT from its

---

[249] Consumers Opening at III-F-56.

[250] *See* Consumers Opening at III-F-56; Consumers Opening e-workpapers "Rail Worksheet-2011.xls" and "Rail Prices.xls."

Engineering Standards are arbitrary and differ from standards used by other Class I railroads and AREMA has no standard for its use .

The determination as to whether to use premium rail in high density curves is one of economics. Each railroad looks at its expected maintenance costs versus the increase in capital costs to use premium rail and then makes a determination as to when to use a premium rail. In fact, when a study of the rail lines that the CERR is replicating was performed by Consumers, and data on the rail installed before 1980 was reviewed, the average lifespan for this "non-premium" rail was 24 years.[251] Notably, the track the CERR is replicating has actual "high-density," and the track in all locations except one, lasted at least 20 years. In summary, Consumers rejects the additional material costs for premium rail because it is an economic determination that each railroad can make factoring in the average speed and yearly tonnage across the line.

### ii. Rail Material Pricing

Consumers on Opening used information provided by CSXT in discovery to develop its rail material prices for regular 115# and 136# CWR. On Reply, CSXT accepts these prices for rail materials and uses the same AFEs for the price of premium 136# rail. On Rebuttal, Consumers accepts CSXT's rail material costs for 136# rail, but rejects its use on the CERR.

---

[251] *See* Consumers Rebuttal e-workpaper "CURVE DATA WORKSHEET _ Rebuttal.xlsx," tab "Non head Hard Rail."

### iii. Off-Line Rail Transportation Costs

To be conservative, Consumers included transportation costs on Opening at a rate of $0.035 per ton-mile from the welding facility in { }. Consumers also assumed that a rail train at a total cost of $3,000 would be required for delivery of the CWR.[252]

On Reply, while agreeing to the source of the rail and the location of the welding facility, CSXT disputes all of the components of the transportation costs. Specifically, CSXT revises the mileage upwards, increases the transportation rate, and disputes the rail train rental fee. Consumers rejects each of these proposed modifications because the evidence Consumers submitted on Opening was based on information provided by CSXT in discovery, which Consumers reasonably may rely upon in its presentation.

On Opening, Consumers only included transportation costs because the information provided by CSXT was inconclusive. Further, the limited information provided by CSXT in discovery required that Consumers estimate the total mileage. The fact that the mileage difference that CSXT identifies on Reply is less than 100 miles militates against requiring a revision upwards. Moreover, CSXT has not definitively demonstrated that its mileage is correct.

---

[252] These delivery costs by the rail train include both the transportation for the 1,000 rail miles and the cost for the rail work car. *See* e-workpapers "Rail Worksheet – 2015.xls" and "LB Foster Train Cost – Page 2.pdf."

With respect to the transportation rate, Consumers used the $0.035 per ton-mile rate. This rate is a 2015 rate and is based on the {

} that Consumers' engineers were able to derive from an AFE that CSXT provided in discovery. Consumers therefore rejects CSXT's proposed rate of $0.079 per ton-mile.

{

[253] {

}

[254] Consumers Opening e-workpaper "LB Foster Train Cost - Page 2" at 2.

[255] { }

[256] {

}

}

[257] { }

[258] *See* Pettibone, Speed Swing, http://www.gopettibone.com/products/speed-swing/ (last accessed May 19, 2016).

[259] {
}

[260] {
}

[261] {
}

### iv. Field Welds

On Opening, Consumers provided a quote from Orgo-Thermit for field weld kits[262] and from Ohio Track for installation costs.[263] In its Reply filing, CSXT accepts the unit costs for field welds, but argues that the costs provided by Consumers do not include installation, and as such add costs for labor.[264]

Consumers' engineers reject the additional labor costs proposed by CSXT engineers for field welds. This is because, as explained in Consumers' Opening, "[t]he cost of labor for all field and comp welds is included in the bid provided by Ohio Track, Inc., which also provided a price for the installation of the main track and turnouts."[265] The Ohio Track, Inc. quote provides that it "is intended to provide a fully completed product" and the track construction costs are listed on a per mile basis.[266] Given that track is not transported in one-mile lengths, and with both parties listing field welds as required every 1,400 feet,[267] the general provision that the quote "is intended to provide a fully completed product" (*see* Consumers Rebuttal e-workpaper "Ohio Track Cost Estimate.pdf")

---

[262] *See* Consumers Opening e-workpaper "Orgo-Thermit Inc Quote.pdf."

[263] *See* Consumers Opening e-workpaper "Ohio Track Cost Estimate.pdf."

[264] CSXT Reply at III-F-82.

[265] *See* Consumers Opening at III-F-58.

[266] *See* Consumers Opening e-workpaper "Ohio Track Cost Estimate.pdf."

[267] *See* Consumers Opening e-workpaper "Track Quantities-2015.xls," tab "Track Quantities," cell C100; CSXT Reply e-workpaper "Track Quantities-2015_Reply.xls," tab "Track Quantities," cell C100.

would necessarily require that field welds be included in the total labor price for track construction.

Further, the field weld labor costs provided by CSXT are artificially high, seemingly to create the impression that Ohio Track Inc. could not possibly have included these costs. But for the field weld labor costs, CSXT submitted a quote from Bankhead Railway Services, Inc., which is located in Atlanta, GA to perform "[a]pproximately 750 136# welds" in the "Chicago IL" area. *See* CSXT Reply e-workpaper "Weld Labor Quote.pdf." Having a separate welding service from 588 miles (714 highway miles) come out to perform the welds also results in a gold-plated price of $675 per weld.[268] In comparison, as evidenced by CSXT's own force account for work to be performed in Miami-Dade County, which lists the installation of field welds as part of "Track Labor," the cost for performing eight (8) field welds, when there was no economy of scale, was $1,560.66 when indexed to First Quarter 2015, or just $195.08/field weld.[269] Consumers' engineers maintain that Ohio Track Inc.'s quote included the labor costs for field welds, and that this is just another attempt by CSXT to find an error or omission and to drive up costs, even when the quote submitted by Consumers' engineers

---

[268] *See id.*

[269] *See* Consumers Rebuttal e-workpaper "Miami Cost for Installation of Field Weld.pdf" (4Q2006 field weld estimate for field of $1,260, indexed to 1Q2015 = $1,560.66; $1,560.66 total field weld cost/8 field welds = $195.08 per field weld).

clearly provides for all labor costs required on a per mile basis for track construction.[270]

#### v. Insulated Joints

CSXT and Consumers both discuss insulated joints in Part III-F-6, signals and communications.[271]

### d. Switches

Consumers' engineers accept CSXT's substitution of five power switches for five hand switches in the vicinity of the Barr Yard.[272] CSXT's engineers did not apply a historical factor to their switch costs and Consumers' engineers have corrected this on Rebuttal. [273]

### e. Other

#### i. Rail Lubricators

On Opening, Consumers provided a quote from LB Foster indexed to 2015.[274] On Reply, CSXT includes additional costs for grease, mats, and installation.[275] Consumers' engineers reject the costs for mats and for installing

---

[270] *See* Consumers Opening e-workpaper "Ohio Track Quote.pdf."

[271] CSXT Reply at III-F-82; Consumers Opening at III-F-58.

[272] *See* "2015 OTM Worksheet Rebuttal.xlsx," tab "Total Cost Summary," cell C140.

[273] *See* "2015 OTM Worksheet Rebuttal.xlsx," tab "Total Cost Summary," cells E138 & E139.

[274] Consumers Opening at III-F-59-60; Consumers Opening e-workpapers "LB Foster Lubricator Quote.pdf" and "2015 OTM Worksheet.xls," tab "TOTAL COST SUMMARY" rows 130 to 132.

[275] CSXT Reply at III-F-84.

rail lubricators, but accept CSXT's shipping costs for grease and lubricators.[276] Consumers also adopts CSXT's cost for lubricators.

Consumers rejects the costs for mats because mats would not have been required for the construction of the original CSXT track and they also are not an AREMA requirement. Additionally, the biodegradable greases that are now on the market make the CSXT proposed costs for mats completely unjustified, and this is the grease that Consumers uses on Rebuttal.[277] Consumers also rejects the costs for installing lubricators because the quote provided by Ohio Track Inc. specifically covers these installation costs.[278] The new costs for lubricators and grease is $693,169 which is an increase of $148,335 from Consumers' costs for lubricators on Opening.[279]

---

[276] *See* CSXT Reply e-workpaper "CSXT_Rail_Lubricator_LB_ Foster.pdf;" Consumers Rebuttal e-workpaper "2015 OTM Worksheet_Rebuttal.xlsx," tab "TOTAL COST SUMMARY," cells M126:M137.

[277] For example, LB Foster carries both "BIOCURVE" and "BioRail." *See* Consumers Rebuttal e-workpapers "BIOCURVE Rail Grease Specification.pdf" ("BIOCURVE is a premium quality biodegradable rail curve grease formulated from U.S.-grown vegetable oils and a lithium-based thickener."); "BioRail Curve Grease Specification.pdf" ("based on oils from vegetable sources that are 100% biodegradable.").

[278] *See* Consumers Opening e-workpapers "Ohio Track Inc. Quote.pdf" (Item 17: "Installation of Rail Lubricator" and "quote is intended to provide a fully completed product" with track construction costs listed on a per mile basis); "LB Foster Lubricator Quote.pdf"; "2015 OTM Worksheet.xlsx," tab "Total Cost Summary," row 243 (installation cost for lubricators).

[279] $148,335 = $693,169-$544,834. *See* Consumers Rebuttal e-workpaper "2015 OTM Worksheet_Rebuttal.xlsx," tab "TOTAL COST SUMMARY," cell G132; Consumers Opening e-workpaper "2015 OTM Worksheet.xlsx," tab "TOTAL COST SUMMARY," cell F132.

### ii. Plates Spikes and Anchors

CSXT on Reply accepts Consumers' unit costs and methods for determining quantities of plates, spikes, and anchors.[280]

#### (a) Derails

Consumers on Opening included costs for derails at turnouts.[281] CSXT on Reply accepts Consumers costs for derails, but adds split point derails at points it has determined where the CERR will cross a PTC equipped railroad.[282] Consumers rejects these costs for split point derails because traffic on the CERR will be moving at a maximum speed of 40 mph.[283] Pursuant to 49 C.F.R. Section 236.1005(a)(1)(i), which has the same requirements as the workpaper submitted into evidence by CSXT,[284] when a PTC route is intersected by a non-PTC route and the maximum speed is less than or equal to 40 mph, only interlocking signal arrangements are required. Therefore, Consumers rejects CSXT's additional costs for split point derails.

#### (b) Wheel Stops

CSXT accepts Consumers' unit costs for wheel stops.[285]

---

[280] *See* CSXT Reply at III-F-84; Consumers Opening at III-F-60-61.

[281] Consumers III-F-61; Consumers Opening e-workpaper "2015 RS Means Page 678.pdf" (cost for derails and wheel stops).

[282] CSXT Reply at III-F-85.

[283] *See* Consumers Opening at III-C-27.

[284] CSXT Reply e-workpaper "PTC Split Point Derails.pptx."

[285] *See* CSXT Reply at III-F-85; Consumers Opening at III-F-61-62; Consumers Opening e-workpaper "2015 RS Means Page 678.pdf" (cost for derails and wheel stops).

### iii. Crossing Diamonds

Consumers on Opening provided for one double diamond at MP DC 28.0.[286] CSXT on Reply adds numerous diamonds asserting that CSXT or its predecessors would have incurred these costs. CSXT, in addition to not agreeing with Consumers diamond crossing inventory, also disputes the "material, transportation, and installation costs."[287] Consumers modifies its costs to include labor, but maintains its position on Opening with respect to the transportation and unit costs for diamonds. As summarized in Rebuttal Table III-F-11 below, Consumers has accepted some of the additional diamond crossings proposed by CSXT and has updated its costs accordingly.[288]

---

[286] Consumers Opening at III-F-59.

[287] CSXT Reply at III-F-85.

[288] *See* Consumers Rebuttal e-workpaper "2015 OTM Worksheet_Rebuttal .xlsx," tab "TOTAL COST SUMMARY," cell I189 (total diamond costs).

## REBUTTAL TABLE III-F-11
## CERR Diamond Inventory

| Location | Number of Diamonds | Consumers Rebuttal[3] |
|---|---|---|
| Barr / MP 6.00 / NS (Stateline) | 4 | **Accept.** Joint Facility Agreement reviewed indicates that CSXT's predecessor may have paid 100% installation costs. |
| Barr / MP 6.10 / IHB (Stateline) | 0 | **Reject.** Joint Facility Agreement reviewed indicates CSXT's predecessor did not have to pay the costs.[1] |
| Barr / MP 10.70 / UP (Dolton) | 4 | **Accept.** C&CT was the junior railroad (installed by 1890) and when installed crossed the senior C&WI (installed prior to 1885). |
| Barr / MP 10.80 / NS (Dolton) | 0 | **Reject.** CSXT does cross the NS at Dolton; however, not on the alignment of the CERR. The CSXT single connection track heading south to the jointly owned Villa Grove Sub crosses the single NS track.[2] |
| Barr / MP 10.90 / IHB (Dolton) | 0 | **Reject.** C&CT installed by 1890 crosses the more junior CH&W (IHB) track that was installed between 1895-1900.[3] |
| BRC / MP 19.50 / NS | { } | { }[4] |

| | | |
|---|---|---|
| Blue Island / MP 22.5 / NS (75th Street) | 2 | Accept. In the vicinity of Blue Island the CSXT line being replicated was originally installed by the CT-Chicago Terminal & Transfer (B&OCT) in 1895. As such, it was the junior RR and would have incurred diamond costs at MPs 22.5, 22.6, 27.39, and 28.00. |
| Blue Island / MP 22.6 / BRC (75th Street) | 2 | |
| Blue Island / MP 27.39 / CN (Brighton Park) | 2 | Accept. Diamonds at Brighton Park installed as part of CREATE but with RR funding. |
| Blue Island / MP 28.00 / CN (Ash Street) | 2 | Accept. Same as MPs 22.5 and 22.6. |
| IHB Dolton Interlocking | 4 | Accept. |
| **Total** | | |
| **CERR Diamonds on BOCT 137.1-IL Segment** | { } | |
| **CERR Diamonds on BOCT 136.1-IN Segment** | { } | |

[1/] *See* Consumers Rebuttal e-workpaper { }
[2/] *See* Consumers Rebuttal e-workpaper "Dolton Diamond.pdf"
[3/] *See* Consumers Rebuttal e-workpaper "1848-1910 Construction of RRs_Chicago.pdf"
[4/] *See* Consumers Rebuttal e-workpaper "Pullman Junction Interlocking.pdf"

### (a) Materials Transportation

CSXT and Consumers both address materials transportation costs for an item within the relevant section discussing its costs, or in the applicable e-workpapers.

### (b) Track Construction Labor

Consumers on Opening provided a bid from Ohio Track that covered both the installation and transport of materials from the railhead to the point of installation. CSXT on Reply contends that additional costs are required "to

transport ballast from the railhead to the point of placement in track."[289] Consumers rejects this increase in labor costs associated with the transport of ballast because this was included in the Ohio Track Inc. quote.[290] This is further discussed *supra* in Parts III-F-3.c.iv and III-F.3.b.ii(b).

**4. Tunnels**

There are no tunnels on the lines that the CERR is replicating.

**5. Bridges**

Consumers' engineers on Opening provided a bridge list and standard bridge designs based on the existing spans and an inspection of the lines the CERR is replicating.[291] Consumers omitted the costs for constructing the Calumet Sag Channel Bridge and the Chicago Sanitary Canal Bridge because these projects were funded by the City of Chicago.[292]

On Reply, CSXT includes costs for the Calumet Sag Channel Bridge and the Chicago Sanitary Canal Bridge. CSXT also increases the bridge costs arguing that the bridges as designed by Consumers' engineers would obstruct water or pedestrian traffic, and more generally that there were design and calculation errors.[293]

---

[289] CSXT Reply at III-F-87.

[290] Consumers Opening e-workpaper "Ohio Track Cost Estimate.pdf"

[291] Consumers Opening at III-F-62-63.

[292] *See id.*

[293] CSXT Reply at III-F-87-88.

Consumers maintains its original position on Opening but makes the following minor modifications and corrections: Consumers adds one bridge that was not changed to a culvert, removes a duplicate structure also on the culvert list, corrects the number of spans on Bridge DC 29.96, and corrects the spreadsheet to properly include the cost for bridge DC30.19.

### a. The CERR Is Not Required to Pay for the Construction of the Calumet Sag Channel Bridge and Chicago Sanitary Channel Bridge

The Chicago Sanitary Canal Bridge and the Cal-Sag Channel Bridges were constructed as part of major public works projects to reverse the flow of the Chicago and Calumet Rivers so they would not flow into Lake Michigan. The existing railroads would not have been required to build new bridges over new man-made waterways that cut through their railroad networks.

Photographs of the Cal Sag Channel bridges show the bridges all look alike, using essentially the same design, even though they are owned by different railroads.[294] If the individual railroads had been required to build these bridges at their own expense, this uniformity would not exist. Each railroad would have built its bridge to match the railroad's bridge standard of the day.

All evidence and references to the construction of these bridges indicates that these railroad bridges were public works projects that were funded with public money. The evidence presented on Opening – while not detailing the

[294] *See* Consumers Rebuttal e-workpapers "Cal-Sag Bridges Aerial.jpg;" "Cal-Sag Bridges #3-#7.jpg;" "Cal-Sag Bridges #5- #7.jpg."

specifics of the construction for these bridges – does clearly show that this was a public works project.[295] However, in response to CSXT's protests to these bridges being publicly funded, Consumers performed additional research and found direct evidence of the Sanitary District funding the construction of these bridges in the Daily News Chicago Almanac circa 1912.[296]

CSXT's is wrong to argue that the CERR should still have to pay something because replacement spans may exist because these bridges were specifically constructed to span a newly constructed channel. Even if some minor canal existed before these major public works projects began, any pre-existing bridges would be insignificant in size, and nowhere near the size of the current bridges. Moreover, CSXT has not provided any evidence that it ever incurred such costs for the original spans or any potential replacement spans.

For the above reasons, Consumers maintains its position on Opening and omits the costs for the Calumet Sag Channel Bridge and the Chicago Sanitary Channel Bridge.

**b. <u>The CERR's Bridges are Already Designed to Allow Sufficient Space for Below-Bridge Water Flow, Automotive Traffic, and Pedestrian Traffic</u>**

The CERR's bridges have the same opening sizes as the CSXT Bridges because they can be built with vertical backwalls, which have the same

---

[295] *See* Consumers Opening e-workpaper "Bascule Bridge Over CSSC Railway Gazette indicating that the Sanitary district paid.pdf."

[296] *See* Consumers Rebuttal e-workpaper "Sanitary District of Chicago_Calumet_Sag Bridge Construction.pdf."

openings as wall abutments. CSXT's engineers wrongly assume that the CERR's proposed bridges must have a spill slope, even though Consumers added costs on Opening to include pre-cast wing walls. For bridges over streets and highways, CSXT proposes very expensive cast in place "Wall Abutments" at three times the price of the CERR's proposed steel pile and precast wing wall design. For stone arch bridges over streams and dirt roads in rural areas, CSXT proposes doubling or even tripling the bridge lengths.

Consumers designed the CERR bridges to be able to be built to span the same length as the current CSXT inventory. The size and design of the wing wall will vary depending on the conditions under the bridge, but such items can still be pre-cast, rather than cast in place.[297] The precast wing walls can provide a vertical face where required. The precast wing wall cost was based on the most common wing wall design used by other Class 1 railroads, per the quote from Coreslab.[298] This was intended as an "average cost" not necessarily the cost for every location. In the case of the vertical face wing walls used to span over city streets, no Rip Rap will be required even though all three bridge types have $18,200 included in the abutment costs for Rip-Rap.[299] After applying the

---

[297] *See* Consumers Rebuttal e-workpapers "Bridge Costs_Reply.xlsx," tab "Bridge Type 3," "Coreslab RR Brochure.pdf," Contech Pre Cast Wing Walls.pdf," "Typical Chicago Street.pdf." *See also* Consumers Opening e-workpaper "Coreslab Precast Components Cost.pdf."

[298] Consumers Opening e-workpaper "Coreslab Precast Components Cost.pdf."

[299] CSXT Reply e-workpaper "Bridge Costs_Reply.xlsx," tab "Bridge Type 3," cell C18 ((rows 76-91, IHR 3.80, AFE A35844).

location factor, the Rip Rap cost included in Chicago Streets Bridges is $23,600 per bridge.[300] The lower than average Rip Rap cost for Chicago Streets Bridges, $23,600 below average (since Rip Rap is not needed at all), will offset the higher than average wing wall costs. Pre-Cast wing wall panels costs presented in opening and not challenged in reply, are $1,000 each plus $2,500 per lift. The $23,600 Rip Rap allowance will cover the cost of 6 additional Pre Cast Wall panels. The pre-cast wing wall cost is applied to every bridge, even though there are some locations where wing walls would not be necessary.[301]

The railroad bridges over the streets of Chicago will not have a spill slope, but instead require vertical face wing walls. The abutments can still be driven piles with pre-cast pile caps and the wing walls can still be pre-cast construction, exactly like the proposed CERR prototypes. Columns placed at the edge of the road, between the road and the sidewalk, and one set in the median, is the norm in the City of Chicago. For example, on the Blue Island Subdivision, this exact configuration was observed 19 times, and only 3 of 29 bridges do not have some intermediate columns in the sidewalk or median, yet CSXT Engineers

---

[300] Consumers Rebuttal e-workpaper "Bridge Costs_Reply_Rebuttal.xlsx," tab "Route Bridges," column Y (location factor) and tab "Bridge Cost by Type Summary," cell D13 (location factor for Kentucky) (most of the location factors in column Y are for Chicago, these are significantly greater than the one in Kentucky at cell D13).

[301] *See* Consumers Rebuttal e-workpapers "Bridge Costs_Reply_Rebuttal.xlsx:" tab "Bridge Type 1," cell C15; tab "Bridge Type 2," cell C22; tab "Bridge Type 3," cell C18; "Coreslab RR Brochure.pdf," Contech Pre Cast Wing Walls.pdf," "Typical Chicago Street.pdf." *See also* Consumers Opening e-workpaper "Coreslab Precast Components Cost.pdf. "

in reply claim this arrangement is "unacceptable." On the BRC portion used by the CERR there is not a single bridge that does not have columns located on either the sidewalks or median. The typical 4 span arrangement is used on 25 of the 31 railroad over street bridges.[302] For the CERR in Chicago north of the Cal-Sag Channel , the 4 span arrangement with a Type 1 or Type 2 superstructure is used on all but 6 bridges,[303] where the longer spans of the Type 3 bridge are needed.[304]

Rather than delving onto average abutment and wing wall costs, CSXT engineers propose lengthening some bridges by outrageous proportions, at least doubling and sometimes tripling the existing bridge length. At MP 61.0 of the Grand Rapids Sub, it is proposed to replace a 24' concrete arch bridge with an 84 feet long, 4 span, type 1 bridge.[305] At MP 34.80 of the Grand Rapids Sub, it is proposed to replace an 18' concrete box bridge with a 108 feet long, 5 span, type 1 bridge.[306] There are a number of additional proposed length increases, equally

---

[302] Consumers Rebuttal e-workpaper "Bridge Costs_Reply_Rebuttal.xlsx," tab "Route Bridges," column M, rows 43-71.

[303] *Id.* at column M, rows 84-114.

[304] *See* Consumers Opening e-workpaper "Field Photos Barr Blue Island and Kenton Subs.pdf " (at 10-277 depict the Blue Island Sub bridges north of the Cal-Sag Channel) (at 377-621 depict the Kenton Sub bridges).

[305] *See* Consumers Opening e-workpaper "Field Photos Grand Rapids and Freemont Subs.pdf" at 794 (photo P8060795).

[306] *See* Consumers Opening e-workpaper "Field Photos Grand Rapids and Freemont Subs.pdf" at 1058 (photo P8061059).

absurd, that are in remote locations where reconnaissance photos were not taken.[307]

### c. Additional Reponses to CSXT Bridge Design and Cost Corrections

CSXT individually challenges almost every bridge configuration.[308] This is despite the fact that individual bridge span lengths were not provided by CSXT in discovery. Instead, CSXT's bridge list provided just the overall length of the bridge and the number of spans.[309] An average span length was computed by dividing the length by the number of spans. For this reason, Consumers does not know every span length of every bridge because that information was not provided in discovery.

CSXT's engineers were very excited by the possibility that some individual spans might exceed the 50 feet span length of the Type 3 prototype bridge. CSXT's engineers specifically reference the bridge at MP 36.0 of the Grand Rapids Subdivision, which crosses the Kalamazoo River.[310] The overall length of the bridge is listed at 356'-0" and has 7 spans. The average span length is the 50.85 feet, or 50'– 10." But this does not mean a completely different bridge type must be developed. The superstructure of the Type 3 Bridge is an

---

[307] Comments for individual bridges are contained in the spreadsheet. Cite to Spreadsheet X at column_.

[308] Reference cost spreadsheet, column P of the Route Bridges Tab.

[309] Consumers Rebuttal e-workpaper "Bridge Costs_Reply_Rebuttal.xlsx," tab "Route Bridges," columns L & M.

[310] *See* CSXT Reply e-workpaper "Bridge Costs_Reply.xlsx," tab "Route Bridges" row 10," cells P10 & Q10.

exact replica of a CSXT bridge, which spanned 50' and used six parallel W36x302 rolled beams. The W36x302 is not the only beam size ever made or readily available. The W36x302 rolled beam is in the middle of a series of available beams. There are 8 different W36 rolled beams heavier (stronger) than the W36x302 and an even greater number lighter than the W36x302. For this one bridge that has spans a mere 2% longer than the prototype, Consumers' engineers simply elected to use the next size larger beam. It is nominally the same size, but the webs and flanges are slightly thicker. It weighs more and thus does cost more. But for every span of a Type 3 bridge that is less than 50' long, lighter beams could be used and the lighter beams will cost less. The 50' span is not the upper limit of the Type 3 Bridge, it is the point where the cost estimating formula is the most accurate.[311] Slightly longer spans merely require slightly heavier beams, which are available. A Type 4 Bridge could have been developed as a scaled up version of the Type 3 Bridge using larger beams. This was not done because the bridge inventory could be reasonably replicated with the three bridge types presented in opening.[312]

CSXT unnecessarily rejects the pier design for the Type 3 Bridge, apparently oblivious to the fact that this was their design, used on their bridge at

---

[311] This is because the prototype bridge used for the Type 3 Bridge spanned 50' and used six parallel W36x302 rolled beams.

[312] *See* Consumers Rebuttal e-workpaper "W36 beam sizes.pdf."

{ }.[313] They claim there are not enough piles per pier when that is the quantity they used for their bridge with 50' spans. They are correct in claiming that Consumers provided no sketches, plans or details depicting what this bridge looks like. This information should have been provided by CSXT in discovery when the information on { } was requested. Had this information been provided to Consumers in discovery, it would have been included in the opening work papers. Apparently, CSXT not only withheld information from Consumers, they also withhold information from members of their own team, as they claim ignorance about a recently built CSXT bridge. The Cost Estimate for AFE A35844,[314] indicates 24 piles and 24 H-Pile Points were used for a bridge that requires 4 support frames (one at each end and two intermediate supports). If indeed 8 piles were used for each pier at MP IHR 3.80, CSXT could have produced drawings or photographs proving this, but they did not. The six piles are in a single row, similar to the arrangement shown in Consumers Opening e-workpaper "CSXT ballasted deck.pdf." The argument about the need for wider and heavier precast pier caps is unfounded since a single row of piles is used.[315]

---

[313] *See* CSXT Reply e-workpaper "Bridge Costs_Reply.xlsx," tab "Bridge Type 3," (rows 76-91, IHR 3.80, AFE A35844).

[314] *See* Consumers Rebuttal e-workpaper "Bridge Costs_Reply_Rebuttal.xlsx," tab "Type 3."

[315] *See* Consumers Opening e-workpaper "CSXT ballasted deck.pdf."

There are 5 locations over river crossings where CSXT laments about additional bridge piers potentially blocking river flow. In four instances the existing bridges use two spans and thus have one large pier right in the middle of the river. The CERR uses three span bridges so that piers will be located closer the shore of the river or in the flood plains on either side, and most importantly, no pier in the middle of the river where the current is the strongest. The size of the existing piers in the middle of the rivers are very large, generally about 4 feet wide, compared to the piers created by using 14" H-Piles that are nominally 14" wide.[316] The cross section of the proposed CERR piers are less than half the size of the existing stone and concrete piers, plus their locations away from the middle of the river are clearly advantageous for greater water flow.[317]

**d. Highway Overpasses**

Consumers on Opening for its costs used an overpass that was built to cross CSXT tracks.[318] Consumers also assumed that the CERR would be responsible for 10% of the costs for the highway overpasses.[319] CSXT on Reply accepts Consumers' inventory of highway overpasses and costs, but adds costs for an overpass at Cottage Grove, relocates one of the existing highway overpasses,

---

[316] USGS maps, aerial photos and a sketch depicting these bridges are included as links to work papers in the bridge cost Spreadsheet. *See* Consumers Rebuttal e-workpaper "Bridge Costs_Reply_Rebuttal.xlsx."

[317] *See* Consumers Rebuttal e-workpaper "Typical River Bridge.pdf."

[318] *See* Consumers Opening at III-F-68.

[319] *Id.* at 70.

and then seeks 100% of the costs at two locations because CSXT contends they were greenfield construction.

Consumers rejects the costs for a flyover at BI 248.3 (Clark Road).[320] In the first instance, a flyover would not work due to elevation problems with nearby turnouts, and it would need to instead be a highway overpass. More importantly this is a "back entrance" that has over a dozen pre-existing at-grade crossings that are frequently obstructed by passing trains. Therefore it makes the most sense to keep the at-grade crossings because the main access to the site is via Buchanan Street at BI 245.83 where there are currently no at-grade crossings.

Consumers also rejects the overpass at Cottage Grove because the overpass at DC 9.97 was purposefully avoided by fouling the track along the main line whenever the train length was greater than the available track between this point and the main line. Basically, the longer trains are just kept on the main line for ~30 minutes, which isn't a problem and this parameter was incorporated into the RTC model.

Lastly, CSXT failed to submit evidence of this greenfield construction and Consumers was unable to determine why these particular locations would qualify for 100% cost reimbursement. As such, these additional costs are rejected.

---

[320] This was proposed as a bridge, but is discussed here because it would only work as an overpass. *See* Consumers Rebuttal e-workpaper "Bridge Costs_Reply_Rebuttal.xlsx," tab "Reply Summary," row 11.

For the above reasons, Consumers rejects all of CSXT's proposed additional costs and modifications to the highway overpasses inventory.

**6. Signals and Communications**

Consumers on Opening provided for a CTC traffic control system from the CERR's Blue Island and Barr Subdivision main lines between 22nd and Curtis.[321] The remainder of the CERR lines between Porter and West Olive are "dark" territory.[322] CSXT on Reply has accepted most of the signal and communications costs and configurations, but modified the interlocking configurations, added some signal components, and added shipping costs for a significant number of the signals components.[323] On Rebuttal, Consumers generally accepts CSXT's additional costs, but rejects the following modifications proposed by CSXT: (a) 15% markup of materials; (b) the changes to the rate for the site engineer; (c) the foundation costs for the tower and the shed; (d) fencing around the microwave towers; (e) the total track connector costs; and (f) the total BRC Signal Bridge costs.

A comparison of Consumers' and CSXT's Signals and Communications costs for the CERR is summarized below in Rebuttal Table III-F-12.

---

[321] Consumers Opening at III-F-70.

[322] *Id.*

[323] *See* CSXT Reply at III-F-108-109.

**REBUTTAL TABLE III-F-12**
**CERR Signal and Communications Costs**
(millions)

| | Item | Consumers Open[/1] | CSXT Reply[/2] | Consumers Rebuttal[/3] | Difference |
|---|---|---|---|---|---|
| 1. | Signals and Wayside CTC | $13.11 | $19.83 | $15.69 | $4.13 |
| 2. | Communications | $5.92 | $11.19 | $10.77 | $0.43 |
| 3. | Crossings | $12.07 | $12.27 | $12.27 | $0.00 |
| 4. | AEIs and FEDs | $1.03 | $1.13 | $1.13 | $0.00 |
| 5. | Central CTC | $0.84 | $0.84 | $0.84 | $0.00 |
| 6. | Locomotive PTC | $0.85 | $1.27 | $1.27 | $.000 |
| 7. | **Total Signal & Communications Costs** | **$33.82** | **$46.54** | **$41.97** | **$4.56** |

[/1] Consumers Opening e-workpaper "CERR Opening C-S Costs.xlsx."

[/2] CSXT Reply e-workpaper " CERR Opening C-S Costs_Reply.xlsx"

[/3] Consumers Rebuttal e-workpaper " CERR Opening C-S Costs_Rebuttal.xlsx"

**a. 15% Markup of Labor and Materials is Not Warranted**

Consumers on Opening already included the 15% markup of labor,[324] and so CSXT adding these costs again on reply duplicates these costs.[325] Additionally, on Reply CSXT adds a 15% markup to the material costs but does not provide an explanation or reason for this across the board increase in costs.[326] This general markup of materials is not consistent with Board precedent, and a

[324] *See* Consumers Opening e-workpaper "CERR C-S Costs.xlsx," tab "Signal & Comm Costs," column H, and tab "Components," column L.

[325] *See* CSXT Reply e-workpaper "CERR C-S Costs_Reply.xlsx," tab "CSXT Reply Totals," column R.

[326] *See id.*

review of the decisions and testimony in AEPCO, DuPont, and SunBelt indicate that this may be a new cost that was either added accidentally, or is an attempt to surreptitiously set new precedent regarding materials costs. Either way, Consumers rejects the additional markup of labor by 15% and the markup of materials by 15%, which reduces costs by $4.6 million.[327]

**b. CSXT Overstates the Foundation Costs for the Sheds and the Towers**

CSXT overstates the costs required for the sheds and the towers.[328] Foundations are poured into trenches or pits and buried. There is no need to erect and strip forms, erect and strip keyways, cure and protect concrete or rub and patch irregularities. The tower foundations are done in two pours, a base or mat,[329] which can be done crudely since it is buried. CSXT's spreadsheet shows many of the concrete items listed twice, because they have estimated the base and columns separately.[330] CSXT's estimates have been revised to only include the base for the towers.[331] Additionally, for the communications shed, it is small enough that it is

---

[327] CSXT Reply e-workpaper "CERR C-S Costs_Reply.xlsx" (sum of cells in column R = $31,017,032); Consumers Rebuttal e-workpaper "CERR C-S Costs_Rebuttal.xlsx" (sum of cells in column R = $26,456,141). $31,017,032-$26,456,141 = $4,560,891.

[328] *See* Consumers Rebuttal e-workpapers "CSX Communications Tower and Shed Cost Estimate Revised.pdf.

[329] *See* Consumers Rebuttal e-workpaper "tower with foundation.pdf" (illustration of typical foundation for a tower).

[330] *See* CSXT Reply e-workpaper "CSX Communications Tower and Shed Cost Estimate.pdf."

[331] *See* Consumers Rebuttal e-workpapers "CSX Communications Tower and Shed Cost Estimate Revised.pdf.

not necessary to include rebar in the footers. It is also not necessary to include costs to cure or rub and patch the footers, which is instead something included for a house or higher-end installation. The remaining costs are more reasonable and have been revised to be approximately $500 per cubic yard of installed concrete. These revisions result in an overall decrease in costs from the CSXT Reply of $19,778.[332]

**c. Revising the Cost for the Site Engineer is Not Warranted**

Consumers rejects CSXT's increase for Site Engineer labor for the microwave towers given the inclusion of several other engineering tasks including a frequency study, a feasibility study, and a path and contour analysis.[333]

**d. Fencing Around the Microwave Towers**

Consumers has eliminated the fencing around the microwave towers because there is already sufficient fencing around the sheds. As proposed, CSXT would be constructing a fence inside a fence, and therefore Consumers has eliminated the interior fence.[334]

---

[332] *See* Consumers Rebuttal e-workpapers "CSX Communications Tower and Shed Cost Estimate Revised.pdf;" "CERR LMR Cost Development_Rebuttal.xlsx," cells O31 & O34; CSXT Reply e-workpaper "CERR C-S Costs_Reply.xlsx" (Total Tower Costs; Reply = $42,109,485; Rebuttal = $42,101,320) (Total Shed Costs; Reply = $42,109,485; Rebuttal = $42,097,872).

[333] *See* CSXT Reply at III-F-118; Consumers Rebuttal e-workpaper "CERR LMR Cost Development_Rebuttal.xls," row 13, columns O & P.

[334] *See* CSXT Reply e-workpapers "CERR LMR Cost Development_Rebuttal," tab "Per Tower Equipment," cells O32 & P32.

### e. CSXT's Total Track Connector Costs are Too High

The track connector costs used by CSXT were not for track connectors, but instead were for joint bars. These costs have been revised by Consumers' engineers to be $2.50[335] per connector, instead of $41 per connector.[336]

### f. CSXT Overstates BRC Signal Bridge Costs

Signal bridge costs were overstated for one of the signal bridges added because of the five tracks, the BRC only owns three, and this is reflected in the evidence submitted by CSXT.[337] Consumers on Rebuttal revises the BRC ownership for this bridge accordingly.[338]

## 7. Buildings and Facilities

Consumers on Opening included costs for facilities that included a headquarters building, a locomotive shop, in addition to roadway buildings for crew changes and maintenance of way staff. [339] Consumers did not provide extensive facilities because as discussed on Opening, the CERR is limited both geographically and has relatively few staff.[340] CSXT in Reply took issue in several instances with the limited nature of the facilities, and added features that

---

[335] *See* Consumers Rebuttal e-workpaper "CERR Track Connector.pdf."

[336] *See* CSXT Reply e-workpaper "CSXT Unit Cost Workpapers.pdf" at 3.

[337] *See* CSXT Reply e-workpaper "BRC - Signal Bridge MP 14.55.pdf" ("BRC Responible Fro [sic] 3/5 (60%) of Signal Bridge (Typical)").

[338] *See* Consumers Rebuttal e-workpaper "CERR C-S Costs_Rebuttal.xlsx," tab "Rebuttal Totals," cell F77.

[339] Consumers Opening at III-F-76.

[340] Consumers Opening at III-F-76.

are not justified given the scope of the CERR operations. Table III-F-13 below summarizes the differences between Consumers and CSXT's proposed building and facilities investments for the CERR.

**REBUTTAL TABLE III-F-13**
**CERR Road Property Investment Costs**
(millions)

| | Section | Consumers Open[/1] | CSXT Reply[/2] | Consumers Rebuttal[/3] | Difference |
|---|---|---|---|---|---|
| 1. | Headquarters Building | $2,051,902 | $2,724,806 | $2,486,955 | $237,852 |
| 2. | Locomotive Shop & Office | $2,475,048 | $6,308,759 | $2,142,321 | $4,166,438 |
| 3. | Roadway Buildings (Crew, MOW) | $1,246,273 | $8,723,935 | $1,426,823 | $7,297,112 |
| 4. | Yard Site Costs | $6,092,900 | $8,719,636 | $6,326,132 | $2,393,504 |
| **5.** | **Total Building and Facilities** | **$11,866,122** | **$26,477,136** | **$12,382,231** | **$14,094,905** |

[/1] Consumers Opening e-workpaper "III-F- TOTAL - 2015.xlsx"

[/2] CSXT Reply e-workpaper "III-F- TOTAL - 2015_Reply.xlsx"

[/3] Consumers Rebuttal e-workpaper "III-F- TOTAL - 2015.xlsx"

### a. Headquarters Building

Consumers on Opening provided for a headquarters building for the CERR at the West Olive yard in Michigan.[341] CSXT has accepted the location for the headquarters building, but has added several items including a headquarters support building.[342] Consumers' engineers accepts CSXT's site costs for the

[341] *See* Consumers Opening at III-F-77.

[342] *See* CSXT Reply at III-F-120-125.

Headquarters Building of $461,590,[343] but rejects most of the building cost increases proposed by CSXT's engineers because they are unjustified given the limited scope and operations of the CERR.[344] As such, Consumer's engineers reject any addition of overall increase in square footage for the headquarters building.

CSXT accepted the CERR's placement of the headquarters building location at its West Olive yard in Michigan.[345] Therefore, it makes no sense to have the foundation conform to the Chicago Municipal Code. Michigan Building Code is based on the International Building Code and therefore, while Consumers will accept that a foundation will be required, it only needs to use an arrangement of 24" diameter x 48" deep concrete piers. In total, there will need to be 348 piers at a cost of $277 each for the foundation, bringing the total cost for the foundation to $96,370.10.[346] Additionally, a floor slab is not required because the site under the building will be cleared, excavated and filled with a dozer.[347] This method

---

[343] *See* CSXT Reply e-workpaper "2015 Buildings_Reply.xlsx" at Cell D10.

[344] CSXT's engineers list the total costs for the Headquarters Building as $2,724,806 ($461,590 = site costs; $2,259,338 = building costs; $3,879 = tie to existing sewer; $2,724,806 = total costs). *See* CSXT Reply e-workpaper "2015 Buildings_Reply.xlsx," tab "Total Building Cost Summary," row 10 (cells F10 & G10 list total costs); CSXT Reply at III-F-120, Table III-F-16 at tow 1, column "Reply."

[345] *See* CSXT Reply at III-F-120.

[346] *See* Consumers Rebuttal e-workpaper "ModSpace Building Foundations.pdf"

[347] *See* Consumers Rebuttal e-workpaper "2015 Building Sites_Rebuttal.xlsx," tab "Headquarters," cells D4 and D5.

provides a flat compacted earth surface that is free of debris and that is all that is required under a building of this type.[348]

It is unclear why CSXT's engineers list "critical communications equipment"[349] as a Headquarters Building cost when these costs are already included as part of the Section 6 "Signals and Communications" costs.[350] Further, the CTC Office System costs, which were included as part of the Central CTC costs, were accepted by CSXT on Reply as part of Signal and Communications costs.[351] Therefore, Consumers rejects CSXT's additional costs for "critical communications equipment" that are listed as "Headquarters Building" costs.[352]

Consumers' engineers reject the additional costs for an Electrical Room because there is already a Mechanical Room and Server Room. Therefore, there is no need for an extra "Electrical Room" given that this equipment can be accommodated in the Mechanical Room.

---

[348] Consumers' engineers note that a concrete slab is convenient for crawling under the building to make repairs but it serves no other purpose.

[349] CSXT Reply at III-F-122.

[350] *See* Consumers' Opening at III-F-72-73 ("The entire system is linked into the dispatching center at the CERR's West Olive headquarters. . .the dispatching center costs are presented in this section.").

[351] *See* CSXT Reply e-workpaper "CERR C-S Costs_Reply.xlsx," at tab "Components," cell N51 (CTC office system material unit costs); and at tab "CTC," cell E5.

[352] This "critical communication" equipment for headquarters is listed by CSXT to cost $109,550.25. See CSXT Reply e-workpaper "2015 Buildings_Reply.xlsx," tab "Headquarters" ( sum of Cells E29+E30+E31+E32).

Fire protection was not omitted and the original quote provided by Consumers from ModSpace[353] includes both a fire alarm and a sprinkler system. Consumers' headquarters building also included a mechanical room to house the system.

Consumers accepts CSXT's costs for emergency backup power and for exterior stairs and a handicap accessible ramp. But Consumers rejects the pavement marking costs because the lot is gravel. The pavement marking costs (assuming there is pavement) are also not justified because there is adequate parking at this facility and a limited number of employees. Consumers, unlike CSXT, is not planning to include a support building and base 32 MOW staff at this facility so parking will be less of an issue. Consumers is also rejecting CSXT's proposed addition of locker rooms because these facilities are in the crew change building.

**b. Headquarters Support Building**

Consumers on Opening did not provide for a headquarters support building. CSXT on Reply is adding this building, stating that "[a]n additional 32 MOW staff will be based here who do not require offices but will need to access facilities such as restrooms and lockers."[354] Consumers rejects this addition of the Headquarters Support Building because the existing crew change facilities and

---

[353] Consumers Opening e-workpaper "HQ MOW CREW ModSpace Building Proposal.pdf" at 18-19

[354] CSXT Reply at III-F-123.

Headquarters Building will provide adequate space for staff. It also makes no sense to have all personnel for the CERR located in West Olive.

### c. Fueling Facilities

Consumers on Opening did not provide for any fixed fueling facilities as direct-to-locomotive ("DTL") fueling will be performed by trucks at the CERR's Barr Yard and the Campbell plant.[355] CSXT on Reply agrees with this fueling arrangement, but includes additional costs for oil/water separators, asphalt, and lighting.[356] As discussed below, Consumers agrees to modify its costs for lighting, but rejects CSXT's request for additional asphalt and oil/water separators.

#### i. No Additional Oil/Water Separators are Required

Consumers' engineers reject CSXT's proposed increase in the total number of oil/water separator systems because it is completely illogical to have nine when at the CERR's Barr Yard these would only need to be installed to cover spills and drainage from the three fueling locations in addition to the locomotive shop. CSXT's only justification for this increase is that nine are required to match Consumers' Opening narrative.[357] But CSXT misquotes exactly what Consumers' engineers stated on Opening, and it is clear from Consumers workpapers that this

---

[355] Consumers Opening at III-F-78.

[356] CSXT Reply at III-F-124-125.

[357] CSXT Reply at III-F-124.

was not an error or omission by Consumers' engineers.[358] With the benefit of hindsight, Consumers would have included a longer description of the fuel containment system, but it was most definitely not Consumers intent to have nine oil/water separators when there are only three fueling locations and the locomotive shop.[359] Further, CSXT's Reply workpapers provide costs for only four oil/water separators and state, just as Consumers' Opening workpaper did, that one is required at the locomotive shop and three total for each of the three fueling points in the Barr Yard.[360] The fueling pads and the locomotive shop are each connected to oil/water separator systems, and as depicted on the "BARR YARD.pdf," these fueling pads are clustered in three distinct locations at the facility. Just as a gas station will typically have only one oil/water separator, Consumers' engineers provided for an oil/water separator at each cluster of fueling pads. Therefore, between the fueling locations and the locomotive shop there are only a total of four oil/water separators.

---

[358] CSXT's Reply provides that "Consumers' narrative states that '[f]or the locomotive shop and each of the eight fueling pads there is an oil/water separator system that is part of the containment cost." CSXT Reply at III-F-124. However, Consumers' Opening narrative states that "[f]or the locomotive shop and for each of the eight fueling pads there is an oil/water separator system that is part of the fuel containment system." Consumers Opening at III-F-85.

[359] *See* Consumers Opening e-workpaper "BARR YARD.pdf."

[360] *See* CSXT's Reply e-workpaper "2015 Buildings_Reply.xlsx," tab "Locomotive Shop Equipment," cell I17 (there are a total of "4 Oil interceptors = 1 for loco shop and 1 for each of 3 fueling points in Yard").

### ii. Asphalt Meets Illinois DOT Standards

Consumers reject s CSXT's increase in costs for additional asphalt to accommodate heavier fuel trucks. CSXT's engineers state that "a heavier industrial asphalt section [is] necessary to accommodate the heavier loads for [the DTL fuel trucks]."[361] But this extra asphalt is not warranted because Consumers' engineers included a 6-inch compacted subbase such that a 4-inch section of pavement will accommodate these fuel trucks and is what is required for local roads in Illinois,[362] which are designed for loads of 80,000 lbs or 40 tons.[363] Notably, in the United States the federal commercial maximum gross vehicle weight without special permitting is 80,000 lbs,[364] and the fuel trucks will not be exceeding this limit. UP on its website states that "transportation modes for diesel fuel" include a "7500 gallon transport truck", or a "2500 to 4000 gallon tank wagon", in addition to rail and barge.[365] The load a semi-trailer would haul is 7,500 gallons, or 27 tons, and a typical tank wagon with a carrying capacity of

---

[361] CSXT Reply at III-F-124.

[362] *See* Consumers Rebuttal e-workpaper "ILDOT district 1 asphalt paving.pdf."

[363] *See* ILDOT, Bureau of Local Roads & Street Manual at 1463, http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-&-Handbooks/Highways/Local-Roads-and-Streets/Local%20Roads%20and%20Streets%20Manual.pdf (80,000 lb load limit).

[364] *See* Consumers e-workpaper "U.S. DOT Maximum Vehicle Weight.pdf," http://ops.fhwa.dot.gov/Freight/sw/overview/index.htm (last accessed May 14, 2016).

[365] *See* UP, Transportation of Fuel to Union Pac. R.R., https://www.up.com/suppliers/orderinfo/fuel_transportation/index.htm (last accessed May 14, 2016).

4,000 gallons has a gross vehicle weight of approximately 56,000 lbs.[366] For the above reasons, Consumers rejects the additional costs for "a heavier industrial asphalt section" because the road as designed on Opening will accommodate the DTL fuel trucks.

#### iii. Consumers Agrees to Revise Lighting Costs

Consumers' engineers reject CSXT's proposed unit costs for the additional lighting fixtures at the fueling pads. Consumers' engineers specified on Opening that there would be extra fixtures at the fueling pads;[367] however, Consumers' engineers did not add the correct number of lights and omitted the pole boxes. The spreadsheet has been revised on Rebuttal and CSXT's costs were used for the pole boxes.[368]

### d. Locomotive Shop & Office

Consumers' engineers based the design for the locomotive shop on the CSXT's existing shop at Barr Yard.[369] Consumers' engineers also modified

---

[366] *See* generally Seneca Tank Inventory, https://inventory.senecatank.com/tanktruck/Unit125655 (last accessed May 14, 2016).

[367] *See* Consumers Opening e-workpaper "FUELING PANS SITE.pdf."

[368] *See* Consumers Rebuttal e-workpaper "Building Sites_Rebuttal.xlsx," tab "YARD," cell X (number of lights) and cell Y (electrical enclosures, i.e. pole boxes); CSXT Reply e-workpaper "Electrical Enclosure - Unit Costs.pdf."

[369] *See* Consumers Opening e-workpaper "Loco Shop Blueprint - Barr Yard (CSX-CNSMR-C-16616 to 16648).pdf" at 4-5; Consumers Opening at III-F-79-80 ("the only key differences" between the existing Barr Yard and the CERR's Barr Yard, "is that the pit for CERR's locomotive shop is a different size and there is a jib crane" instead "of an overhead crane") .

the building to be one-level and to include additional storage.[370] Consumers' engineers had Kessel Construction, Inc. ("Kessel") based on the proposed design specifications[371] generate a quote for the locomotive shop and office.[372] CSXT on Reply made several modifications to the locomotive shop stating that despite Consumers' design including "the same number of ancillary items such as toilets and lockers, and …the same number of tracks and square footage as the [existing] Barr locomotive shop,"[373] that Consumers' design for the locomotive shop has "almost no relevance to the design of the actual Barr locomotive shop."[374] But it is illogical to have a large locomotive shop when the CERR only has 15 locomotives.[375] Consumers' engineers maintain on Rebuttal that with the exception of the additional costs for an H-Frame crane hoist,[376] that Kessel's quote of $2.5 million for the 17,050 square foot locomotive shop is adequate for the CERR operations.

### i. Costs for Inspection Pits Included in Opening

Consumers' engineers reject CSXT's proposed cost increases for inspection pits because Consumers' engineers on Opening included these costs.

---

[370] *Id.* at III-F-80.

[371] Consumers Opening e-workpaper "Locomotive Shop specs.pdf."

[372] Consumers Opening at III-F-80.

[373] CSXT Reply at III-F-125.

[374] CSXT Reply at III-F-125.

[375] Consumers Rebuttal at III-D-7.

[376] *See* Consumers Rebuttal e-workpaper "Jib Crane and Hoist Unit Costs.pdf" (additional cost of $7,625).

Of note, is that the drawings supplied by CSXT in discovery did not depict building foundations or pits.[377] However, Kessel's drawings did show foundations[378] and the pits are described in their proposal.[379] As such, Consumers' engineers reject these additional costs.

### ii. A 6.5 foot Pit Is Inadequate to House Drop Table Equipment

Consumers rejects any cost increases for a larger pit or a drop table because while the Barr Yard locomotive shop would allow for approximately 99% of running repairs to be made onsite, this facility is not designed to accommodate large-scale maintenance operations. As explained on Opening, "[t]he CERR's Barr Yard locomotive shop performs sanding, lubrication or other quick-turnaround servicing requirements as needed at the CERR's locomotive shop."[380] {

---

[377] See Consumers Opening e-workpaper "Loco Shop Blueprint - Barr Yard (CSX-CNSMR-C-16616 to 16648).pdf," at 6-7 of 33.

[378] Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Drawing Set.pdf."

[379] "The two 3'-6" deep "Gauge Pits" with "Jack Stand Pads" will each be 100' long and access[ed] by two sets of stairs at each end as show on the proposal dwg. Each side of the pits will have thickened floor slabs 24" thick by 36" wide the full length of the pits to be used for Jack Stands." Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Proposal.pdf" at 9.

[380] *See* Consumers Opening at III-D-12.

} Consumers' engineers did not include a drop table or larger pit because the existing Barr Yard, which is what Consumers engineers used in designing the pit, has a similar "wheel" or smaller pit to allow for single wheel sets. The terms "wheel pit" and "drop table" are sometimes used incorrectly,[382] and just as this industry article reports a drop table at the existing CSXT Barr Yard when due to space constraints it must be a wheel,[383] the Kessel proposal also used the incorrect terminology and used "drop table pit" instead of "drop pit."[384] CSXT seizes on the semantics to make this point and misstates what Consumers' engineers included in their Locomotive Shop design specifications with respect to a drop table.[385] CSXT's Reply incorrectly states that "Consumers requests pits. . .with one track including a 6.5 foot deep section for a drop table....," when Consumers never included a drop table as part of its specifications for the Barr Yard.[386] Consumers' engineers agree with CSXT's engineers that a 6.5' drop pit

---

[381] *See* CSXT Reply at III-D-28.

[382] A drop table pit is able to accommodate a 2 or 3 axle truck assembly. Here, a single axle drop pit is contemplated and this will allow for the removal of a single wheel set.

[383] *See* William C. Vantuono, *CSX re-opens Chi. Locomotive Shop*, RailwayAge (Dec. 18, 2014), http://www.railwayage.com/index.php/mechanical/locomotives/csx-re-opens-chicago-locomotive-shop.html?channel=.

[384] *See* Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Proposal.pdf" at 7.0 (p. 9 of 34).

[385] *See* Consumers Rebuttal e-workpaper "CSXT discovery drawing S-3.pdf" (shows a pit labeled "turn-table pit 6'-6" deep").

[386] *Compare id. with* CSXT Reply at III-F-126-127; *see also* Consumers Opening e-workpaper "Locomotive Shop specs.docx."

is inadequate to house drop table equipment. It was never Consumers' engineers intent to have such a small drop pit accommodate a drop table and as provided by the specifications to Kessel state, this is a "perpendicular drop pit 6'6" deep that is 9' x 38'."[387] Consumers' engineers were merely replicating the CSXT shop drawing provided in discovery that has a pit 6'6" deep.[388] At the CERR Barr Yard locomotive shop, it is expected that this pit will be used to remove a single wheel set and therefore a drop table or large crane, which is required to drop an entire truck assembly, is not warranted because these larger repairs would be sent out and {

}[389]

### iii. Consumers' Design Does Not Require Additional Exhaust Ventilation

Consumers rejects the costs for exhaust ventilation in the pits because ventilation is not required or necessary. The 6'6" pit will not have people working in it, and the 3'6" pit does not meet OSHA standard for a confined space

---

[387] Consumers Opening e-workpaper "Locomotive Shop specs.docx"

[388] *See* Consumers Rebuttal e-workpaper "CSXT discovery drawing S-3.pdf" (shows a pit labeled "turn-table pit 6'-6" deep").

[389] As explained on Opening, {

} no cost for overhauls of road locomotives is included in Consumers' calculations." *See* Consumers Opening at III-D-10-11.

as people are generally taller than 3'6" and therefore will not be "fully" entering the pit.[390] However, ventilation is provided for the production area.[391]

### iv. Additional Grinder Pump Costs are Not Required

Consumers rejects the additional costs for grinder pumps because the costs for drains were already included on Opening and there is nothing that would prevent the installation of a gravity fed drainage system. Consumers' engineers as part of the Locomotive Shop bid specifications provided to Kessel Construction, Inc. ("KCI") required the pits to have floor drains.[392] While Consumers' engineers did not specify whether the drains needed to be gravity fed or be equipped with pumps, given that the specifications clearly contemplated a drainage system and that KCI referenced these specifications in their proposal, these costs were included as part of the KCI quote.[393]

### v. Fall Protection was Included on Opening

Consumers rejects CSXT's proposed increase in costs for fall protection for the drop pit because railing costs were already included as part of

---

[390] *See* OSHA, Permit-Required Confined Spaces, https://www.osha.gov/Publications/osha3138.html (last accessed May 14,2016) ("By definition, a confined space: Is large enough for an employee to enter fully and perform assigned work....").

[391] *See* Consumers Opening e-workpapers "Chicago IL Locomotive Shop KCI Proposal.pdf" at 13.1 (p.23 of 36).

[392] Consumers Opening e-workpaper "Locomotive Shop specs.docx" at 1.1 and 1.2 ("Pits should have lights, power, air and floor drains."; and see generally Consumers Rebuttal e-workpaper "All Buildings CERR 2015.dwg." (provided to KCI for bid).

[393] *See* Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Proposal.pdf" at 2 (cover letter to Dick Balas).

the Kessel proposal.[394] Consumers also takes issue with CSXT's statement that "Consumers also only includes platforms at floor level on one track and omits fall protection, which makes this one platform unsafe and locomotives on other tracks inaccessible."[395] This statement by CSXT is incorrect as all of the platforms have fall protection[396] and the locomotives are all accessible at floor level platforms.[397]

### vi. Additional Fluid Service Storage and Distribution Equipment is Not Required

Consumers did not err by "omit[ing] fluid service storage and distribution equipment." It is not necessary for each of the service and inspection spots to have their own station with fluids. Further, there is adequate space in the equipment room and adjacent rooms such that the fluids can be stored in close proximity to the distribution equipment.[398] It would also be possible to temporarily store some of the fluids outside. Again, the CERR's Barr Yard is designed to service significantly fewer locomotives than the existing Barr Yard (15 dedicated CERR locomotives plus occasional inspection of road locomotives

---

[394] *See* Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Proposal.pdf" at 7.0 (p. 9 of 34) ("each side will have elevated platforms on each side with fixed railings.").

[395] CSXT Reply at III-F-127.

[396] Consumers Opening e-workpaper "Locomotive Shop specs.docx" at 1.2 ("Track also needs platforms (with handrails and stairs) on both sides of track at locomotive floor height.").

[397] *See id.*

[398] The two rooms are 35'x32' and 35'x39'. *See* Consumers Opening "Locomotive Shop specs.docx" at 1.7 ("32'x36' room in shop area for Mechanical equipment..."); "Chicago IL Locomotive Shop KCI Drawing Set.pdf" (room is at intersection of column lines B and 4).

v. "maintenance and repair of 120 locomotives per month" at existing Barr Yard),[399] and as such does not warrant additional space for fluid storage and distribution equipment because it will not be necessary as CSXT contends, to limit the "hostling of locomotives within the repair facility."[400]

### vii. Opening Design Included Sufficient Clearances and Structural Support

Consumers rejects CSXT's argument and associated costs for modifying the layout of the locomotive shop to increase clearances and structural support. The existing Barr Yard, which according to the CSXT blueprints provided in discovery[401] does not have the "12 freestanding support columns" called for as part of CSXT's Reply.[402] Problematically, the CSXT quote for the crane specifies that it is 95 feet wide,[403] whereas the CSXT locomotive shop drawing has the crane span as 97 feet,[404] proving that the crane is not sitting on the 12" columns it should be. If not an oversight, this is purposefully misleading as CSXT is arguing that their design is superior as it would have more open floor space and would not be obstructed by extra columns. But CSXT would need to

---

[399] *See* CERR Operating Statistics_Rebuttal.xlsx," cell K28. *See* William C. Vantuono, *CSX re-opens Chi. Locomotive Shop*, RailwayAge (Dec. 18, 2014), http://www.railwayage.com/index.php/mechanical/locomotives/csx-re-opens-chicago-locomotive-shop.html?channel=.

[400] *See* CSXT Reply at III-F-127.

[401] *See* Consumers Opening e-workpaper "Loco Shop Blueprint - Barr Yard (CSX-CNSMR-C-16616 to 16648).pdf."

[402] *See* CSXT e-workpaper "Overhead Crane Unit Costs.pdf" at 2.

[403] *See* id. at 4.

[404] CSXT e-workpaper "CERR Loco Shop Layout.pdf."

include two sets of columns because a separate set would be required in addition to the set already depicted by CSXT that are recessed against the wall.[405] Further, as discussed *infra* at III-F-d.viii, Consumers' engineers do not suggest that a bridge crane be added at the Barr Yard, which means that hose reels can continue to be hung from the ceiling and will not need to be floor mounted.[406] Of note, is that the existing CSXT Barr Yard, which has the same layout as the proposed CERR Barr Yard, services 120 locomotives per month. This is upwards of nine to ten times the number of locomotives that are expected to be serviced at the CERR's Barr Yard even when the sporadic maintenance of foreign locomotives is included.[407] Further, the existing CSXT locomotive shop at the Barr Yard has a partial wall between the two tracks, and as can be seen from the picture in the Railway Age article,[408] there is no clear path for a forklift to drive between locomotives and yet this facility is reported to have the capacity to service 120 locomotives a month. Given that the CERR's Barr Yard design was based on CSXT's existing Barr Yard, Consumers rejects these additional costs to increase clearances and structural support.

---

[405] *See id.*

[406] *See* CSXT Reply at III-F-127.

[407] *See* CERR Operating Statistics_Rebuttal.xlsx," cell K28; William C. Vantuono, *CSX re-opens Chi. Locomotive Shop*, RailwayAge (Dec. 18, 2014), http://www.railwayage.com/index.php/mechanical/locomotives/csx-re-opens-chicago-locomotive-shop.html?channel=.

[408] *See id.*

### viii. Consumers Accepts Costs for Larger Crane

As discussed above, the CERR's Barr Yard is not designed to accommodate large-scale maintenance operations. However, Consumers' engineers agree that a larger crane will be required to lift the wheel sets and therefore will accept the additional costs for the H-Frame crane hoist.[409] But the H-Frame crane hoist is all that will be required because Consumers' engineers specifically are not including a drop table, and as such there would be no reason to lift an entire truck assembly or to remove a traction motor. Instead, these items would be removed at the same off-site location where they would be serviced.[410]

### ix. A Drop Table is Not Required

Consumers engineers reject CSXT's proposed additional costs for a drop table because, as discussed *infra*, a drop table was never contemplated and was not included in the specifications[411] because the existing pit at CSXT's Barr Yard also has a maximum depth of 6.5 feet, which as CSXT states in their Reply does not allow for the installation of a drop table.[412] The fact that the proposal prepared by the building contractor states the costs for a drop table are not included cannot be used by CSXT as conclusive evidence that Consumers'

---

[409] *See* Consumers Rebuttal e-workpaper "Jib Crane and Hoist Unit Costs.pdf" (additional cost of $7,625).

[410] *See* discussion *supra* at III-F-7.ii regarding larger maintenance and repairs being performed off-site.

[411] *See* Consumers Opening e-workpaper "Locomotive Shop specs.docx."

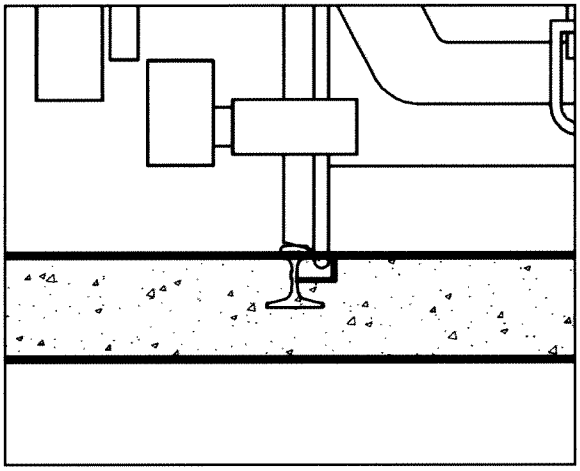
[412] *See* CSXT Reply at III-F-127 ("A 6.5 foot pit is not deep enough to house drop table equipment....").

engineers intended to include a drop table. This is a game of semantics, and given that Consumers' engineers never made reference to a "drop table,"[413] Consumers rejects these additional costs.

### x. Embedded Rail was Included in Opening Costs

Consumers' engineers agree with CSXT that embedded rail is required and these costs were accounted for in Opening.[414] The drawing below is from KCI's cross-section of the locomotive shop and it clearly depicts rail embedded in concrete:

**REBUTTAL FIGURE III-F-1: Cross Section of Rail Embedded in Concrete[415]**



[413] *See* Consumers Opening e-workpapers "Locomotive Shop specs.docx." (pit is referred to as a "drop pit" and not a "drop table pit"); "2015 Buildings.xlsx," tab "Locomotive Shop Equipment," cell A14 (pit is referred to as a "wheel pit (38'x9'x6.5')").

[414] It should be noted that while CSXT states the "locomotive shop contains a myriad of other omissions and inadequacies," frequently the costs for these items were included on Opening. *See* CSXT Reply at III-F-128.

[415] *See* Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Drawing Set.pdf" at 2 (drawing depicts locomotive sitting on rail that is in concrete).

While the first page of KCI's locomotive shop drawings does not show embedded rail, this is because this is a more general drawing and it uses ties to represent track.[416]

### xi. Pedestal Rail was Included in Opening Costs

Consumers rejects any additional costs for pedestal rail because these were included as part of the Opening costs. While Consumers' engineers did not specifically call out this item, the Locomotive Shop specifications require track to be placed in a 20'6" wide pit, and as depicted by KCI's drawing, they are in the center of this pit and therefore would require support.[417] KCI's proposal provides that "[s]upport stands for the train rail (supplied and installed by owner) will be fabricated, installed and finish painted."[418] Consumers' engineers included the costs for the rail "supplied by the owner" as part of the III-F-3 track for the Yard, and notably, this amount of track through the buildings is not deducted in the Yard track mile costs.[419] Consumers' engineers also had Kessel prepare this quote specifically because they have experience building locomotive shops.[420] This was not an error or omission, as CSXT suggests, but instead reliance by

---

[416] *See id.* at 1.

[417] *See* Consumers Opening e-workpaper "Locomotive Shop specs.docx" at 1.2; "Chicago IL Locomotive Shop KCI Drawing Set.pdf" at 1.

[418] *See* Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Proposal.pdf" at 7.0 (p. 11 of 36).

[419] *See* Consumers Opening e-workpaper "2015 Ballast & subballast Worksheet.xlsx," tabs " YARDS, LOCO SHOP," cells K6 and L6.

[420] *See* Consumers Rebuttal e-workpaper "Kessel experience.pdf."

CSXT on preliminary design drawings that were prepared to accompany KCI's bid.

### xii. Ramps Can Be Adjusted at No Additional Cost

If CSXT wants to dispute the slope of the ramps into pits that is fine, but Consumers does not see the point of this objection because the costs for ramps were included on Opening,[421] and the Kessel drawings were preliminary and not the final design. As such, the slope of the ramps could be modified without incurring any increase in costs.

### xiii. Stairs from Shop to Gage Pits Included in Opening

Consumers on Opening included stairs from the shop to the gage pits, and these were also included in Kessel's proposal.[422] Again, it appears that CSXT was relying on a cursory review of the Kessel drawing[423] instead of reviewing the text of Consumers' specifications and the Kessel proposal.

### xiv. Overhead Locomotive Doors are Adequate

CSXT's contention that the overhead doors are not large enough is without merit. Consumers' engineers had to scale off the measurements from the CSXT drawing that was provided in discovery,[424] because even though it was

---

[421] *See* Consumers Opening e-workpaper "Locomotive Shop specs.docx" (item 1.2 includes a "3'6" deep ramp").

[422] *See* Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Proposal.pdf" at 7.0 (p. 9 of 34).

[423] Consumers Opening e-workpaper "Chicago IL Locomotive Shop KCI Drawing Set.pdf."

[424] *See* Consumers Opening e-workpaper "Loco Shop Blueprint - Barr Yard (CSX-CNSMR-C-16616 to 16648).pdf" at 6.

stamped as a final design, these dimensions were not provided. At CSXT's existing Barr Yard locomotive shop the dimensions of the overhead doors are 14ft x 16.5ft. In comparison, the CERR's Barr Yard locomotive shop will have 12ft x 16ft doors, which is adequate for a locomotive that is only 10.5ft x 15.25ft.

#### xv. Emergency Backup Power is Not Required

Consumers rejects having emergency power for the locomotive shop because there was no evidence submitted by CSXT to suggest that the power outages are frequent or lengthy enough to warrant such a system for a small shop that is fairly limited and primarily serves 15 locomotives.

### e. Car Repair Shop

CSXT and Consumers are in agreement that the CERR does not require a Car Repair Shop.[425]

### f. Crew Change Facilities and Yard Office

Consumers on Opening provided for crew change buildings along the CERR at 71st Street, Barr Yard, Curtis, and West Olive.[426] CSXT on Reply removed the facility at the Barr Yard and proposed additional costs for a foundation, exterior stairs, paving, a women's restroom, and square footage. [427] Consumers rejects CSXT's proposal to remove the crew change facility at the Barr Yard and to increase the square footage, but has accepted some of CSXT's other design modifications.

---

[425] Consumers Opening at III-F-81; CSXT Reply at III-F-129.

[426] Consumers Opening at III-F-82.

[427] CSXT Reply at III-F-130-131.

Consumers accepts that concrete piers and a foundation will be required, but rejects CSXT's over-design requiring a perimeter foundation, stem walls, and a slab. A floor slab is not required because the site under the building will be cleared, excavated and filled with a dozer.[428] This method provides a flat compacted earth surface that is free of debris and that is all that is required under a building of this type.[429] Consumers also accepts the costs for the deeper footings for the Crew Change facility at 71st Street because it is located in the Chicago Municipal area, but rejects these costs for the Curtis office because it is most definitely not in the Chicago municipal area and as such would not be subject to these municipal code requirements.[430]

Consumers accepts CSXT's additional costs for ramps and stairs, but rejects the additional costs for "women's restrooms" because it included a separate single occupancy accessible restroom for that purpose. Each facility is designed to accommodate 15 persons, and as such having a separate locker room does not make sense beyond providing for a separate bathroom that locks, which can accommodate the opposite sex and handicapped personnel. This separate

---

[428] *See* Consumers Rebuttal e-workpaper "2015 Building Sites_Rebuttal.xlsx," tab "Crew Change," cells D4 and D5.

[429] Consumers' engineers note that a concrete slab is convenient for crawling under the building to make repairs but it serves no other purpose.

[430] *See generally* City of Chicago, Planning & Zoning Bureau, https://gisapps.cityofchicago.org/zoning/viewframe.htm (searchable map that illustrates Chicago municipal area).

bathroom also satisfies all legal requirements as it is a facility with an occupant load of fewer than 15 persons.[431]

Consumers also rejects the additional paving area and associated costs. Consistent with existing rail facilities, these parking spaces do not need to painted and are gravel.[432] Consumers' engineers also provided for 20 spaces, so even if two spaces are eliminated on the end to allow for additional room to maneuver, there will still be 18 spaces.[433] Notably, the amount of paving that CSXT proposes (432 square feet for Crew Change facilities and 864 square feet for MOW buildings) is only for the backup space at the end of the "dead-end aisle" - the little turn around area at the end of the parking lot. In summary, CSXT is proposing a paved area at the end of a gravel parking area so a car can back out of a space that isn't painted on a gravel lot. Given the bizarre nature of this request, Consumers is rejecting these additional costs.

**g. Maintenance of Way Buildings (Roadway Buildings)**

Consumers on Opening provided for Maintenance of Way ("MOW") office and garage buildings at the Barr Yard and at Grand Junction.[434] CSXT on Reply removes the MOW building at the Barr Yard, but keeps the MOW garage,

---

[431] According to the International plumbing code section 403.2.2, separate facilities shall not be required in structures where occupant load is fewer than 15 persons. *See* Consumers Rebuttal e-workpaper "International plumbing code 403.2.pdf."

[432] *See* Consumers Rebuttal e-workpapers "Google Earth MP 85.95.pdf" and "Google Earth MP 85.95 close up.JPG."

[433] *See* Consumers Opening e-workpaper "Crew Building.pdf."

[434] Consumers Opening at III-F-83.

and makes the same modifications to the MOW buildings that it did to the Crew Change Facilities.[435] Consumers rejects the removal of the MOW building at the Barr Yard and any increases to the overall square footage, but accepts some of CSXT's proposed design modifications.

Consumers accepts CSXT's additional costs for ramps and stairs and agrees to include additional costs for piers and a foundation.[436] However, as with the crew change buildings, Consumers rejects CSXT's other modifications requiring additional square footage and parking. The MOW building is designed to accommodate less than 15 occupants, as such, the parking area with 20 spaces (18 if two are removed for additional room to maneuver) is adequate. Likewise, given that fewer than 15 persons will be in the MOW building at any one time, having a separate single occupancy restroom will satisfy the female bathroom requirement.[437] Consumers also specifically rejects CSXT's over-design requiring a perimeter foundation, stem walls, and a slab. A floor slab is not required because the site under the building will be cleared, excavated and filled with a

---

[435] CSXT Reply at 131-132.

[436] Foundation will include twenty-six 24" diameter x 48" deep concrete piers. Each pier will cost $277, making the total foundation cost for each building $7,200. *See* Consumers Rebuttal e-workpapers "2015 Buildings_Rebuttal.xlsx," cell C16 (0.47 cubic yards per pier at $595/cubic yard = $277 per pier); "page 75 ModSpace Building Foundations.pdf" ($595/cubic yard).

[437] According to the International plumbing code section 403.2.2, separate facilities shall not be required in structures where occupant load is fewer than 15 persons. *See* Consumers Rebuttal e-workpaper "International plumbing code 403.2.pdf."

dozer.[438] This method provides a flat compacted earth surface that is free of debris and that is all that is required under a building of this type.[439]

**h. Turntable**

Consumers on Opening did not provide costs for a turntable, and on Reply CSXT adds these costs stating that one is necessary at the Barr Yard in order to turn the locomotives.[440] Consumers on Opening did not provide a reason or alternative to the turntable that exists at the current Barr Yard because a turntable is more of a historical item or relic that is no longer in use by most Class I railroads today.[441] In the past, when steam locomotives could only operate in one direction a turntable was a necessity, but today's diesel locomotives can run in both directions. Therefore, a turntable, like a drop table, would have little to no practical use at the CERR's shop that is designed to service 15 locomotives. Instead of a turntable, the "Y" track at the Dolton interchange that is 0.56 miles way from the shop could be used when it is necessary to turn the locomotives. For these reasons, Consumers rejects the costs of installing and maintaining a turntable.

---

[438] *See* Consumers Rebuttal e-workpaper "2015 Building Sites_Rebuttal.xlsx," tab "MOW," cells D4 and D5.

[439] Consumers' engineers note that a concrete slab is convenient for crawling under the building to make repairs but it serves no other purpose.

[440] CSXT Reply at 132.

[441] Consumers' engineers actually tried to cost this item but not surprisingly, the only record found was of the Illinois Railway Museum's purchase in an auction of the UP Burnham shop's turntable for $10,000. *See* Consumers Rebuttal e-workpaper "A BIG announcement - Illinois Railway Museum Blog.pdf."

### i. Air Compressor Building & Yard Air Systems

Consumers on Opening did not provide for an air compressor building or yard air because Consumers' engineers determined that the yard activity was light enough to not require it.[442] CSXT in Reply disputed this and argued that having an air system is necessary for charging of the air brakes.[443] Consumers rejects CSXT's additional costs for an air compressor building at the CERR's Barr Yard. It will be possible to re-charge the air using the locomotives, and Consumers' engineers estimate that while this may take upwards of 30-40 minutes, this is something that would not be problematic given the limited traffic and that only 15 locomotives will be primarily serviced at the CERR's Barr Yard.[444] That aside, the inflated costs provided by CSXT defy all logic. The air compressor building called for by CSXT's engineers is over {

[442] Consumers Opening at III-F-86.

[443] CSXT Reply at III-F-132-133.

[444] Locomotives are required to be able to recharge the air for the brake system. Without this function, trains could never move after braking in an emergency or if they braked away from yard air. *See generally* 49 C.F.R §§ 229, 232 (generally provide that a locomotive is the means to charge the air for braking purposes, but allow for alternate means such as yard air or a locomotive that is coupled up that will not ultimately be the lead locomotive); 49 C.F.R. § 232.107(a)(1) ("A railroad shall adopt and comply with a written plan to monitor all yard air sources, other than locomotives, to determine that they operate as intended…."); 49 C.F.R. § 232.107(b)("Condensation and other contaminants shall be blown from the pipe or hose from which compressed air is taken prior to connecting the yard air line or motive power to the train.").

}[445] First, CSXT uses costs for an air compressor building at {

[445] *See* Consumers Rebuttal e-workpaper "2015 Buildings_Rebuttal.xlsx," tab "Locomotive Shop," cell I20.

[446] {

}

[447] {

}

[448] {

}

[449] {

}

[450] {

}

}

**j. Wastewater Treatment**

CSXT on Reply accepted Consumers' wastewater treatment costs.[453]

**k. Yard Site Costs**

Consumers on Opening included the discussion of lighting, paving, drainage and fencing within III-F-7.h. "Yard Air, Yard Lighting and Yard Drainage," and as necessary within the other sections on CERR building and site costs. These items are now addressed separately below in order to conform to CSXT's Reply format.

**i. Yard Lighting**

Consumers on Opening provided for lighting at the CERR's Barr Yard. CSXT on Reply accepted most of Consumers' lighting calculations, but proposed some modifications with respect to electrical enclosures and re-sizing of

[451] *See* Greg Zielinksi, *On the Right Track: R.R. efficiency made better*, EDF+Business (Oct. 25, 2011), http://business.edf.org/blog/tag/union-pacific-railroad/ ("Using 50 HP compressors in place of 150 HP units that consumer energy at a cost of $40k per year can save up to $20k annually *per compressor*.") (emphasis in original).

[452] Consumers Opening at III-F-86.

[453] CSXT Reply at III-F-133; Consumers Opening at III-F-84.

conduits. Consumers will accept CSXT's additional costs for electrical enclosures at Barr Yard, but rejects the additional costs for replacing the 2-inch conduit with a 4-inch conduit. CSXT contends that a 4-inch conduit is necessary because it will need to house "five electrical wires,"[454] and specifically 4 #2 wires and 1 #4 wire.[455] However, the 2-inch galvanized steel conduit is sufficient as it will hold 64 #10 wires, or alternatively, 16 #4 wires or 8 #2 wires.[456] Therefore, Consumers rejects these additional costs to increase the size of the conduit.

### ii. Yard Paving

Consumers on Opening only provided for paving from the Barr Yard entrance to the fuel pad, and a turnaround area for the fuel trucks.[457] CSXT on Reply agreed to these quantities and unit costs, but then requests "paving to provide additional parking for additional headquarter support and MOW personnel at the expanded Barr Yard facilities."[458] In the first instance, Consumers does not agree to have all personnel reporting to the Barr Yard and rejects all increase in square footage and acreage. In the second instance, it makes no sense to provide for a few paved parking spaces when the rest of the lot is gravel. For these reasons, Consumers rejects these additional costs for yard paving.

---

[454] *See* CSXT Reply at III-F-134.

[455] *See* CSXT Reply e-workpaper "2015 Building Sites_Reply.xlsx," tab "Unit Costs," cells A84 & A85.

[456] *See* Consumers Rebuttal e-workpaper "NEC code table.pdf."

[457] *See* Consumers Opening e-workpaper "Barr Yard.pdf"; and Stick Diagrams

[458] CSXT Reply at III-F-134.

### iii. Yard Drainage

Consumers on Opening provided for drywells to manage yard drainage.[459] CSXT on Reply argues that this storm water management system for the Barr Yard is inadequate based on the underlying soils and substitutes the costs for a catch basin and storm sewer.[460] But Consumers' engineers determined that the soils map presented by CSXT does not show the types of soils present in the Barr Yard, as it is classified "533 Urban Land."[461] Urban Land has no soils parameters described by the Soil Conservation Service. In accordance with the map presented by CSXT, the land immediately to the north of the Barr Yard and along its entire length, is classified as "153A Pella silty clay loam."

According to Table 19 – Physical Properties of the Soils, page 695 of the "Soil Survey of Cook County, Illinois" prepared by the USDA, soil type "153A Pella," at a depth of 42" to 60" has a permeability rate of 0.6 to 6 inches per square foot per hour. Assuming an average permeability rate of 3.4 inches per square foot per hour, this is more than sufficient for subsurface storm water disposal.[462]

---

[459] Consumers Opening e-workpaper "Yard Drainage Cost.pdf."

[460] CSXT Reply at III-F-134-135.

[461] *See* CSXT Reply e-workpaper "Barr Yard NRCS Soil Report.pdf."

[462] The area immediately to the south of the Barr Yard consists of a soil designated "805B Orthents, clayey, undulating," and this is a much poorer soil from the permeability standpoint, with a rate at a depth of 7" to 60" of 0.02 to 0.06 inches per hour. *See* Consumers Reply e-workpaper "Barr Yard NRCS Soil Report.pdf"; Consumers Rebuttal e-workpaper "Soil Survey Cook, IL – Page 695.pdf." However, based on the map it appears this soil is only in the areas

Storm water systems are sized based upon a recurring rainfall event. The Illinois Dept. of Transportation uses a 25 year storm event for sizing drainage culverts. This means there is a 4% chance of a 25 year storm event happening in any given year. CERR Engineers have used a 100 year storm event to size the Barr Yard drainage system. There is a 1 % chance that this severity of storm will occur in any year. A 100 year storm in the area of the Barr Yard produces 7.75 inches of rain in 24 hours.[463] Consumers' engineers determined that each drywell could take 2,277 cubic feet of water per hour, which is almost ten (10) times what is necessary to accommodate a 100 year storm event.[464]

Given that the drywells will provide sufficient drainage for the Barr Yard, Consumers rejects CSXT's additional costs for a catch basin and storm sewer network.

---

immediately around the pond that is between the yard and W 138th Street. *See* Consumers Reply e-workpaper "Barr Yard NRCS Soil Report.pdf." The area immediately on the southeastern side of the Barr Yard is listed as "232A Ashkum," and the permeability rate from 29"-60" is 0.2 to 0.6 inches per hour, an acceptable rate. *See* Soil Survey Cook, IL – Page 696.pdf."

[463] The 100 year storm for this portion of the City of Chicago is shown on page 29 of Circular 172 "Frequency Distributions of Heavy Rainstorms in Illinois." Consumers Rebuttal e-workpaper "Circular 172 - Frequency Distribution of Heavy Rainstorms in Ill.pdf."

[464] *See* Consumers Rebuttal e-workpapers"Revised Stormwater rebuttal.pdf" and "Table X1245.pdf."

### iv. Fencing

Consumers on Opening did not provide for fencing of the CERR's Barr Yard because the existing Barr Yard does not have a perimeter fence.[465] As such, Consumers rejects CSXT's costs for yard fencing because these costs are unsubstantiated. CSXT states that 10,014 feet of fencing exists in the current Barr Yard and therefore assumes that these totals reflect the fencing requirements of the CERR's Barr Yard.[466] However, the CERR's Barr Yard is only 63.32 acres,[467] whereas the existing Barr Yard is estimated to be 205 acres.[468] It makes no sense to use the same amount of fencing when the CERR's Barr Yard is 140 acres smaller than the existing Barr Yard.[469] Additionally, while CSXT in its workpaper states that this fencing is "evident in aerial photos,"[470] it is also possible to determine using Google Earth that this fencing belongs to the neighboring non-railroad properties. Specifically, it was determined by Consumers' engineers that the fencing on the south side of the yard west of Route 1 or Halsted Street, which

---

[465] Consumers Opening at III-F-86.

[466] *See* CSXT Reply at III-F-136; CSXT Reply e-workpapers "2015 Building Sites_Reply.xlsx, tab "YARD" and "Barr Fence Quantities.pdf."

[467] *See* Consumers Opening e-workpaper "Barr Yard Site Development Costs.xls," tab "Yard Acreage," cell A2.

[468] *See* Consumers Rebuttal e-workpaper "Barr Yard Acres Calc using Google Earth Pro.jpg."

[469] 141.7 acres = 205 acres (approximate acreage of existing Barr Yard)– 63.32 (CERR's Barr Yard acreage).

[470] *See* CSXT Reply e-workpaper "2015 Building Sites_Reply.xlsx," tab "YARD" at cell F5.

CSXT labels as being 2,209 feet,[471] is the property of the Metropolitan Water Reclamation District of Greater Chicago.[472] Additionally, the fence on the south side west of Halsted only surrounds the MWRDGC pond.[473] It was also determined that the 4,045 feet of fencing on the south side of the yard is the property of the city and does not prevent access to the Barr Yard because it is open on both ends.[474] Lastly, the fence on the north side of the yard, which CSXT labels as being 2,831 feet,[475] encloses the neighboring properties and as such, was most likely not installed by the railroad. The north fencing that is west of Halsted is likely the property of Calumet Armature & Electric Co., Expert Transport Repair; whereas fencing east of Halsted is most likely owned by Bonell Manufacturing Co. Inc.[476] This is therefore not an instance where the railroad has installed fencing to keep people out, but instead most likely a case where the neighboring properties have already installed fencing. CSXT cannot now come in and claim that fencing installed by neighbors should be included as part of the CERR's Barr Yard costs. For the above reasons, Consumers rejects CSXT's additional costs for fencing as unnecessary and unjustified.

---

[471] *See* CSXT Reply e-workpaper "Barr Fence Quantities.pdf."

[472] *See* MWRDGC fence sign photo.pdf."

[473] *See* Consumers Rebuttal "Barr yard fence around MWRDGC pond.pdf."

[474] *See* Consumers Rebuttal e-workpaper "Barr yard fence south side.pdf."

[475] *See* CSXT Reply e-workpaper "Barr Fence Quantities.pdf."

[476] *See* Consumers Rebuttal "Barr yard fence north side.pdf."

### 8. Public Improvements

#### a. Fences

Consumers on Opening did not provide for fencing because there was no evidence of existing fencing along the lines that the CERR is replicating. CSXT on Reply agrees with Consumers "that the vast majority of the CSXT right-of-way being replicated in this case is not fenced," but adds security fencing for signal and communications equipment.[477] Consumers agrees to these additional costs for security fencing.

#### b. Signs

CSXT has accepted Consumers' inventory and cost for signs.

#### c. Highway Crossings and Road Crossing Devices

##### i. Grade Separations

The CERR grade separations are all highway overpasses and are discussed *supra* in Part III-F-5.

##### ii. At-grade Crossings

Consumers on Opening provided an inventory of at-grade crossings along the CERR and 100 percent of the construction costs.[478] CSXT on Reply accepts Consumers' at-grade crossing inventory, but adds costs for "drainage, traffic control, and pavement striping."[479] Consumers did not need to add costs to

---

[477] CSXT Reply at III-F-136.

[478] Consumers Opening at III-F-87; Consumers Opening e-workpapers "2015 Crossing List.xls" and "III - F TOTAL - 2015.xlsx."

[479] CSXT Reply at III-F-137.

install "drainage and dig-out the crossing" ($8,500) because these costs are included in the roadbed preparation cost for constructing the initial roadbed. The drainage portion of this cost is for a small 4" perforated drain which would be installed during the roadbed construction. The pavement markings (at a cost of $5,000) are the responsibility of the local municipality. The estimate relied on by Consumers' engineers was an instance where the crossing was rebuilt and the contractor was disturbing the existing markings.[480] Likewise, traffic control when the crossing is first installed would be covered under the original permit and would not be a separate cost incurred by the contractor.

**9. Mobilization**

CSXT accepted Consumers' Mobilization cost factor of 2.7% for all CERR road property investments except for land, but added land acquisition costs.[481] For the reasons discussed *supra* at III-F-1.b.iv, Consumers rejects these additional costs.

**10. Engineering**

CSXT accepted Consumers' engineering additive of 10%.[482]

**11. Contingencies**

CSXT accepted Consumers' contingency factor of 10%.[483]

---

[480] *See* Consumers Opening e-workpaper "CR Construction Quote For Crossing.pdf."

[481] CSXT Reply at III-F-137-138.

[482] CSXT Reply at III-F-138; Consumers Opening at III-F-88.

[483] CSXT Reply at III-F-138; Consumers Opening at III-F-88.

## 12. Construction Schedule

CSXT accepted Consumers' 30-month construction schedule.[484]

[484] CSXT Reply at III-F-138; Consumers Opening at III-F-88-90.

# III-G Discounted Cash Flow

## III. G. DISCOUNTED CASH FLOW ANALYSIS

In Part III-G of its Reply, CSXT takes issue with elements of Consumers' SAC DCF analysis, and promotes major alterations to the Board's established approach on equity flotation costs. Each of these issues is addressed below.

### 1. Cost of Capital

The CERR's cost of capital is comprised of the cost of common equity ("COE"), the cost of debt ("COD") and the cost of preferred equity (if any). CSXT "accepts Consumers' use of the Board determined railroad industry cost of capital as the starting point for the CERR," but then made three (3) changes to Consumers' calculations.[1] First, CSXT corrects a transposition error in Consumers' presentation of the 2013 COD in its DCF model. Second, CSXT argues for the inclusion of equity flotation costs in its COE calculation. Third, CSXT claims that Consumers' DCF model improperly calculated interest payments on the CERR's COD. Consumers acknowledges the transposition error that substituted the Board-determined value for the 2013 railroad industry debt as a percent of capital for the Board-determined value for the 2013 railroad COD.[2] Consumers corrected the reference issue in its Rebuttal DCF analysis.[3] CSXT's remaining two (2) arguments are without merit, and should be rejected.

---

[1] CSXT Reply at III-G-1.

[2] CSXT Reply at III-G-1.

[3] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Inputs," cell C62.

### a. Consumers Did Not Improperly Omit Equity Flotation Costs

CSXT opens its argument with a misstatement of Board precedent on the issue of equity flotation costs. While claiming that the Board has "endorsed the principle" that they should be included -- implying some sort of settled rule [4] -- CSXT failed to mention that the Board has *never* included an equity flotation cost in any proceeding where it was a contested issue.[5] Indeed, the Board consistently has ruled that flotation costs "already are included in the Board's cost of capital computation,"[6] and therefore should not normally be added as a separate item. A contrary notion appeared for the first time in *Sunbelt*, [7] but the Board gave no explanation for any intended change in its position.[8] Even so, however, the Board rejected the inclusion of equity flotation costs in *Sunbelt* (a figure of 2.1%

---

[4] *See* CSXT Reply at III-G-1.

[5] An equity flotation cost has only been applied once, and that case involved both parties' agreement to such application. *See AEPCO 2011* at 137 (describing the 2007 *AEP Texas* decision where an equity flotation cost was used).

[6] *AEPCO 2011* at 138, citing *Duke/CSXT*, 7 S.T.B. at 433. *See also DuPont* at 274.

[7] *Sunbelt* at 184.

[8] Had the Board intended such a change, it would have been obliged to explain and justify the shift. *See Manufacturers Railway Co. v. S.T.B.*, 676 F.3d 1094, 1095 (D.C. Cir. 2012); *New York Cross Harbor Railroad v. S.T.B.*, 374 F.3d 1171,1181 (D.C. Cir. 2004). Certainly the lack of any recent issuances of equity by the railroads that are included in the Board's cost of capital determination could not suffice; at the time of the *AEPCO 2011* ruling, there had not been such a railroad equity issuance for at least 20 years. In *Sunbelt*, the Board only made a reference to *AEP Texas 2007*, a unique case in which both parties agreed to include flotation costs as part of a recapitalization of the SARR subsequent to its initial stock and debt issuance, a circumstance that is not presented here.

was advocated by the defendant) because a reasonable estimate could not be determined.[9]

In this case, CSXT claims that a flotation cost can be estimated by reviewing the costs of initial public offerings ("IPO") that have occurred over the last decade.[10] The "evidence" that CSXT offers for its extraordinary 6% flotation cost,[11] however, is flawed and not qualitatively superior to claims that the Board has rejected previously, and fails to meet the strict standard that the Board has set as a condition for considering the inclusion of a separate flotation cost, a condition which has not been satisfied in any previous case (including *Sunbelt*). Consumers therefore does not include equity flotation costs in its Rebuttal DCF model.

### i. CSXT's Made-for-Litigation Study Is Not Valid

In *Sunbelt*, the Board echoed its previous holdings that in order to even consider approval of an equity flotation additive, it would have to be presented with "evidence of the existence and size of the equity flotation fee for stock issuances of a similar size (and for transportation companies or other companies with a similar profile) as that needed by the SARR."[12] To support its

---

[9] *See* CSXT Reply at III-G-2.

[10] CSXT Reply at III-G-2 to III-G-4.

[11] CSXT's proposed flotation cost for the CERR is almost triple the levels proposed by the defendant (and rejected by the Board) in *Sunbelt* and *DuPont*, and more than 50% higher than the cost advocated by the defendants in *AEPCO 2011*, which the Board also rejected.

[12] *Sunbelt* at 185.

claim here, CERR performed a made-for-litigation study of IPOs across firms from various industries over the last decade, which CSXT contends supports a 6% flotation fee for the CERR.[13] The CSXT study fails the *Sunbelt* test.

First, the Board in the past has repeatedly rejected studies produced specifically for litigation. For Example, in *TMPA* the Board rejected the use of traffic forecasts produced by the defendant's marketing executives and a third-party expert.[14] Likewise, in *Duke/NS* the Board affirmed the preferability of studies that have not been specifically prepared for litigation.[15] In this instance, CSXT relied upon a study produced specifically for this case that is based upon data that is not readily available to the public. CSXT's workpapers show that the data came from Standard & Poor's Capital IQ platform.[16] Capital IQ is a web-based subscription service of Standard & Poor's that provides business research and analyses for its paid subscribers. The data contained within Capital IQ is not readily available to the public at large, so it is not possible to determine the range and domain of the IPO data used by CSXT in its study.[17] CSXT's use of non-

---

[13] CSXT Reply at III-G-2 to III-G-4.

[14] *TMPA,* 6 S.T.B. at 603.

[15] *Duke/NS*, 7 S.T.B. at 145.

[16] CSXT Reply at III-G-3, n. 5.

[17] Publicly available data indicates there were likely over 1,200 IPOs in the last decade compared to the approximately 500 included in CSXT's study. For example, Renaissance Capital's IPO Center reported 1,700 IPOs between 2007 and 2015. http://www.renaissancecapital.com/ipohome/press/ipofilings.aspx. Also, Professor Jay Ritter, a Professor of Finance at the University of Florida tracks IPO statistics. His data shows there were over 1,000 IPOs between 2005

publicly available data is contradictory to Board precedent, which prefers the use of public, verifiable information instead of proprietary data sources.[18]

Second, CSXT's proffered study does not include analyses of any transportation companies or companies "of a similar size ... [and] with a similar profile" to the CERR.[19] CSXT arrogantly asserts that if its private data study is not accepted then the Board "would in reality be rejecting any such costs for the CERR or any other SARR,"[20] but the fact is that CSXT was well aware of the *Sunbelt* test and simply failed to meet it. It is no excuse to say that the standard is difficult; indeed, given the long-standing precedent against including separate flotation costs on the ground that they already are reflected in the Board's cost of capital calculation,[21] the Board *should* demand precise and clearly comparable evidence specific to the SARR at issue as a condition of considering such an addition.

---

and 2014, the last years available. Dr. Ritter's statistics may be lower because he excludes closed-end funds, REITs, acquisition companies, offer prices below $5, ADRs, limited partnerships, units, banks and S&Ls, and those not listed on CRSP from his statistics. *See*, https://www.quandl.com/data/ RITTER/US_IPO_STATS-Historical-US-IPO-Statistics.

[18] *Railroad Cost of Capital – 2006*, Ex Parte No. 558 (Sub-No. 10), at 7 (STB served April 15, 2008) ("[w]e conclude, therefore, that it is perfectly acceptable to rely on changes in the S&P 500 Price Return Index and reject the AAR's reliance on a proprietary data source").

[19] *Sunbelt* at 185.

[20] CSXT Reply at III-G-5.

[21] *DuPont* at 274; *AEPCO 2011* at 138.

### ii. CSXT Disregards Private Lower Cost Equity Placements

Another key flaw in CSXT's equity flotation cost argument is its underlying presumption that a SARR will incur relatively high costs issuing common equity through an IPO.[22] A high-cost IPO is not the only method available for a company to raise equity capital. CSXT improperly disregards the fact that there are other ways that would be open to a SARR, including private equity placements.[23]

#### (a) Private Equity Placements Are Less Expensive

A private placement (or non-public offering) is a funding round of securities which are sold not through a public offering, but through private transactions, usually to a single or a small number of chosen, accredited investors.[24] Investors in privately placed securities predominantly are highly sophisticated entities or individuals that understand the risk associated with the issuing company and have access to sufficient capital to limit the number of parties involved in the deal. Such investors include, but are not limited to, large

---

[22] *See* CSXT Reply at III-G-2.

[23] CSXT offers a self-serving statement that Consumers has not provided any proof of the feasibility of a private equity placement by the CERR, nor quantified the costs of a private placement. CSXT Reply at III-G-4, n. 6. Since the Board has never included equity flotation costs where the issue has been contested by the parties in the case, it was not Consumers' burden to prove the measure of equity costs that *should* be included.

[24] *See, e.g.*, Brealey, R. A., Myers, S. C., and Allen, F., "*Principles of Corporate Finance, Eighth Edition,*" McGraw-Hill Irwin, 2006, at 403 ("Brealey, Myers and Allen").

conglomerates, insurance companies, pension funds, mezzanine funds, stock funds, and trusts.

Private placement of equity entails a much simpler issuing process than a public sale, since in many cases registration statements and other regulatory actions are not required. This allows the issuing companies to avoid the time, expense, and disclosure requirements of filing registration statements and other regulatory notices.[25] They also can avoid the use of underwriters, and avoid expenses avoided with sales commissions and finder's fees.

A SARR such as the CERR would be an excellent candidate for use of a private placement to raise any needed equity capital. The entity has an assured customer base, a reliable cost structure, and a guaranteed revenue stream that is calculated to assure a return on invested capital equal to the cost of that capital. From an investor's perspective, the CERR is a low-risk enterprise that would be fairly easy to evaluate. It is far more likely that the roughly $500 million in equity capital that the CERR would need could be raised privately, and that a higher-risk/higher cost IPO would not be necessary.

Contrary to CSXT's claim that private equity placements may be more expensive than an IPO, they are by their very nature and purpose less time consuming and expensive than IPOs. This fact is borne out in both academic and financial industry studies.

---

[25] *See*, "*Introduction to Private Placements*" at http://www.seclaw.com/docs/ privateplacement.php/.

- The underwriting fee for a private placement is believed to be much less than for an equivalent public issue, since the underwriter acts solely as an agent for the issuer and none of the financial risks associated with public underwriting are assumed. To the extent that private placements permit raising significant amounts of funds more quickly and at much less expense than in the case of a prospectus distribution, these are more attractive to both the issuer and investors.[26]

- The advantages of private placements: Lower issuance costs and issuance can be quickly placed.[27]

- In a private placement, securities are sold to one or a few investors, generally institutional investors. The primary advantages of private placements are: (1) lower flotation costs; and (2) greater speed, since the shares do not have to go through the SEC registration process.[28]

- As non-public offerings, most private placements do not have to be registered with the SEC. In addition, businesses do not typically need to disclose detailed financial information, and the need for a prospectus is often waived. For these and other reasons, private placements are usually significantly less complicated and expensive than public offerings.[29]

- Companies opting to raise capital by means of a private placement usually do so because of the lesser time and lower cost associated

---

[26] "*Everyone's A Winner: A Study of Shareholder Gains and Flotation Costs of Private Equity*," Srivastava, A.K., Carleton University, 1991 at 4 ("Srivastava"). A copy of the paper is included in Consumers Rebuttal e-workpapers at "Flotation Costs of Private Placements.pdf".

[27] Emery, D.R., Finnerty, J.D., Stowe, J.D., "*Corporate Financial Management*," Prentice Hall; 3rd edition (October 21, 2006) at Chapter 19. A copy of the text's slides is included as Consumers Rebuttal e-workpaper "Emery Finnerty Stowe.ppt."

[28] Bringham, E. F., and Ehrhadt, M.C., "*Financial Management*", South-Western College Pub; 12th edition (2007). A copy of the relevant pages is included as Consumers Rebuttal e-workpaper "Brigham and Ehrhardt.ppt."

[29] "Pros and Cons of Private Placement for Your Business", Sadler, D., *allBusiness*. A copy of the complete article can be found at https://www.allbusiness.com/pros-and-cons-of-private-placement-for-your-business-12953293-1.html .

with the offering's preparation and execution, as compared to a public offering, which requires, among other things, the filing of a registration statement with the SEC.[30]

- Any cost comparison starts with the fact that direct transactions take far less time than syndicated transactions, with their written prospectuses and numerous drafting sessions that involve those attorneys, extensive due diligence, and public filings. Nor is there that requirement for a road show, with all its logistics or lead time involved in educating sales forces of investment banks involved in the deal. In addition, direct investments simplify interactions with regulators which can delay or even kill a public offering while the prospectus is scrutinized…This shorter time to market- along with the fact that [private placements] investments are generally not made public until closing -- adds up to enormous cost advantages to issuers.[31]

An illustrative example of some of the foregoing observations is Airbnb, Inc.'s sale of private equity in 2012, 2014 and 2015. According to Forms D filed by Airbnb, Inc. with the SEC[32], the company raised $200 million, $475 million and $1.5 billion privately in 2012, 2014 and 2015, respectively, while

---

[30] "*Raising Capital: Securities Laws and Business Considerations*", Minnesota Department of Employment and Economic Development and Oppenheimer, Wolff & Donnelly LLP, Sixth Edition, May 2010, at 53. A copy of the book is contained at Consumers Rebuttal e-workpaper "Raising Capital-Securities Law and Business Considerations.pdf."

[31] "*PIPEs: A Guide to Private Investments in Public Entity*", edited by Steven Dresner, Bloomberg Press, 2003, at 244. A private investment in public entity ("PIPE") is a type of private placement in which an already publicly traded company performs a private placement of its stock.

[32] According to the SEC, companies may use an exemption under Regulation D to offer and sell securities without having to register the offering with the SEC. When relying on such an exemption, companies must file what's known as a "Form D" after they first sell their securities. Form D is a brief notice that includes basic information about the company and the offering, such as the names and addresses of the company's executive officers, the size of the offering and the date of first sale. See https://www.sec.gov/answers/formd.htm.

incurring no sales commissions or finder's fees.[33] By definition, private placements of equity are private, and terms and fees associated with them are not readily reported or are confidential. However, Consumers' research located two (2) academic papers that provide insight into what a private placement may cost.

- Barclay, Holderson and Sheenan examined the evidence on private placements of large-percentage blocks of stock and the rationale for companies to make such placements.[34] The authors found that the reported costs, which include legal and accounting fees, printing fees and the like, averaged only 0.4 percent of the value of the shares registered, with the highest costs being 0.9 percent and the lowest at 0.1 percent.[35]

- Srivastava examined Canadian firms that issued private placements of equity between 1981 and 1987, and found that flotation costs ranged from 0.541 percent for offerings in the $50 to $100 million range to 1.402 percent for offerings in the $20 to $30 million range.[36]

The costs associated with private equity placements developed by independent researchers are significantly less than the 6% assumed by CSXT for an IPO.

---

[33] *See* https://www.sec.gov/Archives/edgar/data/1559720/000155972014000002/ xslFormDX01/primary_doc.xml, https://www.sec.gov/Archives/edgar/data/1559720/000155972014000003/xslFormDX01/primary_doc.xml, and https://www.sec.gov/Archives/edgar/data/1559720/000116840415000029/xslFormDX01/primary_doc.xml.

[34] "Private Placements and Managerial Entrenchment", Barclay, M.J., Holderson, C.G., and Sheenan, D.P., *Journal of Corporate Finance*, 13 (2007), 461 to 484. A copy of the paper is included in Consumers Rebuttal e-workpapers at "Private Placements and Managerial Entrenchment.pdf."

[35] *Id.* at 483.

[36] Srivastava at 21.

### (b) A CERR Private Equity Placement Is Plausible

CSXT implies that a private placement of equity may not be plausible for the CERR.[37] This is unfounded, for three (3) reasons.

First, the CERR operates in a hypothetical contestable market, which assumes unlimited availability of resources, including capital. Capital is just like any other resource required to construct a railroad. While a SARR has to pay prevailing market rates for the resources required to construct the SARR, the Board has continuously found that the SARR would face no limits on resource availability.[38]

Second, the private placement market is an extremely large market for capital. A 2012 study found that even in the mid-2000s, the market for private equity reached nearly $50 billion.[39] The market also has seen large private equity placements in the last decade. As described earlier, home-rental service Airbnb Inc. completed one of the biggest private equity funding rounds ever, raising $1.5 billion in 2015.[40] Airbnb was not alone. Over 230 companies in industries as

---

[37] CSXT Reply at III-G-4 to III-G-5, n.6.

[38] *West Tex. Utils. Co.*, 1 S.T.B. at 671.

[39] "The Role of Investment Bank Reputation and Relationships in Equity Private Placements", Erhemjamts, O. and Raman, K., *The Journal of Financial Research*, Vol. XXXV, No. 2, pages 183-210 at 187.

[40] "Airbnb Raises $1.5 Billion in One of Largest Private Placements," *Wall Street Journal*, June 26, 2015. The story can be accessed at http://www.wsj.com/articles/airbnb-raises-1-5-billion-in-one-of-largest-private-placements-1435363506.

diverse as power generation, manufacturing and travel have sold more than $100 million in private equity each since 2009, based on Form D filings with the SEC.[41]

Third, real world companies have shown a willingness to invest large sums of money on a private basis to acquire and operate railroads. The prime example of this is Berkshire Hathaway's decision to invest $34 billion to acquire BNSF Railway. While not a private equity placement in the classic sense, Berkshire Hathaway's acquisition nevertheless shows that sophisticated investors are available to provide sufficient capital to build and operate a railroad larger than the CERR, without the need for raising equity capital through an IPO.[42] Indeed, the roughly $500 million required to acquire all of the CERR's equity logically would be an attractive investment for Berkshire Hathaway or BNSF (which already originates the Campbell traffic), Canadian Pacific (which has publicly indicated an eagerness to expand into the Chicago area), and other major transportation and infrastructure companies.

As in *Sunbelt*, *DuPont* and *AEPCO 2011*, CSXT in this case has not presented "evidence of a similar-sized issuance of stock and the related equity

---

[41] Consumers Rebuttal e-workpaper "Companies Selling Private Equity Pursuant to SEC Form D.xlsx."

[42] Another large railroad equity transaction was Fortress Investment Group's $1.1 billion acquisition of RailAmerica in February 2007. "Private Equity Takes to the Rails," *Forbes*, May 8, 2007. The story can be accessed at http://www.forbes.com/2007/05/08/fortress-florida-update-markets-equity-cx_jl_0508markets22.html

flotation fee"[43] for a company with "a similar profile"[44] to the CERR. Moreover, its made-for-litigation private analysis wrongly assumes that the CERR could only raise equity capital through the higher risk and higher cost IPO process, to the exclusion of others.[45] CSXT has not carried its burden on the issue of equity flotation costs, and Consumers on Rebuttal follows the Board's consistent line of precedents holding against their inclusion in the capital cost determination.

### b. Consumers Properly Handled CERR's Interest Payments

In its Opening Evidence, Consumers explained that it structured its interest payments on debt capital in the same fashion as the real world Class I railroads, including CSXT.[46] Specifically, instead of assuming that the SARR would issue debt structured like a typical home mortgage loan, Consumers structured the interest payments in the same fashion as a Class I railroad and other large corporations that make coupon payments on the debt consisting of fixed interest payments.[47] This approach is consistent with how CSXT structures its

---

[43] *AEPCO 2011* at 138.

[44] *Sunbelt* at 185.

[45] The low costs associated with the private placement alternative examined herein demonstrate the unreasonableness of CSXT's made-for-litigation 6% figure. Even if the Board considers inclusion of an equity flotation cost in this case, CSXT's proffer does not constitute the better evidence on this issue. *See AEPCO 2011* at 85 (Board agreed with defendants that undercutting costs should be considered, but rejected defendants' costs as unjustified and unreasonable). *See also Xcel I*, 7 S.T.B. at 619, 649.

[46] Consumers Opening at III-G-5.

[47] *Id.* at III-G-5 to III-G-6.

own debt, and also is consistent with the Board's assumption that the SARR's capital structure does not change over time.[48]

In *DuPont* and *Sunbelt*, the Board explicitly acknowledged the treatment of interest associated with SARR debt used by Consumers in this case was in-line with real world railroads' debt practices.[49] Nevertheless, the Board rejected the shippers' evidence in those cases, stating that the SARR is evaluated through a "regulatory lens," whereas the railroad industry is evaluated every day by the financial markets, which assess whether a railroad will be able to pay its debt.[50] The Board was concerned that freeing the SARR from this regulatory evaluation, by allegedly allowing it to pay only interest and no principal on its assets, would insulate its borrowing from any scrutiny at all, because the SARR is not subject to the scrutiny of the financial markets. Thus, while the Board recognized the importance of allowing the SARR to use the same business strategies as the railroad industry to the maximum extent possible, it would not permit an interest-only approach to the repayment of debt, detached from the checks and balances that apply in the real world.

Consumers submits that the Board erred in rejecting the real world approach of accounting for railroad debt in *DuPont* and *Sunbelt*. Contrary to the

---

[48] *Id.* at III-G-5 and III-G-8.

[49] *DuPont* at 281; *Sunbelt* at 191. *See* also, *Nevada Power II*, 10 I.C.C. 2d at 319.

[50] *DuPont* at 279-282; *Sunbelt* at 189-191.

Board's belief and CSXT's contention in this proceeding,[51] Consumers' approach not only accounts for interest payments on debt, but it fully takes into consideration the repayment of all principal amounts borrowed to construct the SARR.[52]

According to the Board, fixed coupon payments mean that the SARR is paying only interest on its debt and not repaying the principal, which would impede the ability of the SAC test to determine the SARR's ability to pay the cost of constructing, maintaining and operating its system.[53] Consumers respectively submits that the Board's position is incorrect, because the repayment of any principal amounts borrowed is accounted for in the levelized stream of capital recovery payments, not in the debt amortization approach.

As the Board noted in *Sunbelt*, the computerized DCF model "simulates how the SARR would likely recover its capital investments, taking into account inflation, Federal and state tax liabilities, and a reasonable rate of return".[54] The DCF model ensures that sufficient cash is generated to meet the

---

[51] *See* CSXT Reply at III-G-6. Contrary to CSXT's claim, Consumers did take note of the Board's decisions in *DuPont* and *Sunbelt*, and described why it believed the Board erred in its treatment of amortized debt. Consumers Opening at III-G-8.

[52] As Consumers noted in Opening, because the CERR's approach to debt service is derived from the actual experience of CSXT, the "checks and balances" of the real world effectively have been applied to the CERR by virtue of their application to CSXT. Consumer Opening at III-G-9.

[53] *Sunbelt* at 191.

[54] *Sunbelt* at 6.

required rate of return to debt and equity holders on the SARR's investment, as well as ensuring sufficient cash flows for the return of the required investments. This occurs through the capital carrying charges included in the "Investment SAC" level of the DCF model, which ensure that the SARR is developing enough quarterly cash flows to pay back not only the interest on the debt (as encompassed in the weighted-average cost of capital used as a discount factor), but also the principal amount originally borrowed (as reflected in the investment costs and interest during construction costs). The quarterly capital charges explicitly account for repaying principal on existing and future investments. Thus, the repayment of principal is already accounted for in the DCF model, regardless of whether the SARR uses a home mortgage amortization approach or a coupon approach.

As the DCF model shows, the principal repayment values calculated in the home-mortgage amortization are *not* directly used to develop any actual principal repayment. Those values are used only in calculating the interest component of the assumed home-style mortgage payment.[55] The interest payments on the debt are then used to develop the interest tax shields to determine state and Federal tax payments. Contrary to the Board's inferences in *Sunbelt* and *DuPont*, the principal components of the debt amortization do not directly feed into the capital carrying charges, which provide the SARR's return on, and return

[55] *See, e.g.*, CSXT Reply e-workpaper "Exhibit III-H-1 Reply.xlsm," tab "Interest 20 Year Amort," columns (I), (Y) and (AP).

of, capital. The sole purpose of the debt amortization calculation is to develop the expected interest payments for use in estimating state and Federal taxes. The Board should follow the general rule and "recognize the importance of allowing the SARR to use the same business strategies as the railroad industry to the maximum extent possible…", and permit the CERR to use fixed coupon payments for the treatment of its debt.[56]

In addition to repeating the Board's rationale for rejecting the coupon-interest approach, CSXT implies that Consumers is advocating for issuance of a single 20-year note.[57] CSXT states that the railroad industry cost of debt is effectively a weighted average of notes of various lengths, not single notes of 20-year terms,[58] and that the amortization of debt for the CERR should be similar in structure to a home mortgage to better reflect the actual payment of debt. CSXT's claims are wrong for several reasons.

First, Consumers did not assume it would issue a single 20-year debt instrument to finance the CERR's initial construction. Consistent with *Major Issues,* Consumers assumed that the debt for road property investment is *financed* over 20 years.[59] Such financing can include multiple debt instruments of varying duration. In its Opening Evidence, Consumers recognized the Board's concern

---

[56] *DuPont* at 282. *See also Sunbelt* at 191.

[57] CSXT Reply at III-G-11.

[58] *Id.* at III-G-9 to III-G-10.

[59] Consumers Opening e-workpaper "Exhibit III-H-1.xlsx," tab "Interest."

about the SARR issuing 20-year debt obligations that may not match the actual length of debt obligations issued by the railroads in the cost of capital determination group. However, this concern should not impact the assumption of coupon payments. As Consumers explained, the railroads' level of debt has remained fairly constant since the last round of mergers in the mid 1990's.[60] This is because the railroads are issuing new debt as debt instruments mature, or as they redeem older debt issuances and replace them with newer issuances. As such, the CERR's interest payments would be expected to be consistent from year to year and not declining over time.[61]

The fact that the Board's average cost of railroad industry debt is a weighted-average of short, medium, and long-term interest rates is more consistent with Consumers' determination of quarterly interest payments than with CSXT's argument for home-mortgage style amortization. CSXT assumes that the interest payments under its home-mortgage style amortization approach reflect the payment of interest on short, medium, and long-term debt, and that the fall in debt interest payments over time is simply the reflection of the CERR paying off shorter-term notes and the continued payment of interest on longer-term notes.[62] However, if this were the case, the relative interest payments would be higher in the future, because of the term-structure of interest rates, whereunder longer-term

---

[60] Consumers Opening at III-G-8.

[61] *Id.*

[62] CSXT Reply at III-G-10.

bonds generally have higher interest rates than shorter-term bonds.[63] However, the interest rate does not change over time in the Board's DCF model. This steady-state distribution is indicative of the railroad holding a steady-capital structure as new debt is issued and old debt is retired. This is exactly the assumption underlying Consumers' interest calculations.

CSXT claims that Consumers' approach locks in the cost of debt that occurs during the construction period, and ignores any changes in interest rates that may occur in the future.[64] CSXT contends that as debt instruments mature or are retired, there is no guarantee that future debt will carry the same interest rates.[65] However, the Board's DCF model already makes a contrary assumption. In calculating the interest tax shields associated with future asset replacements, the Board's DCF model assumes future interest payments will equal prior year interest payments. CSXT used this assumption itself in calculating interest payments on future asset replacements.[66] CSXT has offered no other solution to estimate future interest rates or provided any type of future interest forecast. Consumers' approach simply uses the Board long-standing method for estimating future interest rates when no other forecast has been provided.

---

[63] This ignores those rare instances where markets see inverted yield-curves.

[64] CSXT Reply at III-G-7 to III-G-9.

[65] CSXT Reply at III-G-8.

[66] CSXT Reply e-workpaper "Exhibit III-H-1_Reply.xlsm," tab "Replacement Interest," cell D5.

CSXT also contends that some of the debt instruments that form the basis of the SARR's cost of debt are "paid in full" at maturity.[67] CSXT's statement is misleading because the "full payment" by the relevant railroad likely involved reissuance of the principal in a new debt instrument. As indicated in Consumers' Opening Evidence, the railroads' capital structure has remained constant over the last decade, notwithstanding the appreciation in equity values, indicating that as old debt is retired or paid in full, new or additional debt is issued to replace it.[68] Additionally, the DCF model accounts for any repayment of debt principal through its calculation of quarterly capitalized carrying charges, which provide sufficient cash flows, on a discounted basis, to repay debt used to construct and operate the SARR.

In sum, real world companies, including railroads, set a target capital structure, and attempt to maintain it for many reasons, including using the power of leverage to manage earnings and to maintain cash flexibility. The CERR is employing the same approach that real world railroads do, and holding a stable capital structure. This is consistent with the Board's DCF model, which assumes the capital structure does not change over time.[69] This is also consistent with the Board's DCF model assumption that future interest rates will equal prior year interest rates. To reflect this steady-state nature, the SARR must reissue debt as

---

[67] CSXT Reply at III-G-10.

[68] Consumers Opening at III-G-8.

[69] *Id.*

older debt is retired, which ultimately leads to consistent interest payments as reflected in Consumers' DCF model. Consumers continue to rely upon its proper and correct interest rate methodology in its Rebuttal DCF.

### c. Rebuttal Cost of Equity and Debt

In April 2016, the Association of American Railroads ("AAR") submitted its calculation of the 2015 railroad industry cost of capital.[70] Consistent with Board precedent, Consumers updated the DCF model's cost of common equity, cost of debt, and cost of capital to include the 2015 data. Consumers' Rebuttal CERR cost of equity calculations are shown in Rebuttal Table III-G-1 below.

[70] *Railroad Cost of Capital – 2015*, Ex Parte No. 558 (Sub-No. 19), Comments of the Association of American Railroads (filed April 20, 2016).

**Rebuttal Table III-G-1**
**Summary of Consumers Opening and Comparison Of**
**CSXT Reply and Consumers Rebuttal CERR Cost of Equity**

| Year | Consumers Opening[1/] | CSXT Reply[2/] | Consumers Rebuttal[3/] | Difference [4/] |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| 2012 | 11.12% | 11.12% | 11.12% | 0.00% |
| 2013 | 13.80% | 11.32% | 11.32% | 0.00% |
| 2014 | 10.65% | 10.65% | 10.65% | 0.00% |
| 2015 | 12.42% | 11.17% | 9.64% | 1.53% |
| 2016 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2017 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2018 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2019 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2020 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2021 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2022 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2023 | 12.42% | 11.17% | 10.78% | 0.39% |
| 2024 | 12.42% | 11.17% | 10.78% | 0.39% |

1/ Consumers Opening e-workpaper "Exhibit III-H-1 (Errata).xlsm."
2/ CSXT Reply e-workpaper "Exhibit III-H-1_Reply.xlsm."
3/ Consumers Rebuttal 3-workpaper "Exhibit III-H-1_Rebuttal.xlsm."
4/ Column (3) – Column (4).

## 2. Inflation Indices

CSXT accepted Consumers' road property asset indices derived from the AAR railroad chargeout prices and wage rate indices for eastern railroads and IHS Economics' Rail Cost Adjustment Factor Forecast.[71] CSXT updated those indices using IHS Economics' January 2016 forecast.[72] Since CSXT submitted its Reply, IHS Economics has issued its April 2016 forecast.

[71] CSXT Reply at III-G-11. CSXT continues use to the name Global Insight in its Reply.

[72] This was the most recently available forecast at the time of CSXT's Reply.

Consumers has included IHS Economics' April 2016 forecasts and updated actual AAR indices in its Rebuttal DCF analysis.

CSXT also accepted Consumers' land inflation forecast based on historic rural land values reported by the U.S. Department of Agriculture ("USDA") and on a combination of indices published by investment reporting firms Moody's and Standard & Poor's.[73] Since the filing of CSXT's Reply, Moody's and Standard & Poor's have all released updated values. Consumers has included these updated values in its Rebuttal evidence.[74]

While CSXT accepted Consumers' land inflation forecast, it rejected the use of Consumers' land index to adjust land values to their year of acquisition by the CERR.[75] As discussed in Part III-F, CSXT's Reply land value methodology is flawed, and Consumers continues to utilize its Opening approach to adjust land values in Rebuttal.

### 3. Tax Liability

CSXT accepts Consumers' assumed Federal tax rate of 35 percent and its calculated composite state income tax rate for the CERR.[76]

---

[73] CSXT Reply at III-G-12.

[74] See Consumers Rebuttal e-workpaper "CERR Land Appreciation(Rebuttal),xlsx," tabs "Case-Shiller National Updated" and "Moody's RCA Updated".

[75] *Id.*

[76] *Id.*

### 4. Capital Cost Recovery

CSXT accepts Consumers' capital recovery calculations except for the issues raised above and certain other issues CSXT addressed in Reply Part III-H.[77] The other issues raised by CSXT in Reply Part III-H are addressed in Consumers' Rebuttal Part III-H.

[77] CSXT Reply at III-G-13.

# III-H Results of SAC Analysis

## III. H. RESULTS OF SAC ANALYSIS

In this section, Consumers addresses the claims raised by CSXT in its Reply regarding Consumers' DCF analysis and its maximum rate calculations.

### 1. Results of SAC DCF Analysis

Consumers has modified its DCF model to accommodate the changes made by Consumers in this Rebuttal Evidence and discussed in Parts III-A through III-G, *supra*. Consumers describes these modifications below. Additionally, Consumers uses this Part III-H to address numerous errors made by CSXT in its Reply DCF model.

Consumers' Rebuttal DCF analyses are shown in Rebuttal Exhibit III-H-1. The calculations shown in each table of Rebuttal Exhibit III-H-1 are summarized below.[1]

#### a. Cost of Capital

As discussed in Part III-G, CSXT accepted Consumers' use of the 2012 to 2014 cost of common equity during the CERR construction period, and the use of the simple average of the 2012 to 2014 cost of common equity for the years 2015 to 2024.[2] In Rebuttal, Consumers incorporates the AAR's 2015 railroad industry cost of capital calculations which were submitted to the Board on

---

[1] The cost of capital (Table A) and inflation indices (Table B) are addressed in Part III-G.

[2] *See* CSXT Reply at III-H-1-2.

April 20, 2016,[3] after CSXT filed its Reply evidence in this proceeding. Updating the cost of capital to reflect the most current information available is consistent with Board precedent in maximum rate cases. [4] In Rebuttal, Consumers calculates and uses the simple average of the 2012 to 2015 cost of common equity for years 2016 to 2024.

In addition, Consumers corrected the transposition error that impacted the 2013 cost of CERR debt, and relies upon the CERR capital structure, which includes the AAR's 2015 calculations. For the reasons and based on the authorities explained in Part III-G, however, Consumers rejects CSXT's inclusion of a 6% equity flotation cost. Consumers' updated cost of capital figures are set forth in Table A of Consumers' Rebuttal Exhibit III-H-1.[5]

**b. Road Property Investment Values**

The calculation of road property investment costs is summarized in Table C of Rebuttal Exhibit III-H-1[6]. Consumers incorporates its updated road property investment values addressed in Part III-F, where Consumers also

---

[3] *See Railroad Cost of Capital – 2015*, Ex Parte No. 558 (Sub-No. 19), Comments of the Association of American Railroads (filed April 20, 2016).

[4] *WFA I* at 135 ("We use our annual cost-of-capital findings for the railroad industry for 2004 through 2005 to determine the cost of equity that would be experienced by the LRR. The latest railroad-industry cost of equity was determined after the close of the record. Nevertheless, to reflect the most current data available, and consistent with Board practice in prior SAC cases, we update the analysis to include that figure.").

[5] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Cost of Capital."

[6] *Id.* at tab "Investment."

responds to CSXT's criticisms of Consumers' Opening Evidence. In its Reply, CSXT accepts Consumers' construction schedule for the CERR, and its methodology to index annual investment values, excluding land inflation values.[7]

As discussed in Part III-F-1, *supra*, CSXT's land valuation approach, and its subsequent indexing of land values, is biased and inconsistent with Board precedent. These facts render CSXT's associated final land values unreliable. In Rebuttal, Consumers continues to use its Opening valuation and indexing approach for land values, but as described in Section III-G-2, updates the land index values with more current historic values.

**c. Interest During Construction**

Interest During Construction ("IDC") accrues on the road property assets of the CERR. In its Reply, CSXT utilizes the same methodology that Consumers did to calculate IDC.[8] Consumers continues to use this same methodology in Rebuttal.

**d. Interest On Debt Capital**

As discussed in Section III-G-1-b, Consumers structured its interest payments on CERR debt capital in the same fashion as CSXT and the other Class I railroads do in the real world.[9] In Reply, CSXT uses a 20-year home-style mortgage amortization schedule on CERR debt. In Rebuttal, Consumers continues

---

[7] *See* CSXT Reply at III-H-2.

[8] *Id.*

[9] *See* Consumers Opening at III-H-3-4.

to utilize an approach to debt capital that mirrors the debt actually issued by CSXT and the other U.S. Class I railroads included in the Board's annual cost of capital determination.

### e. Present Value of Replacement Cost

Table F of Rebuttal Exhibit III-H-1[10] shows the additional investment (on a present value basis) that the CERR would have to make if each of its assets (excluding land) was replaced at the end of its useful life, indefinitely into the future.

CSXT claims that Consumers erred in not including a 20-year amortization schedule for debt issued for future asset replacement, and says that it reestablished a 20-year debt amortization schedule for replacement assets.[11] However, CSXT's adjustment to the replacement cost calculations to "reestablish" debt amortization for replacement assets is invalid, as it leads to a double count of interest tax shields.

As discussed in its Opening Evidence, Consumers corrected the DCF model's capital carrying charge determination to reflect the constant capital structure assumed by the Board's DCF model by calculating a terminal interest value.[12] This terminal interest value calculation takes into consideration interest payments incurred for debt issued by the SARR in perpetuity, including debt used

---

[10] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Replacement."

[11] *See* CSXT Reply at III-H-3.

[12] *See* Consumers Opening at III-H-6.

for future replacement assets. Separately including interest payments for future replacement assets double-counts the payments. Therefore, Consumers continues to exclude interest payments for replacement assets in its Rebuttal DCF model.

**f. Tax Depreciation Schedules**

CERR is entitled to take advantage of the "bonus" depreciation provisions[13] that were part of the Tax Relief, Unemployment Compensation Reauthorization, and Job Creation Act of 2010; the American Taxpayer Relief Act of 2012; and the Tax Increase Prevention Act of 2014. These laws provided bonus depreciation on capital investments with MACRS recovery periods of 20 years or less. Qualifying investments are allowed a 50 percent depreciation bonus in the year that they are placed into service for assets placed into service prior to September 8, 2010, and 100 percent depreciation for assets thereafter. Tax depreciation for the remaining 50 percent of the cost, or the remaining cost basis, is calculated using the standard MACRS schedules. Table G of Rebuttal Exhibit III-H-1[14] displays the amount of bonus depreciation available to the CERR in 2015 through 2018.

CSXT objects to Consumers' use of bonus depreciation, asserting that it provides the CERR with an advantage over CXST and creates a reverse barrier to entry because identical bonus depreciation was not available to CSXT

---

[13] *Id.* at III-H-4.

[14] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Tax Depreciation."

during the time that the lines replicated by the CERR originally were constructed.[15] CSXT also argues that bonus depreciation is inappropriate because it exists as a byproduct of the CERR's 30-month construction period, and thus confers tax benefits on the CERR that were not available to CSXT.

CSXT's complaints have been rejected by the Board in previous cases,[16] including twice in the past few years,[17] and should be rejected here as well. The Board held in *SunBelt* and *DuPont* that the SARR construction period results both in benefits and disadvantages for the SARR, and that it would be improper to bar the SARR from receiving the benefits while requiring the SARR to endure the disadvantages. CSXT challenges those decisions, asserting that the Board did not specify any of the disadvantages that the SARR would experience.[18] Consumers herein offers a partial outline.

First, prices for materials and services could be elevated during the period of SARR construction, thus forcing the SARR to expend more than it would under normal conditions. For example, if the price of steel is unusually high during the construction period, the SARR is forced to pay the elevated price for all steel on its system. In contrast, real world railroads such as CSXT benefit from having the option to acquire their steel assets over many decades, in both boom

---

[15] *See* CSXT Reply at III-H-3-6.

[16] *See, e.g., West Tex. Utils. Co.,* 1 S.T.B. at 714; *McCarty Farms*, 2 S.T.B. at 525-529.

[17] *SunBelt* at 188-189; *DuPont* at 277-279.

[18] *See* CSXT Reply at III-H-4.

and bust cycles. Similarly, CSXT has had the option of choosing not to construct new lines during unfavorable market conditions, whereas a SAC complainant must take conditions as they are during the SARR construction period, which is dictated by the timing of the defendant's own rate actions.

Second, a SARR can be negatively impacted by prevailing debt interest rates. The cost of capital utilized by the Board in the DCF model includes both an equity component and a debt component.[19] The debt component is based upon the average railroad industry cost of debt during the SARR construction period.[20] If the SARR construction period coincides with a period of high interest rates, the SARR would be saddled with debt costs that could be considerably higher than the incumbent railroad's costs. This negative impact again would be a direct consequence of the SARR's defined construction period. Compared to the SARR, the incumbent would have incurred moderate levels of debt over many decades of financing, thus smoothing out any period of high interest rates.

The SAC concept is predicated upon developing an "optimally efficient" SARR, which means that the SARR necessarily will have certain "advantages" over the incumbent. CSXT's logic would require the SARR to use the same production techniques that CSXT used to build the original rail lines a century ago, rather than more efficient modern techniques, or prohibit the SARR

---

[19] *See, e.g., Railroad Cost of Capital - 2014*, STB Ex Parte No. 558 (Sub-No. 18) (STB served Aug. 7, 2015).

[20] *AEP Texas II* at 107.

from being more efficient, or use better technology than the incumbent, all of which conflict with SAC principles.

According to Dr. William Baumol, one of the principal developers of Contestable Market Theory, "[t]he crucial feature of a contestable market is its vulnerability to hit-and-run entry."[21] In order to hypothesize a contestable rail market, the Board assumes that a SARR can be constructed in the minimum amount of time dictated by technological feasibility for the most complex and time-consuming project on the SARR.[22] Therefore, "hit-and-run entry" means that the SARR must be able to enter the market within the foregoing time frame and pay "current market prices" for construction. That includes bonus depreciation.[23] It also means that the SARR must incur "current market prices" at the time construction actually occurs, including prices for land, material and labor, regardless of what the incumbent may have paid (unless the incumbent paid nothing, in which case the SARR also pays nothing).

It is noteworthy that CSXT itself has benefited substantially not only from the current bonus depreciation laws, but from prior tax benefits that are not available to the CERR. CSXT offers to allow the CERR to take bonus depreciation to the same extent that CSXT itself did over the 2008 to 2014 time period, based

---

[21] *See* Baumol, William, J. "Contestable Markets: An Uprising in the Theory of Industry Structure," *The American Economic Review*, Vol. 72, No. 1, March 1982 at 1-15, p. 4.

[22] *West Tex. Utils. Co.*, 1 S.T.B. at 671-672.

[23] *Id.* at 672.

on a proration of CSXT's bonus depreciation based on route miles.[24] However, this gives an unfair advantage to CSXT, because other (now-expired) tax and/or legal provisions were available to CSXT and its predecessors in previous decades that are not available to the CERR.

These include:

- The U.S. government provided surveyors to the Baltimore & Ohio Railroad ("B&O", a CSXT predecessor) at government expense;[25]
- Favorable state tax treatment for investments in B&O stock, thereby encouraging purchase of the stock;[26]
- The Revenue Act of 1962, which enacted an investment tax credit ("ITC") equal to seven (7) percent of qualified investment property;
- The Tax Reform Act of 1969, which established rapid depreciation of railroad rolling stock;
- The Revenue Reform Act of 1971, which updated the ITC and allowed a 3-year carryback and 7-year carry forward of the credits which could not be used in current years because of tax liability limitations;
- The Tax Reduction Act of 1975, which increased the ITC to ten (10) percent for all taxpayers and increased the tax liability limitations for railroad companies;
- The Tax Reform Act of 1976, which extended the ten (10) percent ITC through December 31, 1980;

---

[24] *See* CSXT Reply at III-H-6.

[25] See James Dilts, The Great Road: The Building of the Baltimore and Ohio, the Nation's First Railroad, 1828-1853 (1996) at 49, Consumers Rebuttal e-workpaper "The Great Road_Select Pages.pdf," at 4.

[26] *Id.* at 44, "The Great Road_Select Pages.pdf," at 2.

- The Revenue Act of 1978, which permanently increased the ITC to 10 percent instead of reverting to seven (7) percent in 1981, and extended the ITC to certain qualified rehabilitation expenditures;

- The Economic Recovery Act of 1981 which allowed for more generous ITC amounts, the enactment of safe-harbor leasing laws and increases in the credits available for qualified rehabilitation projects;

- The Job Creation and Worker Assistance Act of 2002 which enacted a 30 percent bonus depreciation rate for the years 2002 to 2004; and

- The Jobs Growth and Tax Reconciliation Act of 2003 that increased the bonus depreciation to 50 percent and extended its use to 2005.

CSXT makes the claim that since the Board has stated that a SARR is a replacement for the segment of the incumbent's rail system that the SARR would serve, the SARR should not be able to enjoy any benefits (which essentially are economic efficiencies) not fully available to the incumbent railroad.[27] The logical extension of CSXT's argument is that the CERR must be constructed and operated in the same manner as the incumbent, a notion that the Board consistently has rejected.[28] In *West Tex. Utils. Co.,* the Board recognized the trade-off in benefits between the SARR and the incumbent, holding that while a SARR may realize benefits from its shorter construction period, the incumbent benefited from

---

[27] *See* CSXT Reply at III-H-6.

[28] *AEPCO 2011* at 10; *McCarty Farms*, 2 S.T.B. at 468. The SARR does not even have to be a railroad. *See Coal Rate Guidelines*, 1 I.C.C. at 543; *WFA II* at 14 ("using the densities of the hypothetical SARR makes no sense, as under SAC the hypothetical competitor to BNSF does not even need to be a railroad at all.").

building its system in a sequential manner, allowing it to earn returns on individual line segments before the entire system was complete.[29]

Finally, CSXT's position would inject unwarranted speculation into the SAC process. CSXT criticizes the bonus depreciation provision utilized by the CERR as a "temporary" measure,[30] but CSXT ignores the fact that the industrial legal landscape is constantly evolving and changing. New laws are being enacted while old ones expire or are superseded. Federal and state agencies pass new regulations on a regular and ongoing basis. If, as CSXT contends, certain laws in effect at the time of the SARR's construction should be ignored or limited, then there would be no limits to the arguments of future litigants (on both sides) at to the statutes, policies, regulations and other conditions that should or should not be recognized. CSXT's position would unleash even greater speculation into the already hypothetical realm of SAC. As the Board has said, it "must follow existing law."[31]

**g. Average Inflation in Asset Prices**

Table H of Rebuttal Exhibit III-H-1[32] computes the average annual inflation rate by which the capital recovery charge in Table I[33] is indexed. CSXT accepts Consumers' inflation assumptions for assets.[34]

---

[29] *West Tex. Utils. Co.*, 1 S.T.B. at 671 -672.

[30] *See* CSXT Reply at III-H-4.

[31] *AEPCO 2011* at 34.

[32] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Asset Inflation."

### h. Discounted Cash Flow

Consumers explained in its Opening Evidence that it utilized the Board's standard capital recovery methodology, including the modification that the Board made in *AEPCO 2011*, to calculate the present value of unused depreciation in the terminal value calculation.[35] Likewise, Consumers adjusted "the terminal value in the capital carrying charges to reflect the cost of capital assumption that the SARR's level of debt is held constant into perpetuity, and that interest tax shields consistent with this level of debt are accounted for in the cash flow calculation." [36]

The Board's DCF model historically had assumed that after year 20, and until the first assets are replaced in the model, the railroad has no debt and no tax shielding interest payments. This creates an irreconcilable mismatch between the SARR's cost of capital and its cash flows. The cost of capital assumes that the SARR is carrying debt, and the associated interest payments, but the cash flows reflect no benefits from the interest tax shields. The Board recognized this mismatch and changed the terminal value calculation in *DuPont* and *SunBelt*.[37]

Consumers included the Board's revised terminal value calculations in its Opening Evidence. Consumers adjusted the terminal value in the capital

---

[33] *Id.* at tab "Investment SAC."

[34] *See* CSXT Reply at III-H-7

[35] *See* Consumers Opening at III-H-6. *See also, AEPCO 2011* at 140-141.

[36] *SunBelt* at 192.

[37] *DuPont* at 282-284; *SunBelt* at 193.

carrying charges to reflect the assumption that the CERR's level of debt is held constant into perpetuity, and that interest tax shields consistent with this level of debt are accounted for in the cash flow calculation. Consumers calculated an interest tax shield in perpetuity by dividing the last full quarterly coupon payment by one plus the quarterly real cost of capital.[38] This calculation aligns the cost of capital assumption of a fixed level of debt forever, with the interest payable on this debt.[39]

In its Reply, CSXT incorrectly claims that the Board did not accept this modification in *SunBelt*.[40] As the Board explicitly stated, "Consistent with the Board's decision in *DuPont*, we will accept Sunbelt's argument regarding the terminal value adjustment to correct the mismatch it has identified...."[41] What the Board did not accept in *SunBelt* was the shipper's method to calculate the interest expense included in the terminal value calculation. Instead of following the approach taken by Consumers in this proceeding, and matching the interest payments made by railroads in the real world, the Board used a mortgage-style debt amortization. To account for this difference in interest payments in its DCF

---

[38] This is the same type of calculation used to develop the terminal capital carrying charge.

[39] As described above, to avoid a double count in the impact of the interest tax shields, Consumers has adjusted the asset replacement calculations to remove the impact of the interest tax shields on replacement assets.

[40] *See* CSXT Reply at III-H-8. The Board also made the change now rejected by CSXT in *DuPont*, but CSXT ignores this precedent.

[41] *SunBelt* at 193.

model terminal value calculation, the Board developed the simple average of the SARR's interest payments over 20-years, instead of using the average bond interest payment.[42] However, the Board continued to use a terminal value calculation based on a perpetuity model that takes into consideration the SARR's static capital structure.

Acknowledging the outcome in *SunBelt*, CSXT nevertheless claims that the Board made two errors in that case.[43] First, CSXT argues that Board made a conceptual error by introducing inconsistency into the DCF model by applying different financial assumptions between debt used for assets acquired during the construction period and debt used to acquire replacement assets.[44] Second, CSXT asserts that the Board made a mathematical error by overriding the interest payments in years 11 to 20 of the DCF model and instead using the average interest payments.[45] Neither claim has merit.

As to the alleged conceptual error, CSXT claims that before the correction to the terminal value calculation, the DCF model was configured to assume that both debt used to acquire assets during the initial construction period and debt used to acquire replacement assets would be amortized over 20 years,

---

[42] *Id.* at 193-194.

[43] CSXT Reply at III-H-9.

[44] CSXT Reply at III-H-9.

[45] CSXT Reply at III-H-10.

while after the correction, the debt amortization assumptions are different.[46] CSXT alleges that debt used to acquire the original assets is still amortized over 20 years, but there will be no amortization of debt used for the acquisition of assets in subsequent replacement cycles.[47]

CSXT's argument is wrong for two reasons. First, the DCF model used in *SunBelt* did not assume that both debts associated with original assets and debt used for replacement assets would have a 20-year amortization period. Rather, the model assumed debt associated with replacement assets would be amortized over the *lesser of* the service life of the asset, or 20 years. The "different assumptions" objection made by CSXT (regarding debt associated with original and replacement assets) existed prior to the terminal value correction accepted in *SunBelt*.

Second, if the Board does not calculate its debt interest in the manner proposed by Consumers, the terminal value correction will account for amortization of debt used to acquire future assets in the same manner as original CERR debt. CSXT's claim that there will be no amortization of debt for assets in subsequent asset replacement cycles[48] ignores the fact that the debt reflected in

---

[46] CSXT Reply at III-H-10. CSXT's claims rest, in part, on the assumption that the Board will continue to assume the SARR amortizes its debt using a home mortgage style amortization schedule. Correcting the interest calculation to the coupon style approach used by Consumers eliminates any alleged mismatch, and provides yet another reason why the Board should adopt Consumers' approach.

[47] *Id.*

[48] *Id.*

the terminal value calculation is there to perpetually replace future assets (as well as to account for other corporate needs as is the case with real world railroads). If anything, the terminal value correction adopted by the Board removes an inconsistency that was already present in the DCF model.

CSXT also argues that the Board's correction of the mismatch would create a mathematical error by overstating the amount of interest a SARR would pay in years 11 through 20.[49] CSXT claims that, because interest payments are lower than average in the later years of the amortization period, the use of average interest payments over this period would overstate the interest expense.[50] However, CSXT fails to consider that while the interest payments in the second half of the 20-year amortization period are lower than the average, the interest payments in the first half of the amortization period are higher. The use of an average interest payment within the perpetuity calculation takes into consideration both the lower payments that occur in the second half of the amortization period and the higher payments in the first half.

Based on its erroneous claims, CSXT's Reply relies on the terminal value methodology used in *AEPCO 2011*.[51] However, the *AEPCO 2011* adjustment, which simply used the present value of the years 11 through 20 mortgage-style interest payments in the terminal value calculation, suffered from

---

[49] *Id.* at III-H-10-13.

[50] *Id.* at III-H-14.

[51] *Id.* at III-H-12.

the same mismatch between future interest payments and the static capital structure that was addressed and resolved by the Board in *SunBelt*. CSXT's proposed terminal value calculation should be rejected.

**i. Computation of Tax Liability – Taxable Income**

CSXT accepted Consumers' assumed Federal tax rate of 35 percent and its calculated composite state income tax rate for the CERR.[52]

**j. Operating Expenses**

Table K of Rebuttal Exhibit III-H-1[53] displays the operating expenses incurred in each year of the DCF period. CSXT accepted Consumers' approach for indexing operating costs, but used its overstated Reply operating expense calculations in its DCF model.[54] In this Rebuttal, Consumers continues to use its Opening approach of indexing all operating expenses based on the CERR's change in net ton-miles.

**k. Summary of SAC**

Consumers' Rebuttal calculation of total SAC for the CERR is presented in Table L of Rebuttal Exhibit III-H-1[55] and compared with CSXT's Reply values in Rebuttal Table III-H-1 below.

---

[52] *Id.*

[53] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Operating SAC" and "Operating SAC 2."

[54] *See* CSXT Reply at III-H-12.

[55] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Netting."

**Rebuttal Table III-H-1**
**Summary of CSXT Reply and Consumers Rebuttal SAC Results for the CERR**
($ in millions)

| | CSXT Reply[1/] | | | Consumers Rebuttal[2/] | | |
|---|---|---|---|---|---|---|
| Year | SAC | SARR Revenue | Over-Payments (Shortfall) | SAC | SARR Revenue | Overpayments (Shortfall) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 2015 | $165.1 | $109.4 | ($55.7) | $113.3 | $139.6 | $26.4 |
| 2016 | $159.1 | $92.5 | ($66.5) | $107.1 | $121.6 | $14.5 |
| 2017 | $166.6 | $109.5 | ($57.1) | $116.6 | $155.7 | $39.1 |
| 2018 | $171.8 | $105.3 | ($66.5) | $120.8 | $156.4 | $35.6 |
| 2019 | $178.9 | $109.6 | ($69.3) | $125.9 | $161.4 | $35.5 |
| 2020 | $186.7 | $118.9 | ($67.8) | $132.8 | $177.0 | $44.2 |
| 2021 | $193.5 | $120.6 | ($72.9) | $138.3 | $183.5 | $45.3 |
| 2022 | $202.1 | $128.9 | ($73.2) | $144.7 | $197.6 | $52.9 |
| 2023 | $209.0 | $124.8 | ($84.2) | $148.8 | $198.7 | $50.0 |
| 2024 | $218.5 | $138.0 | ($80.5) | $156.2 | $219.4 | $63.2 |

[1/] *See* CSXT Reply at III-H-13.
[2/] *See* Consumers Rebuttal e-workpaper "Exhibit III-H-1_Rebuttal.xlsm," tab "Summary."

As shown in Rebuttal Table III-H-1 above, contrary to CSXT's calculations, the CERR revenues exceed the stand-alone costs in each year of the study period. Where stand-alone revenues are shown to exceed costs, rates for the members of the traffic group must be adjusted to bring revenues and SAC into equilibrium.

## 2. Maximum Rate Calculation

In *Major Issues,* the Board adopted MMM as its rate prescription approach under the *Coal Rate Guidelines.*[56] Consistent with that decision, Consumers has used the MMM as required under the Board's *Major Issues* decision to bring SAC and stand-alone revenues into equilibrium.[57]

CSXT generally accepted Consumers' MMM approach, but claims that the URCS index that Consumers used in its Opening MMM calculations does not properly reflect future CSXT variable costs because it does not include gains in CSXT productivity over the modeling period.[58] CSXT proposes that the Board either revert to using the RCAF-A to adjust the MMM variable costs, or add a productivity component to the URCS index used by Consumers in its Opening Evidence.[59] CSXT's proposed adjustments are unnecessary and result in less accurate estimates of future variable costs, as explained in detail below.

The productivity adjustment factor ("PAF") used to calculate the RCAF-A, and which CSXT proposes to use in this case either by directly applying the RCAF-A or by modifying Consumers' URCS index, is developed by calculating the change in the input cost index divided by the change in the output index for all reporting Class I carriers. The input index reflects the R-1 total expenses for the Class I railroads, on a constant dollar basis, using the AAR's

---

[56] *Major Issues* at 14-23.

[57] *See* Consumers Opening at III-H-9.

[58] *See* CSXT Reply at III-H-14.

[59] *See* CSXT Reply at III-H-17-18.

RCR as the deflator. The change in expenses reflects both the inflation on input prices, and the utilization of the cost inputs (e.g., labor, fuel, etc.) for all Class I railroads, not just CSXT. Expressing the expenses on a constant dollar basis is intended to remove the impact of inflation in input prices. However, this is not exact, because the distribution of expenses in the RCR is not necessarily the same as the distribution of costs in the total expenses. Moreover, this distribution is, by definition, not the same as the CSXT distribution of the CSXT cost components in the variable cost calculation.

Similarly, the output index used in the PAF also reflects general industry changes, not changes specific to CSXT. The output index in the STB's productivity calculation determines the change in ton-miles (weighted on revenues) for 189 unique movement parameters. This produces an output matrix that reflects different key parameters, including: (1) shipment weights; (2) lengths of haul; (3) car types; and (4) service types (based on cars per shipment). In general terms, for Class I railroads, productivity gains are realized when there is a shift to more efficient types of service, *i.e.*, heavier loads, longer hauls and more cars per waybill. These shifts are not uniform across the industry, though. There is no reason to believe that CSXT's changes in the output factors that make up the PAF output index will be in lockstep with the rest of the industry.

In *DuPont* and *SunBelt*, the Board rejected the use of a "generalized, industry index when a more specific approach is available."[60] CSXT's proposed adjustment to URCS would introduce a general industry index to an approach that utilizes CSXT specific costs. In Rebuttal, Consumers continues to use its CSXT specific URCS index to adjust the variable costs in the MMM application, consistent with the Board's *DuPont* and *SunBelt* decisions.

### 3. Internal Cross-Subsidy

CSXT argues that if the Board determines that CERR revenues exceed CERR SAC, then the Board also must test for the existence of internal cross-subsidies.[61] CSXT's position is flatly contradicted by precedent. As the Board found both in *WFA II* and *AEPCO 2011,* when a *defendant* fails to identify a section of the SARR that it claims is not self-supporting, it has not met its burden to demonstrate an internal cross subsidy and there is no basis to alter the SARR's traffic group or modify the SAC analysis.[62]

In this case, CSXT has not presented any evidence that any specific section of the CERR is not self-supporting, and therefore has not met its burden regarding any alleged cross-subsidy.

---

[60] *DuPont* at 285-286; *SunBelt* at 196.

[61] *See* CSXT Reply at III-H-18.

[62] *WFA II* at 10; *AEPCO 2011* at 16.

### 4. Maximum Reasonable Rates

The SAC analysis summarized in Parts III-A through III-G, *supra,* and displayed in Rebuttal Exhibit III-H-1, demonstrates that over the 10-year DCF period, the revenues generated by the CERR exceed its total capital and operating costs. Rebuttal Table III-H-2 below shows the measure of excess revenue over SAC in each year of the DCF period for this case.

**Rebuttal Table III-H-2**
**Summary of Consumers Rebuttal DCF Results for the CERR**
**January 1, 2015 to December 31, 2024**

| Year | Annual Stand-Alone Requirement | Stand-Alone Revenues | Over-Payments (Shortfall) | PV Difference | Cumulative PV Difference |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 2015 | $113,264,186 | $139,628,736 | $26,364,550 | $25,177,985 | $25,177,985 |
| 2016 | $107,085,713 | $121,592,139 | $14,506,427 | $12,440,432 | $37,618,417 |
| 2017 | $116,631,577 | $155,739,878 | $39,108,301 | $30,273,360 | $67,891,777 |
| 2018 | $120,835,080 | $156,446,662 | $35,611,582 | $24,882,821 | $92,774,598 |
| 2019 | $125,908,109 | $161,400,726 | $35,492,617 | $22,385,306 | $115,159,904 |
| 2020 | $132,770,953 | $176,952,127 | $44,181,174 | $25,152,372 | $140,312,276 |
| 2021 | $138,276,463 | $183,545,475 | $45,269,012 | $23,262,660 | $163,574,936 |
| 2022 | $144,653,867 | $197,592,151 | $52,938,284 | $24,555,280 | $188,130,216 |
| 2023 | $148,762,860 | $198,740,607 | $49,977,747 | $20,925,140 | $209,055,356 |
| 2024 | $156,166,068 | $219,400,189 | $63,234,121 | $23,897,907 | $232,953,262 |

Source: Consumers Rebuttal e-workpaper "Exhibit III-H-1Rebuttal.xlsm," tab "Summary."

Application of MMM yields the following maximum R/VC ratios for Consumers' Campbell coal traffic for each year of the DCF model.

**Rebuttal Table III-H-3**
**Rebuttal MMM Results**

| Year | Maximum R/VC Ratios |
|---|---|
| (1) | (2) |
| 2015 | 358.6% |
| 2016 | 419.9% |
| 2017 | 310.6% |
| 2018 | 325.4% |
| 2019 | 327.3% |
| 2020 | 302.3% |
| 2021 | 298.8% |
| 2022 | 280.3% |
| 2023 | 282.0% |
| 2024 | 252.4% |

Source: Rebuttal Exhibit III-H-2

As indicated in Rebuttal Table III-H-3, the maximum R/VC ranges from 252.4 percent to 419.9 percent over the 10-year DCF period.

As applied to the unadjusted Phase III URCS variable costs for the issue movements, the following MMM maximum reasonable rates apply to shipments to Campbell from the Chicago interchange at the 1Q15 wage and price levels.

**Table III-H-4**
**CONSUMERS' MMM RATES PER TON – 1Q15**

| CSXT Origin | Car Type | MMM Rate Per Ton 1Q15 |
|---|---|---|
| (1) | (2) | (3) |
| 1. Chicago, IL | Gondola | $10.22 |
| 2. Chicago, IL | Hopper | $10.08 |

Source: Consumers Rebuttal e-workpaper "1Q15 to 1Q16 MMM Rates_Rebuttal.xlsx," tab "Rates," cells D28 and E28.

The maximum lawful rates for the transportation of coal from the origin covered by Tariff CSXT-13952, Amendment 1, equals the greater of the jurisdictional threshold or the MMM maximum rates. Table III-H-5 compares CSXT's rates to Consumers to the jurisdictional threshold and the MMM maximum. The issue rates are greater than both the jurisdictional threshold and the MMM rates.

**Table III-H-5**
**MAXIMUM RATE SUMMARY FOR 1Q15 TO 1Q16**

| Quarter | CSXT Rate Level (Including fuel surcharge) | Jurisdictional Threshold per Ton | MMM Rate Per Ton | Maximum Rate Per Ton[1/] |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| **Gondola** | | | | |
| 1. 1Q 2015 | $14.95 | $5.13 | $10.22 | $10.22 |
| 2. 2Q 2015 | $14.95 | $5.20 | $10.36 | $10.36 |
| 3. 3Q 2015 | $14.95 | $5.17 | $10.29 | $10.29 |
| 4. 4Q 2015 | $15.07 | $5.09 | $10.15 | $10.15 |
| 5. 1Q 2016 | $15.33 | $4.93 | $11.51 | $11.51 |
| **Hopper** | | | | |
| 6. 1Q 2015 | $14.95 | $5.06 | $10.08 | $10.08 |
| 7. 2Q 2015 | $14.95 | $5.13 | $10.22 | $10.22 |
| 8. 3Q 2015 | $14.95 | $5.09 | $10.15 | $10.15 |
| 9. 4Q 2015 | $15.07 | $5.02 | $10.01 | $10.01 |
| 10. 1Q 2016 | $15.33 | $4.88 | $11.38 | $11.38 |

[1/] The Maximum Rate Per Ton equals the greater of the Jurisdictional Threshold (Column (3)) or MMM Rate (Column (4)) per ton.

Source: Consumers Rebuttal e-workpaper "1Q15 to 1Q16MMM Rates_Rebuttal.xlsx," tab "Rates."

### 5. Reparations

As described in Part I of its Opening Evidence, Consumers has been paying rates under Tariff CSXT-13952, Amendment 1, in excess of the maximum reasonable rates per ton since January 1, 2015. CSXT thus owes Consumers the difference between the rates paid and the lawful maximum levels in principal reparations payments. Such principal will increase until CSXT complies with a final order of the Board in this proceeding. Consumers also is entitled to interest on all principal reparations amounts, calculated from the date that the first

unlawful charge was paid at the rate assessed under CSXT-13952, and otherwise in accordance with 49 C.F.R. § 1141.1, *et seq.*

The Board's regulations (49 C.F.R. § 1141.1, *et seq.*) provide for interest at the U.S. Prime Rate as published by the Wall Street Journal, updated and compounded for each change in the published rate. *See also Ex Parte No. 715* at 35-36, 41.

## IV Revenue Adequacy

**BEFORE THE**
**SURFACE TRANSPORTATION BOARD**

| | | |
|---|---|---|
| **CONSUMERS ENERGY COMPANY** | ) | |
| **Complainant,** | ) | |
| **v.** | ) | **Docket No. NOR 42142** |
| **CSX TRANSPORTATION, INC.** | ) | |
| **Defendant.** | ) | |

## PART IV

## REVENUE ADEQUACY

Consumers' Opening Evidence demonstrated that the Board should grant the revenue adequacy rate relief that Consumers requested under 49 U.S.C. § 10704(a)(2) and the *Coal Rate Guidelines*.

Relying on the accompanying report of Dr. John F. Hennigan ("Hennigan Report"), the former director of the ICC's Office of Economics,[1] and other materials, Consumers first demonstrated that CSXT had achieved revenue adequacy on a long-term basis and was likely to remain so for the long term. While CSXT has not yet been found to be revenue adequate under the Board's annual "snapshot" ROI=COC test using the Board's values for the current cost of capital ("COC"), Consumers showed that the shortfall in recent years has been so

[1] Dr. Hennigan is also sponsoring Part IV of Consumers' Rebuttal Evidence and submitting an accompanying Verified Statement ("Hennigan Rebuttal Report").

small as to lack statistical significance. Consumers further demonstrated that CSXT satisfied the ROI=COC test by a very substantial amount on a long-term basis using any of a number of well-supported adjustments to the Board's COC methodology or the COC as calculated by independent observers {

}.[2]

The finding of revenue adequacy under the ROI=COC test as reasonably applied is confirmed by review of the individual criteria for measuring revenue adequacy that Congress specified at 49 U.S.C. § 10704(a)(2).[3] Consumers also showed that consideration of standard financial ratios long relied upon by investors and analysts, and previously utilized by the Board's predecessor, provided further evidence of CSXT's revenue adequacy,[4] as did analyses by respected independent financial analysis firms focusing on long-term considerations.[5]

Finally, Consumers showed that CSXT's revenue adequacy compelled a ruling that CSXT's January 1, 2015 rate increase on Consumers' Campbell coal traffic was unlawful under the *Coal Rate Guidelines* and applicable precedent.[6]

---

[2] Consumers Opening at IV-2-11.

[3] *Id.* at IV-11-25.

[4] *Id.* at IV-25-37.

[5] *Id.* at IV-37-42.

[6] *Id.* at IV-42-46.

CSXT's Reply is more significant for what it does *not* contend than for what it does. CSXT takes no issue with the accuracy of Consumers' calculations, underlying data, and other evidence. For example, CSXT stresses, repeatedly, that the Board has not made an annual finding of revenue adequacy for CSXT under its snapshot test, but CSXT does not challenge Consumers' demonstration that the shortfall has been statistically insignificant in recent years. CSXT does not dispute any of the COC adjustments that show CSXT to be revenue adequate, the underlying support for those adjustments, or the accuracy of Consumers' financial ratio calculations. CSXT also does not address, much less challenge, Consumers' showing that CSXT satisfies the revenue adequacy criteria specified by statute, beyond urging the use of replacement costs, which the Board has repeatedly rejected and is contrary to the Board's governing statute. CSXT also makes no attempt to show that there is some reason why the Campbell movement specifically should experience a rate increase, despite CSXT's revenue adequacy.

CSXT instead devotes its Reply to contending that: (A) the Board should abandon altogether any Revenue Adequacy Constraint based on system-wide revenues;[7] (B) Consumers cannot seek relief under the *Guidelines'* SAC Constraint and Revenue Adequacy Constraint at the same time;[8] (C) CSXT cannot be found revenue adequate because it fails the ROI=COC test using the Board's

---

[7] CSXT Reply at IV-3-26.

[8] *Id.* at IV-26-29

annual COC;[9] and (D) earnings above the COC should not trigger revenue adequacy liability.[10]

These are a remarkable set of defective contentions. Contentions (A) and (B) are directly contrary to the *Coal Rate Guidelines* and agency precedent, and the Board already rejected them in its June 15, 2015 decision that denied CSXT's January 13, 2015 motion to dismiss Consumers' revenue adequacy claim. Contention (C) also is contrary to the Board's decision, and to agency precedents allowing shippers to present "other competent and probative evidence" of a carrier's revenue adequacy in an individual rate case. Contention (D) grossly distorts and misrepresents the relief that Consumers has requested and the basis for that relief.

CSXT's Reply made no effort to track the organization of Consumers' Opening Part IV. In order to be responsive and ease the Board's burdens, Consumers has organized its Part IV Rebuttal to track CSXT's Part IV Reply, but with captions that reflect Consumers' positions. The trade-off in using CSXT's organization is that some of CSXT's repetition carries over to Consumers' Rebuttal.

---

[9] *Id.* at IV-29-61.

[10] *Id.* at IV-61-66.

## A. THE BOARD MUST AND SHOULD APPLY THE EXISTING REVENUE ADEQUACY CONSTRAINT

CSXT's lead argument against Consumers' evidence is that "the Board should abandon a revenue adequacy rate constraint based on CSXT's system-wide revenue needs."[11] CSXT's request necessarily concedes the fact that the Revenue Adequacy Constraint already is part of the *Coal Rate Guidelines*.

The Revenue Adequacy Constraint is not an incidental appendage to CMP. Instead, it resides at the core, as "the logical *first* constraint on a carrier's pricing is that its rates not be designed to earn greater revenues than needed to achieve and maintain this 'revenue adequacy' level."[12] "The Revenue Adequacy Constraint is a necessary, explicit condition needed to complete CMP and to apply its competitive pricing principles to a regulatory framework."[13] CSXT's request to eliminate the Constraint would fundamentally alter the *Coal Rate Guidelines* and leave SAC as the only protection for captive shippers against unreasonable rates. Such a direct attack on the *Guidelines* should not be permitted in an individual rate case.[14]

---

[11] CSXT Reply at IV-3 (capitalization altered).

[12] *Coal Rate Guidelines*, 1 I.C.C.2d at 535 (emphasis added).

[13] Hennigan Rebuttal Report at 3.

[14] CSXT claims it may challenge the Revenue Adequacy Constraint "in its entirety" because the *Guidelines* are merely a general statement of policy and thus do not represent a "legislative rule." CSXT Reply at IV-33. Such claims should have been brought when the *Guidelines* were challenged and upheld on review. *Consol. Rail Corp. v. United States*, 812 F.2d 1444 (3d Cir. 1987). CSXT is foreclosed from making such a broad challenge now.

The notion that a separate regulatory constraint should apply if a railroad is revenue adequate is entirely logical. Professor Baumol has explained that SAC does not represent the optimal rate or establish a rate floor, as CSXT claims. Instead, SAC represents the maximum rate ceiling that a monopolist, or any other firm, should ever be able to charge:

> To summarize, the contestable markets rule that at least some regulatory agencies have adopted to constrain pricing by firms considered to have market power is the following.
>
> No price is allowed to be higher than stand-alone cost and no price is allowed to be lower than incremental cost, but any price in between these two levels is permitted.[15]

Professor Baumol noted that contestable markets, like perfectly competitive ones, allow "[p]rofits no higher than the competitive level."[16] Contestable markets surpass competitive ones because they enable economies of scale to be realized, without allowing excessive profits.[17] The consideration whether a carrier already is earning its cost of capital on an entity-wide basis is thus inherently fundamental to determining whether that carrier should be able to raise the rates of a captive shipper that is already paying differentially higher rates.

---

[15] William J. Baumol, *Contestable Markets: Applications and Their Theoretical Foundation*, Momigliano Lecture (1997) at 15, included in Consumers e-workpapers at "RA-BaumolMomigliano.pdf".

[16] *Id.* at 8 (italics deleted).

[17] *Id.* at 7.

The Revenue Adequacy Constraint flows directly from this principle:

> Our revenue adequacy standard represents a reasonable level of profitability for a healthy carrier. It fairly rewards the rail company's investors and assures shippers that the carrier will be able to meet their service needs for the long term. Carriers do not need greater revenues than this standard permits, and we believe that, in a regulated setting, they are not entitled to any higher revenues.[18]

Allowing a carrier to exceed the revenue adequacy level carries the same adverse consequences as allowing a carrier to charge more than SAC: (a) captive shippers pay, and the carrier collects, more than is required for the carrier to "be able to meet their service needs for the long term;" (b) the resulting reduction in volume, or deadweight loss, represents a misallocation of societal resources; and (c) the excess payments overcompensate railroad investors and can cross-subsidize competitive traffic, contrary to the Long-Cannon factors at 49 U.S.C. § 10701(d)(2).[19]

The fact that the SAC Constraint includes a revenue adequacy component of sorts, *i.e.*, the SARR's rates are set so that the SARR recoups its cost of capital,[20] does not render the Revenue Adequacy Constraint superfluous. As Dr. Hennigan explained at the Board's hearing in *Ex Parte No. 722*, and in greater detail in his Rebuttal Report, the two constraints achieve the same

---

[18] *Coal Rate Guidelines*, 1 I.C.C.2d at 535.

[19] Hennigan Rebuttal Report at 3-7.

[20] CSXT Reply at IV-3-4 & n.7.

Ramsey-type result, but by different means, as SAC applies on a bottom-up basis, and revenue adequacy is top-down in nature.[21] As the Board previously explained:

> The revenue adequacy ... constraint[] employ[s] a "top-down" approach, examining the incumbent carrier's existing operations, and ... the revenues, expenses, asset values, and liabilities associated with rail operations reported in the carrier's financial statements. If the carrier is revenue adequate (earning sufficient funds to cover its costs and provide a fair return on its investment),... the complaining shipper may be entitled to relief.... In contrast, the SAC constraint uses a "bottom-up" approach, calculating the revenue requirements that a hypothetical new, optimally efficient carrier would need to provide rail service to the complaining shipper. Thus, the SAC constraint does not rely on book values.[22]

As Dr. Hennigan further explains, the Revenue Adequacy Constraint, like SAC, allocates unattributable costs on the basis of differential demand, allowing the carrier to recoup its costs on a sustainable basis, while efficiently maximizing the carrier's output. A regulated carrier does not need to, nor should it charge rates on captive traffic higher than required to achieve revenue adequacy, just as it should not charge rates higher than SAC, as doing either confers an excessive recovery that is not needed to allocate the costs of production on a Ramsey-efficient, differentially-priced basis.[23]

---

[21] STB Hearing in *Ex Parte No. 722*, July 22, 2015, tr. at 41; Hennigan Rebuttal Report at 8-13.

[22] *Western Coal Traffic League--Pet. for Decl. Order*, Finance Docket No. 35506 (STB served July 25, 2013) at 8 ("*WCTL Petition BNSF*").

[23] Hennigan Rebuttal Report at 8-13; *see also,* IV-14-20, *infra*.

Abandoning the constraint would enable CSXT to extract excessive returns on captive traffic that it does not need to cover its unattributable costs and attract and maintain investment, thereby violating contestable market principles, basic economic principles, and the requirement in 49 U.S.C. §§ 10701(d)(1) and 10702(1) that rates on market dominant traffic be reasonable.

### 1. CSXT's Revenue Adequacy Provides Useful Guidance for the Reasonableness of Particular Rates and is Not Undermined by Cases Applying Only the SAC Constraint

CSXT argues that its "system-wide revenue requirements provide no guidance whatsoever on the rate Consumers[] should pay" because those requirements are "irrelevant," citing various Board and D.C. Circuit decisions in *Xcel I* and elsewhere.[24] CSXT misreads those decisions, none of which invoked the Revenue Adequacy Constraint.

In *Xcel I*, the shipper sought relief under the SAC Constraint, and BNSF tried to defend its above-SAC rates based on its revenue inadequacy. The Board and the D.C. Circuit correctly rejected BNSF's defense, as SAC implements the basic principle that even a revenue inadequate carrier should not be permitted to impose an unreasonable rate:

> The Board is on solid ground here. Regardless whether BNSF as a system is revenue-adequate, system-wide revenue inadequacy is not a basis upon which a carrier may defend an unreasonable rate over a segment of its system. *See Coal Rate Guidelines,* 1 I.C.C.2d at 536 ("[A] rate may be unreasonable even if the carrier is far short of revenue adequacy"). As the Board

[24] CSXT Reply at IV-4-8.

> explained in denying BNSF's petition for reconsideration, the SAC test is designed to take into account the railroad's need for revenue adequacy "on the portion of its system that is included in the system of the SARR." *Decision II,* at 6; *see also Burlington N. R.R. v. ICC,* 985 F.2d 589, 597 (D.C. Cir. 1993) ("CMP explicitly builds in the idea of revenue adequacy (subject to the SAC constraint)").[25]

As the *Xcel I* shipper did not even seek revenue adequacy relief, the decision provides no support for CSXT's claim that a revenue adequate carrier should be allowed to collect a higher SAC rate when the Revenue Adequacy Constraint identifies a lower maximum reasonable rate.[26]

CSXT next depicts its position as "the inverse of the long held view that the revenue inadequacy of a carrier is irrelevant in a rate case."[27] But in *Omaha Power*, as in the other cases, the shipper did not even seek revenue adequacy relief, so CSXT's logic fails for that reason alone. Beyond that, relying on the inverse of a proposition constitutes a broadly recognized logical fallacy.[28]

CSXT ignores the precedent wherein the Board applied the Revenue Adequacy Constraint in spite of the carrier's claim that SAC identified a higher

---

[25] *BNSF Ry. v. S.T.B.*, 453 F.3d 473, 480 (D.C. Cir. 2006).

[26] CSXT quotes language rejecting BNSF's claim that the SAC rates should not be set below the RSAM level. CSXT Reply at IV-5. RSAM's insignificance in a SAC case has no bearing for a rate claim founded upon the Revenue Adequacy Constraint, where revenue adequacy is applied on a top-down basis.

[27] CSXT Reply at IV-5, citing *Omaha Public Power Dist. v. Burlington Northern, Inc.*, 3 I.C.C.2d 123, 157 (1986).

[28] *E.g.*, www.algebra.com/algebra/homework/Conjunction/THEO-2011-08-22-02.lesson (explaining to the effect that the proposition that if it barks, then it is a dog, does not prove that if it does not bark, then it is not a dog).

rate.[29] The D.C. Circuit affirmed that the Board's holding that the carrier's SAC evidence was not relevant, even if it would have yielded a different result, "was a reasonable reading of the agency's rate guidelines and is not subject to reversal by this court." *Id. CF Industries* is more apposite than the cases noted by CSXT.

CSXT's final contention is that Consumers should not receive relief under the Revenue Adequacy Constraint because its movement uses less than 1% of CSXT's route miles.[30] CSXT's logic fails in multiple respects.

First, CSXT has not shown that Consumers' movement is atypical in any way. CSXT's contention is just another argument that there should be no Revenue Adequacy Constraint at all, when the *Coal Rate Guidelines*, contestable market theory, and precedent all show otherwise. The fact that CSXT handles many movements -- some long, short, big, small, *etc.* -- creates the economies of scale, scope, and density that give rise to CSXT's market power and the related need for meaningful regulation to address the potential for the accumulation of supra-competitive profits.[31]

Second, CSXT's focus on miles ignores the fact that the Campbell movement utilizes CSXT's facilities in Chicago, which CSXT elsewhere depicts

---

[29] *CF Indus., Inc. v. Koch Pipeline Co,*, 4 S.T.B. 637 (2000), *aff'd sub nom. CF Indus., Inc. v. Surface Transp. Bd.*, 255 F.3d 816, 827-28 (D.C. Cir. 2001).

[30] CSXT Reply at IV-5-8.

[31] Baumol, Momigliano Lecture, at 7, 11.

as a vital portion of its network.[32] The Campbell movement is not as isolated or insular as CSXT claims.

Third, the Campbell movement is very significant to CSXT under other salient metrics such as volume, revenues, margin, contribution, *etc.* Simply by falling above the jurisdictional threshold, the Campbell movement necessarily makes a greater contribution than the majority of CSXT's other traffic revenues.

As part of its RSAM calculation, the Board divides each carrier's costed waybill sample into three segments based on its revenue to variable cost ratio ("R/VC"): (a) at least 180%, (b) at least 100%, but below 180%, and (c) below 100%. For CSXT in 2014, revenues were $4.7 billion for (a), $5.2 billion for (b), and $1.2 billion for (c).[33] Accordingly, even if the R/VC for the expiring 2014 contract rate on the Campbell movement in effect immediately prior to this litigation was merely 180% { }, so as to fall at the bottom of (a), its markup would still exceed the majority (at least 57%) of CSXT's other traffic.

Fourth, even if CSXT were correct that the Campbell movement constitutes a *de minimis* portion of CSXT's total transportation, it would follow that the rate relief requested would have no greater impact on CSXT. CSXT's claim that the movement is insignificant is no reason to withhold relief.

---

[32] *E.g.*, CSXT Reply at IV-28-29, 70.

[33] *See* e-workpaper "RA-CSXTWaybillAnalysis.xlsx", tab "Analysis", line 10, rows cell H11, Ill, J11, and K11. Source data taken from https://www.stb.dot.gov/stb/docs/Economic%20Data/RSAM%20Computation_2014_Locked.xlsx, tab "RSAM_2014_Class_I_Costs_and_Rev", line 9, columns g through I, included as e-workpaper "RA-RSAMWBreakdown.xlsx".

Finally, the nature of a top-down constraint is that it potentially applies to all of a carrier's eligible captive traffic. As Dr. Hennigan explains, the constraint involves a Ramsey-efficient allocation of all of a carrier's unattributable costs to its full traffic base.[34] Excluding a particular movement because it is "small" violates the foundation of the constraint. Nonetheless, a particular movement may be ineligible for relief if the carrier can "demonstrate with particularity: (1) a need for the higher revenues; (2) the harm it would suffer if it could not collect them; and (3) why the captive shippers should provide them."[35] CSXT had this opportunity, but opted to forego any such showing in its Reply Evidence.

In sum, CSXT has provided no support for its claims that the Constraint should be abandoned or that Consumers is ineligible for such relief.

### 2. Replacement Costs Should Not be Utilized to Measure CSXT's Revenue Adequacy

CSXT argues at length that any assessment of revenue adequacy should be based on replacement costs. CSXT Reply at IV-8-26. CSXT bases its position on various considerations, each of which is addressed below. However, the short answer is that CSXT's contentions cannot be accepted for three fundamental reasons. First, the Board does not utilize replacement costs for measuring revenue adequacy and has consistently rejected repeated railroad

---

[34] Hennigan Rebuttal Report at 8, 10-11.

[35] *Coal Rate Guidelines*, 1 I.C.C.2d at 536 n.36.

requests that it do so. Second, even if replacement costs could be considered, CSXT has submitted no quantitative evidence regarding its actual replacement costs. Third, even if CSXT had submitted such evidence, it would be necessary to determine CSXT's "'real' cost of capital to avoid double-counting the effects of inflation."[36] CSXT has submitted no evidence regarding the real cost of cost of capital.[37]

### a. Regulatory Policy Should Replicate the Disciplining Forces of Competition, and the Revenue Adequacy Constraint Does So Utilizing GAAP Costs

Consumers agrees with CSXT's general statement that "[t]he goal of regulation is to replicate the result in a competitive market."[38] Indeed, that is precisely what the Revenue Adequacy Constraint seeks to accomplish, as explained in Hennigan Rebuttal Report at 8-10. Firms in competitive markets do not earn monopoly profits because such profits induce others to enter and compete, and monopoly profits cannot be sustained in the face of such competition.[39] In a monopoly market, barriers to entry exist, often in the form of economies of scale, scope, and density, and prevent competitive entry, allowing an incumbent to garner supra-competitive profits in excess of its cost of capital.[40]

---

[36] *Assoc. of Am. R.R.--Pet. Regarding Methodology for Determining R.R. Revenue Adequacy*, Ex Parte No. 679 (STB served Oct. 23, 2008) at 5.

[37] Hennigan Rebuttal Report at 14.

[38] CSXT Reply at IV-11.

[39] Baumol, Momigliano Lecture, at 8.

[40] *Id.* at 7, 11.

Railroads are subject to rate regulation to the extent that they do not operate in competitive markets with respect to their captive traffic. The Revenue Adequacy Constraint serves as a check that the railroad does not extract excessive rents on captive traffic. The revenue adequacy level "represents a reasonable level of profitability for a healthy carrier" that "fairly rewards the rail company's investors and assures shippers that the carrier will be able to meet their service needs."[41] "Carriers do not need greater revenues than this standard permits, and we believe that, in a regulated setting, they are not entitled to any higher revenues."[42] The Revenue Adequacy Constraint protects captive shippers from paying too much, while allowing carriers to receive the revenues that they need to provide service by allocating unattributable costs on a Ramsey-efficient basis.[43]

Where Consumers and CSXT diverge is how the presence of monopoly profits should be ascertained, and what consequences should follow if they are present. Consumers' position is that use of historical or generally accepted accounting principles ("GAAP") costs are appropriate and preferable for this purpose, and that use of the replacement costs as advocated by CSXT will undermine accuracy and increase complexity. As Dr. Hennigan explains, deployment of the Revenue Adequacy Constraint using GAAP costs and the nominal cost of capital results in Ramsey-efficient pricing that allocates an

---

[41] *Coal Rate Guidelines*, 1 I.C.C.2d at 535.

[42] *Id.*

[43] Hennigan Rebuttal Report at 5-7, 10-11.

appropriate, but not excessive, amount of unattributable costs to captive shippers such as Consumers. Allowing carriers to collect more constitutes an overrecovery for which there is no economic justification.[44]

Significantly, others reviewing the issue, including Congress in the Staggers Rail Act of 1980 (requiring use of GAAP accounting to the maximum extent practicable in 49 U.S.C. § 11161), the ICC, the Railroad Accounting Principles Board ("RAPB"), the General Accounting (now Government Accountability) Office ("GAO"), and the Board itself, have reached the same conclusion that the revenue adequacy constraint should utilize GAAP costs, as explained in Hennigan Rebuttal Report at 17-23.[45]

The RAPB considered the merits of using replacement costs for revenue adequacy purposes at length, and concluded that the potential benefits did not outweigh the costs and risks.[46] The RAPB specifically considered whether using GAAP costs would undermine the railroads' ability to attract needed capital, and concluded that the use of GAAP costs was consistent with the revenue adequacy objective:

---

[44] *Id.* at 7-10, 15-16, 22-29.

[45] *Assoc. of Am. R.R.--Pet. Regarding Methodology for Determining R.R. Revenue Adequacy*, Ex Parte No. 679 (STB served Oct. 23, 2008) (denying AAR petition and citing prior ICC, RAPB, and GAO decisions and reports rejecting use of replacement costs to measure revenue adequacy); *WCTL Petition BNSF* at 8 (Revenue Adequacy Constraint uses "revenues, expenses, asset values, and liability associated with rail operations reported in carrier's financial statements").

[46] RAPB Report, Volume 2, at *e.g.*, 40-41, 46-48.

> A primary object of the [Staggers Rail Act] is to assist railroads in attaining revenue adequacy. To accomplish this objective, investors must be permitted to earn a market return on their investment. As long as investors can earn a rate of return comparable to their market rates of return for investments of comparable risk, they will continue to invest.
>
> Use of GAAP cost is consistent with the objective of enabling railroad entities to attract capital for the replacement of necessary assets. Railroad assets will be replaced so long as competitive returns are allowed on the existing and new investments of the entity.... if investors reasonably can expect to earn a competitive return, capital can be attracted when it is required, and the accumulation of funds in advance of the reinvestment is not necessary.[47]

CSXT acknowledged this reality in stating in response to Consumers' Interrogatory No. 20 "that it calculates and utilizes the replacement cost of assets every time it replaces an asset, because replacement costs are by definition the true cost necessary to replace railroad infrastructure."[48] In other words, CSXT calculates the replacement cost of an asset when it needs to, which is when the asset is actually replaced or a new asset is acquired. CSXT has sufficient funds, and sufficient access to capital, to make those replacements when needed. The cost is verifiable, as it is the price actually paid at the time. The actual investment then enters the investment base, where it is utilized to determine the carrier's ongoing revenue needs.[49] Not all assets require replacement when

---

[47] *Id.* at 47, discussed in Hennigan Rebuttal Report at 22-23.

[48] E-workpaper "RA-CSXT-InterNo20.pdf".

[49] Hennigan Rebuttal Report at 25-26.

they wear out, and some assets can be replaced with a different or superior asset; *e.g.*, CSXT no longer purchases coal-fired locomotives and has little use for manned cabooses, but relies more extensively on computers and other advanced technology.[50]

Relying on GAAP costs does not undermine the carriers' ability to obtain adequate capital, when and as needed. Indeed, the assessment of whether a carrier is providing a "competitive return" that "represents a reasonable level of profitability" and "fairly rewards the rail company's investors" is best made when its investment base can be compared to those of other firms. Those other firms, whether they operate in monopoly or more competitive markets, are near uniform in reporting their results and being evaluated by investors on the basis of GAAP and not replacement costs.[51]

CSXT is asking the Board to deviate from the type of cost recognition that is the norm not only for rate regulation in the United States, but also for investment in non-regulated companies. For its own part, CSXT sees no need to account for the replacement cost of its asset base in conducting its affairs. As stated in its discovery response, "[i]n the ordinary course of business CSXT

---

[50] *Id.* at 18, 22, 26-27.

[51] Hennigan Rebuttal Report at 15-17.

does not maintain any database, spreadsheet, or other document that calculates the overall replacement costs of the CSXT system."[52]

Moreover, CSXT has not shown that relying on the GAAP approach imposes any sort of hardship on its operations, its investment and financial decisions, or its ability to attract needed capital. Significantly, CSXT explains in its Proxy Statement for 2016[53] that half of its long-term incentive compensation for its executives, which "is intended to incent employee behavior that supports strategic initiatives to drive shareholder value over a multi-year period," is based on Return on Assets ("ROA").[54] CSXT calculates ROA as tax-adjusted operating income, excluding certain non-recurring items, divided by net property, which is measured by subtracting accumulated depreciation from gross property.[55] CSXT thus relies on GAAP to measure and incent its own long-term value, even as it argues that the Board should use replacement costs for that purpose

---

[52] Letter from CSXT Counsel to Consumers Counsel, dated August 13, 2015, excerpt included as e-workpaper "RA-CSXT-Supp-InterNo20.pdf"; Hennigan Rebuttal Report at 26-27.

[53] E-workpaper "RA-CSX2016ProxyStatement.pdf".

[54] *Id.* at 43, 44. As discussed *infra*, the other half of the incentive compensation is based on operating ratio. CSXT's management compensation arrangements are discussed in greater detail in Hennigan Rebuttal Report at 27-29.

[55] *Id.* For the eleven-quarter period from the April 2013 through December 2015, CSXT's ROA averaged 7.86%, exceeding the threshold return of 7.69%. *Id.* at 44, 45. As explained in Hennigan Rebuttal Report at 29, 43, it would make little sense for CSXT to set ROA compensation targets below its cost of capital, as such performance would theoretically not contribute to growth in long-term value.

### b. CSXT's Cited Support for Using Replacement Costs was Previously Considered and Rejected, and Remains Underwhelming

CSXT claims that "the academic support for the use of replacement costs is overwhelming."[56] But the support that CSXT identifies (the Economist Letter, *etc.*) is all very dated, and has been previously considered and repeatedly rejected, as the Board noted in denying the AAR's petition in *Ex Parte No. 679* in 2008.

If the support were so "overwhelming,"[57] one would expect to find replacement costs used pervasively in economic regulation, CSXT's own internal practices, and financial and investment analysis of non-regulated firms generally. CSXT has supplied no such evidence. However, the norm in all of those contexts is to rely on GAAP, not replacement costs.[58]

CSXT fails to identify a single instance where full-scale replacement costs are utilized for general rate regulation. CSXT has not provided a basis for the Board to depart from its own established practice and that of numerous other agencies that utilize GAAP costs, and instead turn to replacement costs to determine a regulated entity's overall revenue requirements.

CSXT cannot even show that it tracks and utilizes the total replacement costs for conducting its own affairs. "In the ordinary course of

---

[56] CSXT Reply at IV-12 (capitalization deleted).

[57] *Id.* at IV-10, 12-13.

[58] Hennigan Rebuttal Report at 15-16.

business CSXT does not maintain any database, spreadsheet, or other document that calculates the overall replacement costs of the CSXT system."[59] CSXT relies on GAAP costs, not replacement costs, to calculate and incent its ROA for executive compensation designed "to drive shareholder value over a multi-year period."[60]

CSXT also has not adduced empirical or other evidence to support its broad claim that "[p]rices in competitive markets are based on current costs, not historical costs,"[61] in a way that requires or supports the use of total replacement costs for a firm's assets. Public companies are required to report on the basis of GAAP, and GAAP forms the foundation for evaluation and analysis in the financial and investment community.[62]

CSXT attempts to analogize to circumstances where some individual assets are valued on a replacement cost basis, such as the costs of a semitrailer for a trucking firm and the rental rate for a house in the housing market.[63] In doing so, CSXT misconstrues the nature of the Revenue Adequacy Constraint. As Dr. Hennigan explained in his testimony to the Board, the Revenue Adequacy Constraint operates on a top-down basis, and not bottom-up, as with SAC and

---

[59] E-workpaper "RA-CSXT-Supp-InterNo20.pdf;' Hennigan Rebuttal Report at 26-27.

[60] CSXT 2016 Proxy Statement at 44-45, "RA-CSX2016ProxyStatement", discussed at IV-19, *supra*, and Hennigan Rebuttal Report at 28.

[61] CSXT Reply at IV-13.

[62] Hennigan Rebuttal Report at 15-17.

[63] CSXT Reply at IV-13-14.

Simplified SAC. The revenue adequacy constraint looks to the total investment base in the aggregate. Some assets may be very new and others old, although older assets often benefit from substantial ongoing capital expenditures.[64] CSXT's ongoing capital expenditures are substantial and result in an ongoing renewal of its assets, *e.g.*, CSXT "calculates and utilizes the replacement cost of assets every time it replaces an asset, because replacement costs are by definition the true cost necessary to replace railroad infrastructure."[65] When an asset is replaced or updated, the replacement cost/expenditure enters its asset base.[66] The need to replace assets from time to time does not require that all of a firm's assets be valued on a replacement cost basis.

Use of replacement costs is thus not required to achieve "the universally accepted principle of striving to replicate the results of competitive markets." As the RAPB explained in the passage quoted at IV-17, *supra*, investors logically will continue to invest as long as they receive a competitive return on their investments, including the replacement cost of assets as they are

---

[64] Hennigan Rebuttal Report at 24-26. CSXT's claim that land is different because it does not depreciate is discussed at IV-24-26, *infra*.

[65] "RA-CSXT-InterNo.20.pdf".

[66] Hennigan Rebuttal Report at 25-26 (showing how the net book value of CSXT's physical assets grew by 20.1% from 2010 to 2014).

replaced. CSXT has not suggested, much less demonstrated, that it is short on invested capital or has been unable to raise needed capital.[67]

CSXT then turns to the accounting for railroad mergers and other control acquisitions, where CSXT claims "a market transaction that sets the price of railroad assets."[68] Here, too, CSXT distorts both marketplace reality and Board precedent. Railroad control transactions set a price for the overall enterprise on an overall going concern basis, not the replacement or market cost of individual assets.[69] GAAP then requires that the negotiated acquisition price (including any premium) be allocated to individual assets, some of which may be written-up and others written-down. But the price itself has been negotiated for the overall enterprise. The substantial premiums paid in the recent mergers have not been for the raw assets considered in isolation.

The premiums and the associated increases in the jurisdictional threshold resulting from control transactions certainly have disturbed captive shippers. However, the agency's recognition of some write-ups in conjunction with the mergers, based on GAAP, provides no support for using replacement costs generally. The Board has been very clear on this distinction:

---

[67] *E.g.*, Hennigan Rebuttal Report at 24-29. CSXT's fictitious revenue adequacy shortfall is addressed at IV-40-42, *infra*, and Hennigan Rebuttal Report at 48-51.

[68] CSXT Reply at IV-14.

[69] At least in part, the premium reflects projected synergies and other gains arising from expanded economies of scale, scope, and density, such as consolidated overheard and reduced interchanges.

> Purchase accounting is required by GAAP; replacement cost accounting is not. Purchase accounting requires a *one-time* adjustment to asset values and is triggered by a *company specific market event* that signals that the book values of that company's assets are under- or overstated relative to their real values. In contrast, replacement cost accounting would need to be applied across the entire industry and would be imposed by a change in accounting philosophy rather than a market event.[70]

The use of write-ups in railroad mergers provides no basis for using replacements costs generally or to measure revenue adequacy. Such use of replacement costs is directly contrary to GAAP and Congress' directive that the Board conform its accounting rules to GAAP to the maximum extent practicable.

### c. CSXT's Discussion of the Replacement Cost of Land is Deficient and Unavailing

CSXT claims that land particularly demonstrates the need for replacement costs because it does not depreciate and instead increases in value, such that it would be sold if it does not cover its replacement cost. CSXT Reply at IV-16-17. CSXT's analysis proves no such thing, and the nature of land only confirms that replacement costs should not be used to evaluate revenue adequacy.

First, in deciding whether a particular segment is covering its costs, CSXT would not logically look at the value of the land in isolation, but would instead consider the segment's relationship to the greater whole. CSXT would

---

[70] *WCTL Petition BNSF* at 21 (original emphasis).

hesitate to abandon a small segment that links major parts of its network. Focusing on land or any other individual asset in isolation is of no value.

Second, even a revenue adequate carrier, whether measured by replacement costs or not, may decide that it has surplus land or other assets and choose to abandon segments or otherwise consolidate its operations. For example, CSXT announced that it was reducing operations in Erwin, Tennessee, on October 15, 2015, closing mechanical shops in Corbin, Kentucky, on October 20, 2015, consolidating operations administration from ten divisions to nine and closing administrative offices at Huntington, West Virginia, on January 18, 2016, and streamlining mechanical operations at sixteen locations on February 12, 2016.[71] Such developments do not prove revenue inadequacy, only an opportunity to improve profitability and efficiency, possibly in response to changes in a dynamic market.[72] A segment, including associated land, may cover its full costs, but the firm may decide that it can earn an even greater return by selling those assets and deploying the proceeds elsewhere.

Third, CSXT controls a significant portion of its land under easements rather than fee interests. CSXT would not recoup anything for

---

[71] CSXT's announcements are included as e-workpaper "RA-CSXT-ReductionAnnounements.pdf".

[72] Hennigan Rebuttal Report at 30-31.

disposing of a segment owned by easement. Valuing such land at its replacement cost substantially overstates CSXT's investment.[73]

CSXT's concluding paragraph in this section is to the effect that use of something less than replacement cost will deprive the railroads of the ability to earn a reasonable return and force them to curtail investment.[74] The RAPB explained nearly thirty (30) years ago that reliance on the GAAP investment base is sufficient and preferable for determining if a firm is able to attract sufficient capital to remain in business and expand as needed. Other firms generally report and are evaluated on the basis of GAAP.

### d. CSXT Has Not Overcome the Practical Problems with Replacement Costs, or Even Attempted To Do So

CSXT contends that the practical problems with using replacement costs to measure revenue adequacy have been overcome because (a) it has no excess capacity, obviating the need to identify excess assets,[75] and (b) the BEA statistics can be utilized to determine the current value of railroad assets.[76] CSXT's claims do not survive review.

---

[73]CSXT's specific focus on the replacement cost of land also appears inconsistent with its proposal to use the Bureau of Economic Analysis approach to replacement cost less depreciation (CSXT Reply at IV-21-22). As land is not used up and does not depreciate, the replacement cost for land less (non-existent) depreciation is the same as its full replacement cost.

[74] CSXT Reply at IV-17.

[75] *Id.* at IV-17-21

[76] *Id.* at IV-21-22

CSXT is quite correct that shippers expressed frustration in *Ex Parte No. 724* and elsewhere about the poor railroad service during 2013-2014. However, those service problems cannot be attributed to an inability or failure to make long-term investments required to handle unprecedented traffic volumes.[77] Traffic volumes in 2013-2014 were, by various measures, either below or modestly above the pre-recession peaks,[78] and the underlying problem was not a lack of basic track infrastructure. While weather played a role, the problems would not have persisted if weather were the only or even the main cause. In substantial part, the problems stemmed from railroad decisions to control expenses by reducing labor counts and storing locomotives.[79]

CSXT's own recent decisions demonstrate that it believes it still has excess assets, as evidenced by its recent actions in Erwin, Tennessee, Corbin, Kentucky, and elsewhere discussed at IV-25, *supra*. CSXT's actions reflect a determination that some of its assets will not be needed in the future, and such pruning likely will continue. A replacement cost methodology remains suspect in

---

[77] *See, e.g.,* http://www.mprnews.org/story/2014/12/14/rail-delays, "Documents cast doubt on BNSF explanation of shipping delays" (December 14, 2014), included as e-workpaper "RA-DoubtsAboutBNSFDelays.pdf".

[78] Hennigan Rebuttal Report at 47-48 and e-workpapers referenced therein.

[79] *See, e.g.,* http://www.omaha.com/money/buffett/service-problems-in-give-bnsf-a-lot-of-work-to/article_36d807e8-8644-5c92-a8d0-3e999299571d.html (March 1, 2015) (quoting Professor David Kass of the University of Maryland, commenting about BNSF, "But it does raise the question of how much the service problems were weather-related and how much they were a result of bad managerial decisions."); e-workpaper "RA-BNSF2014ServiceProblems.pdf".

assuming that every existing asset today will be replaced, and with the same type of asset, in the future.[80]

CSXT also references very robust traffic growth projections.[81] However, meeting future traffic growth does not require the use of replacement costs, as the RAPB explained. *See* discussion at IV-18-19, *supra*.

CSXT's claim that the answer to the practical question of how to "reasonably transform the unreliable accounting values into current replacements … may lie within the BEA"[82] also is deficient. CSXT did not provide an actual replacement cost calculation based on the BEA data, or show how to apply the BEA data to its assets.[83] Instead, CSXT merely asserts that "[t]he answer may lie within the BEA", "urges the Board to begin a rulemaking proceeding to explore how to use this published data," and acknowledges that its approach (whatever it turns out to be) "will not be perfect."[84] Those general statements do not provide anything that the Board can actually use in the instant rate case. CSXT also ignores the need to use a real cost of capital to avoid double-counting inflation, a long a recognized drawback to utilizing replacement costs.[85]

---

[80] Hennigan Rebuttal Report at 21-22 (discussing Economists Letter).

[81] CSXT Reply at IV-9-10 & n.20, and 19.

[82] CSXT Reply at IV-21.

[83] Hennigan Rebuttal Report at 27, 31.

[84] CSXT Reply at IV-21-22.

[85] *E.g.*, Ex Parte No. 679 at 5; Hennigan Rebuttal Report at 31-32.

Third, CSXT ignores the Congressional directive for the Board to rely upon GAAP accounting "to the maximum extent practicable."[86] The applicable statutory provisions and their history are discussed in Hennigan Rebuttal Report at 19-20. CSXT's effort to "transform the unreliable accounting values into current replacement costs"[87] violates Congress' directive. The RAPB also did not view GAAP data as unreliable in general or unsuitable for assessing railroad revenue adequacy, but found it superior to using replacement costs, as did the GAO, the ICC, and the Board in prior decisions.[88]

**e. Congress Has Not Directed the Use of Replacement Costs to Measure Revenue Adequacy**

CSXT next argues that Congress, in Section 16 of recently enacted S. 808, the *Surface Transportation Board Reauthorization Act of 2015*, Pub. L. No. 114-110, 129 Stat. 2228, directed the use of replacement costs to determine the revenue adequacy of railroads.[89]

As explained below, Congress did no such thing. Moreover, any action that Congress did take would have no bearing on Consumers' rate case, because of what Congress did specify in Section 17:

SEC. 17. Construction.

---

[86] 49 U.S.C. §§ 11161, 11164.

[87] CSXT Reply at IV-21.

[88] Hennigan Rebuttal Report at 17-29.

[89] CSXT Reply at IV-22-26.

> Nothing in this Act may be construed to affect any suit commenced by or against the Surface Transportation Board, or any proceeding or challenge pending before the Surface Transportation Board, before the date of the enactment of this Act.

Since Consumers' rate case was already pending "before the Surface Transportation Board, before the date of the enactment [December 18, 2015] of" S. 808, the legislation cannot be construed to have any impact on Consumers' rate case. Any claim otherwise is at least disingenuous, and raises questions as to counsel's candor and fairness under 49 C.F.R. § 1103.27.

Even if Section 16 somehow was applicable, it would not support CSXT's position because Congress did not direct the use of replacement costs or other forward-looking valuation of assets. To the contrary, the accompanying Senate Report on the legislation expressly states that "[t]his section would not require *any* change to how the STB determines railroad revenue adequacy,"[90] a position confirmed by Senator Thune's letter to the Board dated March 31, 2016. There is also no basis to infer that Congress has directed the use of something other than GAAP costs, particularly as Congress did not alter the directive in 49 U.S.C. § 11161 to the Board to rely on GAAP "to the maximum extent practicable."

---

[90] Senate Report No. 114-52 (2015) at 14 (emphasis added). Since the House of Representatives passed the Senate bill, there was no need for a separate House Report or Conference Report on the legislation.

As CSXT observes, Congress did amend 49 U.S.C. § 10704(a)(2) to include language noting the need "for the infrastructure and investment needed to meet the present and future demand for rail services." The section-by-section review explains that the provision "would clarify standards and procedures for evaluating revenue adequacy and emphasizes the infrastructure needed in order for rail services to be able to meet the present and future demand for rail service."[91] Such language addressing service needs is not surprising in view of the railroad operational problems that afflicted shippers during 2013-2014, which the Senate Report reviews at 3-7. But clarifying standards and emphasizing needs are very different than fundamentally altering a costing approach that has been used for over thirty (30) years, and remains strongly encouraged by a separate statutory provision that was not amended.

In stating that S. 808 "would clarify that a carrier's capability to meet its current and future service needs is relevant when considering revenue adequacy," the Senate Report includes a footnote that cites and quotes in part from the statement in *Coal Rate Guidelines* that under the revenue adequacy constraint "captive shippers should not be required to continue to pay differentially higher rates than other shippers when some or all of that differential is no longer necessary to ensure a financially sound carrier capable of meeting its *current and*

[91] S. Rep. at 14.

*future service needs*."[92] The *Coal Rate Guidelines* and the Revenue Adequacy Constraint already incorporate the need for revenues to meet "current and future service needs." Section 16 does not add anything new.

## B. CONSUMERS MAY SEEK RELIEF UNDER BOTH THE SAC AND REVENUE ADEQUACY CONSTRAINTS

CSXT claims that Consumers cannot seek relief under both the SAC Constraint and the Revenue Adequacy Constraint simultaneously.[93] CSXT makes this claim despite acknowledging that the *Coal Rate Guidelines*, *Arkansas Power & Light*, and *Nevada Power* all hold otherwise.[94]

CSXT argues instead that entertaining a revenue adequacy claim is improper because it could confer relief by identifying a rate below the applicable SAC level, creating a cross-subsidy prohibited by SAC theory as described in *Otter Tail*, and *PPL Montana*.[95] CSXT's claim is completely contrary to the *Coal Rate Guidelines*, contestable market theory, and Board precedent.

First, the *Coal Rate Guidelines* define revenue adequacy as "the logical first constraint" on a market dominant carrier's pricing. As such, it applies even before stand-alone costs are considered, and its applicability is not

---

[92] S. Rep. at 8 & n.44, citing *Coal Rate Guidelines*, 1 I.C.C.2d at 535-56 (italics added for the *Guidelines* language that is quoted in the Senate Report footnote).

[93] CSXT Reply at IV-26-29.

[94] *Id.* at IV-28 & nn.62-64, citing *Nevada Power*, 6 I.C.C.2d 1, *Arkansas Power & Light*, 3 I.C.C.2d 757, and *Coal Rate Guidelines*, 1 I.C.C.2d at 545-58.

[95] *Id.* at IV-27.

undermined if the SAC analysis identifies a higher maximum reasonable rate. "Thus, the various constraints contained in CMP may be used individually or in combination to analyze whether the rate at issue is unreasonably high, *i.e.*, set at a level greater than necessary to collect the portion of unattributable costs that can properly be charged to that shipper."[96]

Second, contestable market theory does *not* identify SAC as the undisputed reasonable price, but merely as the *ceiling* on the reasonable price. "No price is allowed to be higher than stand-alone cost and no price is allowed to be lower than incremental cost, but any price in between these two levels is permitted."[97] The fact that a revenue adequacy analysis identifies a lower rate than the SAC analysis does not violate SAC principles. Under CSXT's approach, a SAC analysis showing that all of a revenue adequate carrier's rates are below the SAC level would allow the carrier to take additional rate increases on captive traffic, even though the carrier already is revenue adequate. Such an outcome, amounts to unconstrained market pricing and runs afoul of Ramsey pricing principles and the *Guidelines*.[98]

Third, CSXT's claim that awarding revenue adequacy relief will cause Consumers to fail to cover its unattributable costs, or benefit from some

---

[96] *Coal Rate Guidelines*, 1 I.C.C.2d at 548.

[97] Baumol, Momigliano Lecture, 1997, at 15.

[98] Hennigan Rebuttal Report at 7, 12-13.

(unidentified) cross-subsidy,[99] distorts the nature of the Revenue Adequacy Constraint. As Dr. Hennigan explains, the Revenue Adequacy Constraint, just like SAC, results in an efficient allocation of unattributable costs.[100] Consumers will still cover not only its attributable costs, but also its share of unattributable costs, efficiently allocated in accordance with Ramsey pricing principles:

> *CMP provides two approaches for determining the revenue requirements of an efficient carrier. They can be calculated for the existing carrier on a system-wide basis by applying the revenue adequacy and management efficiency constraints.* Alternatively, they can be hypothesized using a potential, "stand-alone cost" system. In either case, the approach taken obviates the need for movement-by-movement estimates of demand elasticities for the carrier's entire system. *CMP will have defined the total amount of unattributable costs to which the shipper must contribute and focused on the traffic which can reasonably be expected to pay those costs.* At that point, market forces will largely determine the share of the costs to be borne by each shipper. *The result of this process is a rate structure* which reflects long-run marginal costs, demand elasticity, a*nd the differential pricing of unattributable costs*--the same result that occurs under Ramsey pricing. Thus, in spite of the lack of mathematical precision in CMP, it should yield rates similar to those produced by Ramsey pricing.[101]

The footnote explains that revenue adequacy and SAC both allocate unattributable costs efficiently, albeit differently, and that the shipper may choose between them:

---

[99] CSXT Reply at IV-27-29.

[100] Hennigan Rebuttal Report at 8-13.

[101] *Coal Rate Guidelines*, 1 I.C.C.2d at 534 (footnote omitted; emphasis added).

> *However, the rate to an individual shipper may vary depending upon which of the two CMP approaches is used. If the shipper adopts the revenue adequacy approach, adjusted for demonstrated management inefficiencies, to determine the reasonableness of the rate, the total unattributable costs of the existing system are subject to recovery via differential pricing. Thus, the shipper's rate reflects the recovery of these costs whether or not the shipper benefits from all the system's services.* When stand-alone cost is sued to determine rate reasonableness, the shipper may specify the level of service provided and, therefore, the costs for which it is responsible. A complainant should consider these factors in deciding which approach to pursue.[102]

CSXT correctly observes that revenue adequacy and SAC "represent different means of approaching the same basic issues, *i.e.*, the extent of unattributable costs to be covered through differential pricing and the portion that can be charged to the shipper involved."[103] However, CSXT's conclusion that SAC should override a lower rate under revenue adequacy, does not follow.

As Dr. Hennigan explained in his initial report and further explains in his Rebuttal Report, "[b]oth the revenue adequacy and stand-alone cost constraints are guided by and emulate competitive market principles," but they do so in different ways.[104] The Revenue Adequacy Constraint applies on a top-down basis, using the GAAP costs of the existing carrier as a whole. "The revenue

---

[102] *Id.* at n.35 (emphasis added).

[103] CSXT Reply at IV-20, quoting *Coal Rate Guidelines*, 1 I.C.C.2d at 547.

[104] Hennigan Rebuttal Report at 8.

adequacy constraint is a limit on the total revenues a carrier can collect."[105] All unattributable costs have been allocated, as the carrier otherwise would not be revenue adequate. What CSXT ignores is that the allocation is made on the basis of Ramsey-type differential pricing, as explained in Hennigan Rebuttal Report at 3-7, 10-13. Before the January 1, 2015 rate increase, Consumers already was paying a rate with a high R/VC markup { }, substantially above CSXT's RSAM. Other customers likewise pay markups that reflect an allocation based on relative demand. CSXT did not need to collect more from Consumers to be revenue adequate, and Consumers should not be paying more.[106]

Consumers' requested relief does not require any other shipper to pay more, diminish the relief that might be available to some other shipper, or force CSXT to the brink of revenue inadequacy. It does not "steal from a penniless Peter to pay Paul."[107] To the contrary, Consumers' relief under the Revenue Adequacy Constraint simply cancels a rate increase that CSXT did not require in order to remain revenue adequate by a substantial margin.

Finally, the Board already has held that revenue adequacy relief is available even if SAC might approve a higher maximum reasonable rate:

> There is simply no reason why complainants should not be allowed to apply the revenue adequacy constraint here, or why a SAC presentation should be

---

[105] *Coal Rate Guidelines*, 1 I.C.C.2d at 547.

[106] Hennigan Rebuttal Report at 8, 12-13.

[107] CSXT Reply at IV-27, quoting from *PPL Montana v. S.T.B.*, 437 F.3d at 1246.

> necessary. As we have recognized, there is "no single formula" that can perfectly test the reasonableness of rates. *Rate Guidelines,* 1 I.C.C.2d at 524. Thus, CMP purposely affords complaining parties the flexibility to approach a rate analysis from alternative perspectives, examining either the pricing needs of a hypothetical carrier or the defendant carrier's pricing needs. *Id.* at 547-48.[108]

The D.C. Circuit upheld the Board's use of the constraint, stating that the agency's holding that the carrier's "SAC evidence was not relevant even if it would have yielded a different result, was a reasonable reading of the agency's rate guidelines and is not subject to reversal by this court."[109] CSXT's argument already has been rejected by a reviewing court, so there is no reason for the Board to entertain it further here.

## C. CSXT IS REVENUE ADEQUATE

CSXT argues at length (CSXT Reply at IV-29-60) that it cannot be found revenue adequate because it has not passed the Board's snapshot ROI=COC test, and no other information can or should be considered. The Board rejected this position when it denied CSXT's Motion to Dismiss, ruling that Consumers was entitled to present "other competent and probative evidence" to make its case.

Consumers did present such other evidence. Consumers showed that CSXT's ROI=COC deficit using the Board's COC was so small as to lack

---

[108] *CF Indus., Inc.,* 4 S.T.B. at 657.

[109] *CF Indus., Inc. v. Surface Transp. Bd.*, 255 F.3d at 827-28. *Accord, Bituminous Coal – Hiawatha, UT to Moapa, NV*, 6 I.C.C.2d at 6-17; *Arkansas Power & Light Company v. Burlington Northern Railroad Company,* 3 I.C.C.2d 757, 765-77 (1987).

statistical significance; that CSXT was revenue adequate under the ROI=COC test if a more reasonable COC was used {

}; that the financial and investment community considered CSXT to be revenue adequate; and that standard financial ratios confirmed CSXT's revenue adequacy. Significantly, Consumers also showed that CSXT fulfilled each of the statutory criteria for revenue adequacy specified by Congress in 49 U.S.C. § 10704(a)(2), which CSXT ignores entirely.[110]

CSXT did not present any affirmative evidence of its own revenue inadequacy, choosing instead to dispute Consumers' evidence. Consumers responds to CSXT's individual arguments below.

### 1. The ROI=COC Test is Not the Only Competent and Probative Evidence of CSXT's Revenue Adequacy

CSXT argues that the use of the ROI=COC test is a "legislative rule" that precludes consideration of other revenue adequacy evidence.[111] But there is no such rule, legislative or otherwise, as the Board and the ICC consistently have made clear that "other competent and probative evidence" will continue to be considered in individual cases:

> We will also consider these findings in individual rate reasonableness proceedings conducted under 49 U.S.C. § 10701a, but will not necessarily treat these findings as determinative of revenue adequacy issues

---

[110] Hennigan Rebuttal Report at 33-47.

[111] CSXT Reply at IV-32-33, citing *Standards I*, 364 I.C.C. at 809-10, *Standards II*, 3 I.C.C.2d at 267-68, and *Arkansas Power & Light v. Burlington Northern N. R.R.*, 3 I.C.C.2d at 765.

> raised in those cases. Rather, we will continue to consider all probative evidence submitted in such cases pertaining to the revenue adequacy of the particular carrier(s) involved.[112]

The agency then affirmed in *Nevada Power* that "[w]e have stated that any other competent and probative evidence relative to the carrier's revenue adequacy may be submitted in individual rate reasonableness proceedings."[113] That decision clearly establishes that the annual snapshot determinations on which CSXT now relies do not preclude findings of revenue adequacy and associated rate relief under the *Coal Rate Guidelines*.

CSXT's claim that use of Board's hybrid estimate of the cost of equity ("COE") portion of the COC for purposes of assessing revenue adequacy is also a legislative rule[114] rests on even less support. A willingness to consider other competent and probative evidence necessarily entails the possibility that such evidence will demonstrate revenue adequacy, when the ROI=COC test shows otherwise. In considering whether the ROI=COC test yields a "false negative" (or, in CSXT's case, a false neutral), one must consider whether the ROI=COC test is defective, at least as applied.

An inherent pitfall of relying on a single factor test such as ROI=COC is that the individual components may be flawed, and such flaws may

---

[112] *Railroad Revenue Adequacy -- 1987 Determination,* 4 I.C.C.2d 731, 731 (1988).

[113] 6 I.C.C.2d at 7 n.24 (citing *1987 Determination*).

[114] CSXT Reply at IV-33.

prove critical.[115] If the ROI=COC test and other probative evidence yield disparate results, then an effort should be made to reconcile the two and consider whether the COC input is flawed, especially when it utilizes values substantially higher than those utilized by the financial and investment community { }. Competent and probative evidence can include a showing that the Board's COC estimate is inaccurate. As the Board allows parties to show that a different COC should apply for SAC purposes,[116] it follows that a party should be allowed to show that a different COC should apply for revenue adequacy purposes in a specific case under the *Guidelines*.

**2. CSXT's Claimed Revenue Shortfall Analysis is Implausible**

CSXT claims to have fallen short of the ROI=COC threshold every year since 1986, and that the net present value of its shortfall since 1999 now exceeds $33.5 billion, such that CSXT cannot possibly be found to be revenue adequate on a long-term basis.[117]

CSXT presented the same analysis (through 2013) in its Motion to Dismiss, which was denied. There is no $33.5 billion shortfall that CSXT is owed or owes to anyone. It is, at most, the compounded sum of a set of artificial annual shortfalls of measured revenues as compared to an industry COC calculation, which by the end of the period disappears within the statistical range of accuracy.

---

[115] Hennigan Rebuttal Report at 36.

[116] *E.g., Arizona Elec. Power Coop. v. BNSF*, Docket No. 42113 (STB served Nov. 22, 2011) at 137.

[117] CSXT Reply at IV-34-38.

If CSXT really had an escalating deficit of that magnitude, it would have careened into a death-spiral ending in bankruptcy or at least stagnated, neither of which has occurred.[118]

CSXT's alleged cumulative shortfall has not impaired its viability or prevented it from meeting the revenue adequacy criteria specified in 49 U.S.C. § 10704(a)(2). As explained at IV-62-63, *infra*, CSXT has not even disputed that it satisfies the statutory criteria. CSXT has also provided an admirable return to its shareholders during the period covered by the alleged revenue shortfall.[119] As of December 31, 1998, CSXT had a split-adjusted share price of $6.91 and a market capitalization of $9.01 billion. As of December 31, 2014, CSXT's share price was $36.23, representing a 424% increase, and its market capitalization was $35.93 billion, representing a 299% increase. By comparison, the S&P 500 index over the same period rose from a value 1229.23 to a value of 2058.9, an increase of 67%.

A firm that had an actual shortfall of $33 billion in the funding it needs for its long-term survival over this period would not have seen its market capitalization grow by $27 billion. Similarly, a long-term "buy and hold" equity investor in CSXT would not have experienced any loss over this period, but

---

[118] Hennigan Rebuttal Report at 48-51.

[119] Hennigan Rebuttal Report at 50-51, and e-workpaper "RA-Table34.xlsx". As CSXT chose not to address the decline in its stock price since 2014 in its Reply Evidence, it should be foreclosed from seeking to do so at some later time.

instead would have realized a highly attractive return. CSXT itself repurchased a substantial quantity of its own shares during the period, and continues to do so.

### 3. Consumers' Other Evidence of CSXT's Revenue Adequacy is Compelling

CSXT next purports to respond to Consumers' demonstration of CSXT's revenue adequacy.[120] CSXT does not dispute the actual substance of Consumers' showing, but instead focuses on the permissibility of the evidence presented (other than the review of the 49 U.S.C. § 10704(a)(2) criteria, which CSXT ignores altogether).

#### a. Consumers' Evidence Addresses Long-Term Revenue Adequacy

CSXT begins by characterizing the Morningstar, Standard & Poor's ("S&P"), and ValueLine reports and analysis presented by Consumers as "short term" in nature, while claiming that "long term" data is needed.[121]

CSXT ignores the substance of Consumers' presentation, which focused on the long-term, fundamental aspects of the analyses, and not short-term buy/sell, overweight/underweight, or other timing recommendations.[122] Morningstar, for example, stated that CSXT was highly likely to outearn its cost of

---

[120] CSXT Reply at IV-38-61.

[121] CSXT Reply at IV-39-40, quoting *Standards II*, 3 I.C.C.2d at 267-68 (noting that "security analysts are interested not only in long-term viability but also in the potential profits for the short-term. Indeed, sometimes the potential to make a short term profit may far outweigh their interest in the long term health and earnings capacity of the railroad.").

[122] *See* Hennigan Rebuttal Report at 40-41.

capital for the next ten (10) years, and more likely than not for the following ten (10). When combined with the historical data that Consumers presented, CSXT is shown to be revenue adequate for a period of at least 25 years. Consumers also focused on the long-term aspects of the S&P and ValueLine analyses.

Despite criticizing Wall Street analysts for their short-term focus, CSXT insists on retaining the MSDCF component of the Board's COC, which relies on relatively short-term projections of those same analysts.[123] The MSDCF utilizes estimates of growth in earnings per share ("EPS") to project future cashflows. (EPS is a defective metric for a DCF model that utilizes firm-wide cashflows when buybacks reduce the number of shares.) The EPS estimates are prepared by the same analysts that CSXT criticizes for focusing on short-term factors. While the EPS projections may be called "long term," they cover a period only from three to five years. CSXT also ignores the fact that the Board calculates RSAM and measures railroad productivity over four and five years, respectively.[124]

**b. Other Cost of Capital Evidence is Properly Considered**

CSXT insists that Consumers cannot depart from the Board-determined COE values because: (1) the methodology constitutes a legislative

---

[123] CSXT Reply at IV-41-43.

[124] The ICC experimented with longer measuring periods for productivity to capture the business cycle, but concluded that doing was not necessary or practicable and that consistent use of a five-year period was superior. *Productivity Adjustment--Implementation*, 9 I.C.C.2d 1072, 1079 (1993).

rule; (2) CSXT and the AAR defended the existing methodology in *Ex Parte No. 664 (Sub-No. 2)*; (3) the agency has long used an industry-wide and not a firm-specific COC; and (4) Consumers has advocated a different approach in its own utility rate cases.[125] Each of these is addressed below.

**i. Consumers' Alternative Costs of Capital Constitutes Competent and Probative Evidence that is Properly Considered in its Rate Case**

CSXT argues that since challenges to the Board's COC methodology are not to be presented in the annual *Ex Parte No. 558* proceedings, Consumers cannot present other evidence based on alternative COC calculations in its individual rate case.[126]

CSXT's argument in a *non sequitur* because Consumers is not challenging the Board's general industry cost of capital calculation here. Instead, Consumers has submitted evidence in and for purposes of its rate case that compares CSXT's ROI to the railroad COC, for both the industry as a whole and CSXT specifically, calculated following standard practices of the financial and investment community { }. The information constitutes "other competent and probative evidence" permitted under the Board's order denying CSXT's Motion to Dismiss.

In addition, CSXT's legal authority does not support CSXT's conclusion. For example, CSXT states that the COC sets "the

---

[125] CSXT Reply at IV-40-51.

[126] *Id.* at IV-41-44.

profitability threshold that plays a key role in determining whether a railroad is revenue adequate."[127] But "key role" in a general industry determination does not mean "exclusive determinant" for purposes of an individual rate proceeding.[128] Allowing additional evidence necessarily entails the possibility that the evidence will conflict rather than confirm. Moreover, the Board allows parties to use alternative costs of capital in rate cases, as CSXT itself admits.[129] The same principle should hold for the revenue adequacy portion of a combined rate case, especially as "other competent and probative evidence" is to be considered.

### ii. Strong Reasons Support Utilizing a More Accurate Cost of Capital

CSXT replies to Consumers' showing why a more accurate COC should be utilized by arguing that the Board's existing COC methodology should be retained. CSXT's offers nothing new in support of its position, and refers only to the AAR's submission in *Ex Parte No. 664 (Sub-No. 2)*.[130]

As CSXT simply referenced other submissions without presenting anything directly, Consumers will refer to the presentation that it made in its Opening Evidence, rather than review again the infirmities in the Board's existing MSDCF and CAPM approaches to calculating the COE. However, Consumers

---

[127] CSXT Reply at IV-22, quoting *R.R. Cost of Capital -- 2007*, Ex Parte No. 558 (Sub-No. 11) (STB served Apr. 23, 2008) at 2.

[128] *1987 Determination,* 4 I.C.C.2d at 731.

[129] CSXT Reply at IV-43.

[130] *Id.* at IV-44 & n.90.

notes that CSXT made no claim that the investment and financial community actually utilizes the Board's MSDCF and CAPM approaches, or considers the Board's COC values to be realistic. {

} The disparity is so wide that the Board's ROI=COC test fails to provide a useful assessment of whether a carrier's returns are healthy enough to attract needed capital.

On February 23, 2016, Morgan Stanley issued a report that further confirms that the Board's COC is substantially overstated.[131] Morgan Stanley presents a weighted average cost of capital ("WACC" or COC) of 6.7 % for CSXT (pp. 38-39), 7.2% for UP (pp. 33-34), and between 6% and 8% for railroads generally (p. 28).[132] Even if these values reflect a tax shield for equity, the impact should be no more than 50 basis points.[133] Accordingly, CSXT's COC without the possible tax shield would be no more than 7.2% and the midpoint of the industry range would be 7.5%, more than 300 basis points below the Board's COC for

---

[131] Morgan Stanley, *Rails: End of the Pricing Renaissance: Time for Quality and Defense* (Feb. 23, 2016), excerpts included as e-workpaper "RA-MorganStanley.pdf".

[132] Morgan Stanley did not provide values for NS or CP, presumably because Morgan Stanley was advising NS with respect to CP's merger overtures.

[133] The tax shield reflects the percentage of debt times the tax rate times the cost of debt. Conservatively assuming a capital structure with 35% debt, a 35% corporate tax rate, and a 4% cost of debt, the resulting tax shield is 0.49% or 49 basis points (0.35 x 0.35 x 0.04 = 0.0049).

2014, and 211 basis points below the 9.61% that the AAR calculates as the COC for 2015 in its April 20, 2016 filing in *Ex Parte No. 558 (Sub-No. 19)*.

The reasonable conclusion to be drawn is that the Board's COC figures have been substantially overstated since at least 2005, and distort the use of the ROI=COC test in an individual rate proceeding. Ignoring this evidence on the grounds that only the Board-determined COC can be considered constitutes a willful denial of reality.

### iii. A CSXT-Specific Cost of Capital May be Considered and CSXT's Own Figure is Relevant

CSXT maintains that an industry-wide COC should be utilized because it is more accurate and provides an incentive for efficient management, and that Consumers' evidence regarding a CSXT-specific COC should not be considered at all. CSXT Reply at IV-44-46. CSXT distorts Consumers' position.

Consumers submitted CSXT-specific COC data to confirm that: (a) the Board's COC values are unrealistic, (b) CSXT is revenue adequate by a wide margin, and (c) the requested relief will not deprive CSXT of needed funds or impose any sort of hardship on CSXT or its other shippers. Consumer accepts that a wider data set with more similar railroads is generally more desirable statistically. However, the Board's annual sample of only three or four railroads is small, and the individual members vary significantly.[134] Such a narrow sample is

[134] The sample excludes BNSF, the larger member; UP, the second largest, operates in the West; KCS, the smallest member is significantly smaller and has

not superior to a CSXT-specific value, and Morgan Stanley {

} confirm that an accurate industry average would be lower than what the Board has calculated.

CSXT's claim that using a CSXT-specific COC will undermine its incentive to become more efficient[135] ignores the nature of the revenue adequacy relief requested. CSXT still will outearn its COC and remain incented to do so. The relief applies only to Consumers' movement, and its R/VC will continue to far exceed the jurisdictional threshold and CSXT's RSAM ratio, both of which are determined using the Board's COC.

### iv. Railroads and Utilities Differ, and Their COCs Should Not be Calculated Using the Same Methods

CSXT criticizes Consumers for taking a different approach to COC in a utility rate proceeding before the MPSC than it does here before the Board, and claims this "inconsistency, by itself, is sufficient reason to give no weight to Consumers position here."[136]

CSXT ignores the major differences between railroads and utilities and their associated regulatory environments, which support the use of different cost of capital methods. Unlike railroads, utilities (a) face pervasive rate regulation and strong prohibitions on rate discrimination, (b) have lower and more

---

more foreign presence. CSXT references the RAPB's analysis (CSXT Reply at IV-45), but there were many more domestic Class I railroads at the time.

[135] CSXT Reply at IV-45.

[136] *Id.* at IV-47.

stable growth rates, (c) generally do not engage in major stock buybacks, (d) are often bought primarily for their dividend yield, and (e) tend to be counter-cyclical. These differences support use of a DCF method to supplement potential weaknesses in the CAPM as applied under those conditions, and use of a longer historical MRP for utilities. These factual differences and their COC consequences are explained further below.

**(a) Use of Multiple Models**

As CSXT notes, Consumers presented several COE models in its own rate case before the MPSC, but only the CAPM in its case before the Board.[137] However, the context must be understood.

The relatively low near-term growth rates, lack of stock buybacks, and pervasive rate regulation for utilities all enable the DCF approach to yield plausible results for utilities. Consumers' DCF COE was close to those under its other models. In contrast, the Board's MSDCF values as applied to railroads exceeded its CAPM values by a large amount over a sustained period. The Board's CAPM values are themselves substantially overstated, as shown by the lower values from Morgan Stanley, { }, and Consumers' other analyses.

The problems associated with applying a MSDCF approach to the railroads, with their high growth rates, substantial buybacks, and limited regulation, are exacerbated by the Board's choice of MSDCF model. Using a

[137] *Id.* at IV-47-48.

different MSDCF model, such as the one that the Brattle Group, the AAR's retained expert in the *Ex Parte No. 664 (Sub-No. 2)* proceeding, for example, may help to mitigate these problems.[138] The Brattle standard model likely would yield a lower railroad COC. The differences between the Brattle and Board MSDCF models are substantial when applied to the railroads, but are not so material when applied to utilities, whose initial growth rates are lower and closer to the terminal growth rates.

In short, to the issue is not whether the use of multiple models is preferable *per se*, but rather whether the models, assumptions, and inputs fit the industries and contexts in which they are used, especially when the results deviate widely from other available and credible information. Those problems are compounded when disparate results are blithely averaged together, as under the Board's hybrid methodology, without attempting to consider the disparities or determine whether some results are more credible than others.

**(b) CAPM**

CSXT claims Consumers' support for CAPM in its Opening Evidence contrasts "starkly" with Consumers' negative depiction of the CAPM

---

[138] The Western Coal Traffic League's Reply Comments in *Ex Parte No. 664 (Sub-No. 2)* (Nov. 4, 2014), explained that Brattle's standard model defines cashflows as dividends plus buybacks, starts the phase-in to the terminal growth rate at year six, and does not expand cash flows at the start of the third stage. The EPS growth rates should also be adjusted to account for stock buybacks, which are substantial for the railroad industry. The Brattle model is very similar to what the League suggested in *Ex Parte No. 664 (Sub-No. 1)* (if a second model was needed), which yielded a COE below that of the CAPM for the years reviewed.

before the MPSC.[139] However, the short paragraph quoted by CSXT has no bearing on the application of the CAPM to railroads.

The Blume adjustment mitigates beta sensitivity by assigning a two-thirds weight to the observed beta and a one-third weight to a neutral beta of 1.0, thus moderating both high and low betas. Consumers utilized this Blume adjustment in its Opening Evidence at IV-6.[140] Also, utility betas tend to be very low, whereas railroad betas show less deviation from the mean of 1.0.[141]

Second, utility stocks are bought in major part for their dividend yield, making them especially sensitive to interest rate fluctuations.[142] Their interest rate sensitivity, particularly when combined with regulatory lag, induces counter-cyclical price movements. Rising interest rates often signal increased economic activity and a rising stock market, but the lag in updating the utility

---

[139] CSXT Reply at IV-49.

[140] CSXT misstates what Consumers actually said. CSXT claims Consumers sought a COE based on CAPM, a 50-year MRP, and a MRP no greater than 5%. CSXT Reply at IV-47. Consumers actually recommended CAPM, a 50-year MRP, and the Blume beta adjustment. Consumers Opening at IV-6.

[141] The utility betas that Consumers submitted to the MPSC ranged from a low of 0.60 to a high of 0.85, with an average of 0.72. Exhibit of Dhenuvakonda Rao in U-17735, DVR-1 (dated December 2014) at 3. The beta values used by the Board during 2006-2014 have shown less deviation from the mean, ranging from a 2006 low of 0.8604 to a 2013 high of 1.3499.

[142] "One stock market sector closely tied to interest rates is utilities. With historically high dividend yields, utilities stocks compete with bonds and other interest-bearing securities for income-seeking investors." 4 Oversold Utilities Stocks, The Smarter Investor, U.S. News & World Report (May 19, 2015), http://money.usnews.com/money/blogs/the-smarter-mutual-fund-investor/2015/05/19/4-oversold-utilities-stocks; e-workpaper "RA-USNewsUtilitiesStocks.pdf".

ROE will cause utility stock prices to trail general stock market increases, at least until regulators catch up, at which time the opposite may occur. This counter-cyclicality and regulatory lag combine to lower the utilities' measured beta and associated CAPM COE. In contrast, railroads are more cyclical (rail volumes are often a leading economic indicator), and regulatory lag is not a concern. CAPM is thus a much better fit for the railroads. Railroads also are not subject to the pervasive economic regulation (ROE determination, ban on discrimination, pervasive regulatory lag) that applies to utilities and can suppress the movement of utility stock prices.

In short, the beta and other CAPM concerns that apply to utilities, which Consumers noted before the MPSC, do not apply to railroads.

**(c) Market Risk Premium**

CSXT also criticizes Consumers for supporting a shorter historical period for the market risk premium ("MRP") before the Board than it sought for itself before the MPSC.[143] Again, CSXT's criticism is unfounded.

First, use of a 1926-based MRP is common in rate cases before public service commissions. Unlike railroads, utilities face pervasive rate and ROE regulation, and the ROE is typically not reset on an annual or other regular basis. Utilities also are typically more leveraged than railroads.[144] Utilities thus

---

[143] CSXT Reply at IV-49-51.

[144] The MPSC adopted a capital structure for Consumers that consisted of 41.66% common equity at a ROE of 10.3% and an overall weighted cost of capital was 6.18%. MPSC Decision in U-17735 (Nov. 19, 2015) at 49.

face a much more immediate risk that a low ROE may provide an inadequate return that chokes off access to capital before the next rate case can be completed and the new ROE and rates go into effect. Utilities rarely can write-up assets following a merger, and face disallowances under meaningful "used and useful" and prudency tests that do not apply to railroads. One response to these increased regulatory risks is to seek a longer historical MRP for the CAPM portion of the ROE. Also, because utilities are subject to long-term, pervasive rate regulation, a longer-term historical MRP can provide stability for both the utility and its customers.

Second, since there are many separate utilities, public service commissions logically take into account the ROE set by fellow commissions, as the MPSC did, particularly as utilities compete in the first instance with each other for the same pool of investment dollars. "The Commission observes that 10.3% is at the upper point of the Staff's recommended ROE range, and Consumers showed, using the Staff's exhibit, that the average ROE resulting from recently decided cases in Michigan, Indiana, Ohio, Pennsylvania, and Wisconsin was 10.26%."[145] How the ROE is derived often is less important than whether the ROE is close to the norm for other utilities. In contrast, railroads are substantially

[145] MPSC Decision at 47.

unregulated and depict themselves as competing for capital in the unregulated marketplace, where use of CAPM and a lower MRP is the norm.[146]

In short, the utility and railroad industries and their respective regulatory environments differ substantially. A COC approach that works well for one industry may work poorly for the other. There was nothing deviant in Consumers' submissions. CSXT's efforts to exploit isolated statements regarding the CAPM in Consumers' MPSC filing in no way undermine Consumers' criticisms of the railroad COC methodology advocated by CSXT here as the only acceptable indication of revenue adequacy.

### c. Financial Ratios Provide Proper Evidence of CSXT's Revenue Adequacy

CSXT argues at length that Consumers' financial ratios evidence cannot be considered because their use in determining the annual industry snapshot was discontinued in *Standards II*, 3 I.C.C.2d at 266 (with two Commissioners dissenting), and the ratios otherwise provide an incomplete depiction of CSXT's long-term revenue adequacy, as opposed to financial health.[147]

CSXT fundamentally distorts the nature of Consumers' presentation. Consumers did not present single-year ratios, but analyzed data over multiple

---

[146] The AAR's witness agreed with the Western Coal Traffic League that use of CAPM was the norm for nonregulated industries. July 23, 2015 transcript for *Ex Parte Nos. 722* and *664 (Sub-No. 2)* at 129.

[147] CSXT Reply at IV-51-57.

years (2010-2014). Likewise, Consumers does not propose that the ratios be considered as the sole evidence of CSXT's long-term revenue adequacy, or that the Board replace the ROI=COC test for annual revenue adequacy under 49 U.S.C. § 10704(a)(3) with the financial ratios.

Consumers advocates that the multiple-year ratios be considered part of the "other competent and probative evidence" that confirms CSXT's long-term revenue adequacy. CSXT admits that the ratios are "indicators … of the railroads' financial health"[148] and does not identify any errors in the calculations or underlying data. They extend over at least five years and provide more than a short-term indication. The data uniformly show that CSXT is healthy, sustainable, and viable on a long-term basis, and there is no need to weigh factors against each other.[149] CSXT's efforts to criticize each ratio in isolation ignore their interaction and support in the other data that Consumers presented.[150]

CSXT itself relies on two GAAP-based ratios, operating ratio and ROA, measured over just eleven quarters, to incent its executives "to drive shareholder value over a multi-year period."[151] CSXT's own actions show that

---

[148] *Id.* at IV-51.

[149] *Id.* at IV-52

[150] Hennigan Rebuttal Report at 35-36.

[151] CSXT 2016 Proxy Statement at 43; "RA-CSX2016ProxyStatement.pdf".

multiple GAAP-based ratios are a valuable measure of long-term financial health.[152]

CSXT's criticisms of the individual ratios are considered below.

### i. Market to Book Value Ratios

CSXT criticizes Consumers' market-to-book value ratios for using historical book value and not replacement costs. CSXT Reply at IV-54. However, the market prices CSXT above book value not because of its high replacement costs (*id.*), but because the carrier has a favorable going concern value. If replacement costs were so key to CSXT's market valuation, there would be a readily accessible and frequently utilized source for those costs. But there is none. CSXT does not maintain such data, and relies on GAAP values for its long-term incentive compensation.[153]

### ii. Operating Ratios

CSXT criticizes Consumers' operating ratios as being short-term in nature, showing only relative improvement, supposedly by ignoring capital expenditure requirements.[154]

The criticisms are makeweight. CSXT's operating ratios are commendably low, have been so for a sustained period, and have been more than sufficient to fund the capital expenditures, dividends, and buybacks, without a

---

[152] Hennigan Rebuttal Report at 27-29.

[153] *Id.* at 26-29.

[154] CSXT Reply at IV-55.

significant increase in debt-to-capital ratios (addressed next).[155] CSXT has explicitly stated that it expects the low operating ratios to persist for the long term and even improve further.[156] Moreover, Consumers is not proposing that the Board consider the operating or other ratio in isolation for a single year, but as part of a larger, broader review spanning at least five years into the past and extending into the future.

CSXT itself views operating ratio as sufficiently important to assign half of its long-term incentive compensation for its executives to them, measured over an eleven-quarter period.[157] CSXT's own actions refute its criticism.

### iii. Debt-to-Capital Ratios

CSXT criticizes the debt-to-capital ratios as only signifying a choice about capital structure.[158] However, the ratio shows that CSXT has not achieved its success through excessive leverage. Combined with CSXT's favorable debt ratings, the debt-to-capital ratios confirm that CSXT has adequate access to capital, one of the elements of revenue adequacy under 49 U.S.C. § 10704(a)(2) and a key criterion under the RAPB Report. {

---

[155] Consumers Opening at IV-18-20, 28-29, 35-36. Capital expenditures increase depreciation, and CSXT's operating ratio improved despite the 17.8% increase in CSXT's depreciation expense from 2010 ($977 million) to 2014 ($1,151 million). Consumers Opening e-workpaper "RA-xlsx", tab "Table_3", row 13, columns B and F. $1,151/$977=1.178.

[156] *Id.* at IV-39.

[157] CSXT 2016 Proxy Statement at 43-44, discussed in Hennigan Rebuttal Report at 27-29.

[158] CSXT Reply at IV-54-55.

} The ratio further shows that CSXT's present financial condition is both stable and sustainable. Together with the other information, the ratio provides an additional "indication of the adequacy of a railroad's rate of return on investment."[160]

### iv. Return on Equity

CSXT minimizes Consumers' showing of CSXT's "consistently high" return on equity on the grounds that the returns (which CSXT terms "ROI") "at best provides only a partial measure of railroad returns because it can also be directly affected by other factors that have nothing to do with a firm's overall ability to earn its weighted average cost of capital, which reflects both equity and debt."[161]

CSXT is vague as to its "other factors," but the concern appears to be that a high return on equity means little if achieved through excessive leverage. CSXT does not actually claim to have excessive leverage, and Consumers' other evidence shows that it does not. CSXT has a relatively low debt-to-capital ratio, favorable credit ratings, and {

}.[162] CSXT similarly tried to

---

[159] { }

[160] CSXT Reply at IV-55; Hennigan Rebuttal Report at 35-36.

[161] CSXT Reply at IV-56.

[162] Consumers Opening at IV-49 and IV-57-58, *supra*.

minimize the debt-to-capital ratio, claiming it addresses capital structure, and nothing more. CSXT criticizes each ratio and data point in isolation in order to divert attention from the overall pattern of revenue adequacy.[163]

### v. Cash Flow To Equity Ratios

CSXT criticizes Consumers' presentation of cash flow to equity ratios as providing only a short-term analysis, reflecting leverage, and ignoring the need for capital expenditures.[164] These criticisms likewise are invalid.

The ratios are not short-term as they cover five years of data, and are further supported by the significant appreciation in stock price and market value during the period that CSXT supposedly was generating a massive (fictitious) revenue shortfall. Any concerns about leverage are answered by the previous debt-to-capital ratio discussion. The cash flows have been sufficient to cover CSXT's capital expenditures (including ongoing replacement and expansion of assets as needed), as well as dividends and share buybacks while maintaining leverage.[165]

---

[163] Hennigan Rebuttal Report at 35-36.

[164] CSXT Reply at IV-56.

[165] Consumers Opening at IV-18-20, 28-29, 35-36. Hennigan Rebuttal Report at 36.

### vi. Dividend Payment Ratios (Dividend Yields)

CSXT also minimizes Consumers' discussion of CSXT's dividend yield ratios on the grounds that investors would expect to receive more from an equity investment than from a risk-free Treasury bond.[166]

CSXT's equity investors have received much more through the sustained appreciation in its stock prices during the very period CSXT claims it experienced a revenue shortfall.[167] The dividend yields occurred despite the stock appreciation, as CSXT repeatedly increased its dividends. CSXT could have increased the dividend yield substantially more by using funds that instead were devoted instead to buybacks.[168]

In short, the financial ratios further confirm that CSXT has achieved long-term revenue adequacy and is likely to remain so, and that the ROI=COC test with the Board's COC does not accurately depict CSXT's financial condition.[169]

### d. There is No CSXT Cash Cow Fallacy

CSXT claims that Consumers has presented a "cash cow" fallacy regarding CSXT, and that acceptance of Consumers' evidence would cause CSXT to resemble the former Southern Pacific Railroad before it was acquired by UP.[170]

---

[166] CSXT Reply at IV-57.

[167] IV-40-42, *supra*; Hennigan Rebuttal Report at 48-50.

[168] Consumers Opening at IV-19.

[169] Hennigan Rebuttal Report at 35-36.

[170] CSXT Reply at IV-57-61.

CSXT's claims are entirely unfounded and at odds with reality, { }.[171] CSXT is not revenue adequate simply because it has enough cash on hand to cover capital expenditures and provide dividends and buybacks to its shareholders.[172] Consumers showed that CSXT is generating those funds from its operations, as shown by the favorable operating ratios.[173] The analogy to SP is particularly far-fetched, as it reported operating ratios of 100.7% for 1993, 92.6% for 1994, and 100.4% for 1995.[174] The operating ratio disparity alone shows that today's CSXT in no way resembles the former SP.

Furthermore, CSXT has not been funding its progress by selling off large amounts of assets not used for railroad operations or issuing junk bonds.[175] CSXT has favorable bond ratings that have improved in recent years, a stable favorable debt-to-capital ratio, and { } CSXT's analogy to SP is specious.

---

[171] Hennigan Rebuttal Report at 43-44.

[172] CSXT Reply at IV-57-58.

[173] Consumers Opening at IV-13-14, 17; Hennigan Rebuttal Report at 44-47.

[174] Hennigan Rebuttal Report at 44-45. SP's 10-K Report for 1996, http://www.sec.gov/Archives/edgar/data/92259/0000898430-96-001043.txt, excerpt included as e-workpaper "RA-SP-1995-10K.pdf" (at p. 2 of the report or p. 4 of the pdf e-workpaper).

[175] CSXT Reply at IV-58-60.

CSXT claims that if railroad earnings exceeded their COC, then railroads would aggressively expand, and then postulates that the reason they are not expanding "is probably because they are not earning their cost of capital on the replacement cost of rail assets."[176] This assertion is entirely devoid of factual and logical support. CSXT cannot plausibly suggest that failure to "earn[] their cost of capital on the replacement cost of rail assets" explains anything when, by its own admission, CSXT does not even calculate those replacement costs and instead relies on GAAP to track and incent its long term value.[177] Notably, no CSXT executive stepped forward to verify this claim.

Furthermore, CSXT, like its fellow railroads, has been investing in its expansion through its capital expenditures. As explained in Hennigan Rebuttal Report at 25-26, CSXT's capital expenditures caused its total assets to grow by 23%, its accumulated depreciation to grow by 30.2%, and its net book value to grow by 20.1%, from the beginning of 2010 to the end of 2014. CSXT's revenues are plainly adequate to cover operating expenses, make needed capital expenditures, cover debt, and provide a return to stockholders adequate to support a large increase in its stock price. Nothing more is or should be required to demonstrate revenue adequacy under 49 U.S.C. § 10704(a).

---

[176] CSXT at IV-58.

[177] Hennigan Rebuttal Report at 26-27.

### e. CSXT Ignored the Statutory Revenue Adequacy Criteria

CSXT's Reply made no attempt to show that CSXT fails to satisfy any of the revenue adequacy criteria that Congress specified in 49 U.S.C. § 10704(a)(2). Consumers devoted a substantial portion of its Opening Evidence to showing that CSXT satisfied all of them.[178] CSXT's failure to address the specified statutory criteria in any way should be deemed an admission that CSXT indeed fulfills them.[179]

## D. CSXT'S CLAIM THAT EARNING ONE CENT ABOVE THE COST OF CAPITAL TRIGGERS REVENUE ADEQUACY LIABILITY MISREPRESENTS CONSUMERS' POSITION

CSXT claims that Consumers' presentation shows that earning one cent above the cost of capital triggers revenue adequacy liability and prevents CSXT from ever earning more than its cost of capital.[180] CSXT again misrepresents Consumers' position and the basis for the requested relief.

First, Consumers has shown that CSXT has achieved revenue adequacy by a substantial measure, over a sustained period of time (at least five (5) years), and is likely to remain revenue adequate for a substantial period into the future, *e.g.*, at least twenty (20) years according to Morningstar. CSXT more than satisfies the criteria stated in CSXT's referenced rulemaking notice for *Coal*

---

[178] Consumers Opening at IV-11-24; Hennigan Report at 9-25.

[179] Hennigan Rebuttal Report at 34.

[180] CSXT Reply at IV-61-65.

*Rate Guidelines* ("a consistent pattern of returns substantially in excess of a carrier's revenue needs").[181]

Second, the relief that Consumers seeks is limited to a rollback of the rate *increase* that CSXT imposed on Consumers on January 1, 2015, when CSXT already had achieved revenue adequacy, and a return of excess charges collected thereafter. Such relief does not limit CSXT's rates generally or prevent CSXT from continuing to outearn its cost of capital. Moreover, subject to the outcome of the SAC analysis, CSXT could adjust the Campbell rate in the future to track the RCAF-A. The relief applied to Consumers would not be available the great majority of CSXT's other traffic, and even eligible shippers would need to commence formal proceedings before the Board and satisfy the statute's jurisdictional prerequisites as a precursor to relief.

CSXT's discussion of statistical error[182] also distorts Consumers' evidence. Dr. Hennigan explained that CSXT is within the range of statistical significance for revenue adequacy under the annual snapshot ROI=COC test using the Board's flawed COC. A more plausible COC, *e.g.*, those used by the financial and investment community in general, Morningstar, Morgan Stanley, { }, shows CSXT to be revenue adequate beyond the range of statistical error.

---

[181] CSXT Reply at IV-63 & n.147. CSXT's repeated reliance on the notice of proposed rulemaking and not the final *Coal Rate Guidelines* decision itself indicates that CSXT could find no support in the Commission's final order, which was upheld on judicial review.

[182] CSXT Reply at IV-62, 64.

CSXT's attempt to compare railroad returns and COC to those of other industries[183] adds nothing other than confusion. While CSXT indicates that the data is from 2014, it actually covers the period from 2004-2013.[184] The AAR/CSXT data does not focus on the period covered by Consumers' analysis, and no back-up quantitative workpapers were provided by either CSXT or the AAR, in violation of the Board's standards for rate cases.[185] The data presented also includes deferred taxes in the investment base, and the railroad ROI is calculated as a simple average,[186] further deviations from the Board's standards. The COC derivation is not detailed, but the railroad COC is below 10%, which would make the industry revenue adequate under the Board's ROI=COC test.[187]

That some firms in some other industries may enjoy higher excess returns relative to their COC does not establish that CSXT should enjoy similar excess returns before it is subject to the Revenue Adequacy Constraint, particularly when it already meets the revenue adequacy criteria under the *Coal Rate Guidelines* and 49 U.S.C. § 10704(a)(2). "Carriers do not need greater

---

[183] CSXT Reply at IV-64-65.

[184] Brinner VS in AAR Opening Comments in *Ex Parte No. 722*, at 10.

[185] *FMC*, 4 S.T.B. at 733.

[186] Brinner VS at 14-15 & n.15.

[187] Exhibit 2 in Brinner VS at 13 shows a railroad industry COC below 10%, and Exhibit 3a in Brinner VS at 15 shows a simple average return of 9.9% for the four railroads included in the S&P 500. "On average, over the period 2004-2013, the STB-estimated rate of return for the four railroads within the S&P 500 is 2.7 percentage points above the Bloomberg-estimated rate of return for those railroads." *Id.* at 15.

revenues than this standard permits, and we believe that, in a regulated setting, they are not entitled to any higher revenues."[188]

## E. CONSUMERS DOES NOT PROPOSE NIXON-ERA PRICE CONTROLS

CSXT presents a disparate and somewhat duplicative set of claims against revenue adequacy relief under a rather strange final heading to the effect that the Board should avoid Nixon-era price controls.[189]

CSXT's claim here is silly. Consumers seeks relief only for the Campbell movement, and CSXT may adjust that rate to track overall cost changes and retain savings from keeping its costs below changes in the RCAF-A. CSXT also eschewed its opportunity to show that the Campbell movement should bear a higher rate, indicating an inability on its part to do so. CSXT's "Nixon-era" problem is a product of its imagination.[190]

### 1. Consumers is Not Seeking an Across-the-Board Price Ceiling

CSXT claims that Consumers' reliance on *CF Indus., Inc.* amounts to advocacy of an "across-the-board price ceiling" or "a *system-wide* price freeze on all captive traffic once a railroad becomes revenue-adequate."[191]

---

[188] *Coal Rate Guidelines*, 1 I.C.C.2d at 535.

[189] CSXT Reply at IV-66-73.

[190] CSXT cites the *Guidelines* notice, not the final *Guidelines* itself, for its concern with "maintain[ing] perfect year-to-year conformance with the prescribed revenue adequacy level." CSXT Reply at IV-66 n.152. The problem does not exist. CSXT is already revenue adequate by a substantial margin, and the margin will be at least preserved, and probably expanded.

[191] CSXT Reply at IV-67 (capitalization removed; original emphasis).

This is nonsense. Consumers seeks relief on rates from a single interchange to a single destination. Concerns about other CSXT rates can be addressed in other rate cases, if and when they are brought. Much of CSXT's other traffic is not subject to the Board's rate authority because it is exempt, under contract, pays rates below the jurisdictional threshold, or otherwise not captive.

The "across-the-board rate freeze" is another fallacy. Not even the Campbell rate would be frozen, as RCAF-A cost adjustments are permitted. Consumers' relief is equivalent to that obtained in *CF Industries*, which also was limited to the complaining shippers' own traffic.[192] Seeking relief previously granted by the agency is hardly improper.

CSXT seeks to distinguish *CF Industries* on two grounds, both of which are contrived. CSXT first claims that it, unlike Koch, is challenging the validity of the Revenue Adequacy Constraint. That is a distinction without a difference. Both Koch and CSXT objected to the application of the Constraint; CSXT's additional attack on its existence is irrelevant. The Revenue Adequacy Constraint adopted as part of *Coal Rate Guidelines* was upheld on appeal. Moreover, Koch, like CSXT, argued that the SAC Constraint should apply exclusively, but the Board ruled otherwise and its decision was upheld.[193] If

---

[192]Because of the limited number of customers for the pipeline at issue in *CF Industries*, the relief awarded effectively applied to much of the defendant's "system." The far broader nature of CSXT's customer base belies any "system wide" impact of granting relief to Consumers.

[193] *CF Industries, Inc. v. S.T. B.*, *supra.*

CSXT wanted to challenge the validity of the Revenue Adequacy Constraint, it should have done so when the *Coal Rate Guidelines* were adopted.

Second, CSXT seeks to equate the Revenue Adequacy Constraint with "a public utility model of rate regulation" that could be appropriate for across-the-board regulation of pipelines, but that Congress rejected for railroads.[194] However, the relief that Consumers seeks hardly amounts to pervasive regulation. Rates will not automatically be regulated. To obtain relief, shippers must bring complaints and show both quantitative and qualitative market dominance. The rate relief, if available and awarded, limits the exercise of further differential pricing, but by itself does not disturb the preexisting level of differential pricing or limit CSXT's total margins. Shippers that obtain relief will have different R/VC mark-ups. The relief is not equivalent to uniform, pervasive, and non-discriminatory pipeline regulation.

**2. No Unlawful Presumption of Unreasonableness Would Exist**

CSXT alleges that the fictitious price freeze would create unlawful presumptions with "pitfalls reminiscent of the failed price control policies adopted during the Nixon and Ford Administrations."[195]

---

[194] CSXT Reply at IV-67-69. CSXT's claim that CF Industries sought full regulation of the Koch Pipeline is incorrect. CF sought relief only for its own traffic, and some relief was denied for lack of market dominance. 4 S.T.B. at 639, 655. CSXT also cites *WCTL Petition BNSF,* Finance Docket No. 35506, at 16 (CSXT Reply at IV-68 n.158), but that case discussed the revenue adequacy constraint favorably, as noted at IV-8, *supra.*

[195] CSXT Reply at IV-69-73.

CSXT's claims are unfounded. CSXT's real complaint is that it is losing a conclusive presumption of revenue inadequacy under the ROI=COC test using a flawed COC. There is no legal or policy obstacle to making an informed and credible finding of revenue adequacy and then applying the constraint adopted thirty (30) years ago in *Coal Rate Guidelines* and previously applied in *CF Industries*.

As noted *supra*, CSXT would continue to earn returns exceeding a credible cost of capital and likely increase that excess. There would be no rate freeze:

- Shippers still must file rate complaints in order to obtain relief;
- Shippers would need to establish market dominance;
- Those shippers obtaining relief would have differing R/VC ratios;
- Carriers can adjust their regulated rates to reflect changes in the RCAF-A and retain savings by keeping increases in their overall costs below the RCAF-A;
- Carriers could show that a particular shipper should bear additional costs under the Board's *Guidelines* criteria;[196]
- Carriers could negotiate a non-regulated contract rates for movements covered by revenue adequacy relief; and
- Most traffic would not be subject to rate regulation at all, because it is under the jurisdictional threshold, otherwise is non-captive, moves under contract, or is exempt.

[196] 1 I,C.C. 2d at 536 n. 36.

### a. Consumers' Requested Relief Would Not Create a Price Freeze or Improper Presumption of Relief

CSXT claims that Consumers' proposal would create a presumption of rate unreasonableness that is not permitted under the ICCTA or the Administrative Procedure Act, apparently because there would be no finding that the particular rate is unreasonable.[197]

CSXT's objection is murky, as CSXT does not identify any precedent to support its contention, and its claim appears to duplicate its earlier objections. CSXT's referenced statutory provisions do not support its claim that "shift[ing] the burden of proof in rate reasonableness cases from complaining shippers to defendant railroads" would be "contrary to ICCTA and the Administrative Procedure Act."[198] Moreover, under the constraint as advocated by Consumers, no such shift takes place. The shipper must demonstrate market dominance, and must carry the burden of showing that the defendant carrier is revenue adequate. The railroad's ability to avoid application of the constraint by invoking the "special showing" exception in the *Guidelines*, (1 I.C.C.2d at 536 n.36), represents an affirmative defense, not a shift in the primary burden of proof.

CSXT's real concern appears to be that it would no longer be presumed revenue inadequate and that SAC would cease to be the sole operative prong of CMP under the *Coal Rate Guidelines*. But no improper or unwarranted

---

[197] *Id.* at IV-69.

[198] *Id.*

presumption would apply. The various statutory provisions that CSXT references[199] would remain applicable. To obtain relief, shippers still must bring complaints and show market dominance under 49 U.S.C. §§ 11701(a) and 10707. A mere finding of market dominance would not establish a presumption that the rate is unreasonable under 49 U.S.C. § 10707(c).[200] Instead, any finding of unreasonableness would flow from the carrier's revenue adequacy status and application of the *Coal Rate Guidelines*. Relief would be available only after a hearing under 5 U.S.C. § 556(d),[201] where CSXT would have the opportunity to show that the particular movement still should bear a higher rate.

**b. The Availability of Revenue Adequacy Relief Does Not Create An Unlawful Presumption of Market Power**

CSXT next claims that Consumers improperly asks the Board to presume that any rate increase on captive traffic would be an unreasonable exercise of market power.[202] CSXT's claim duplicates at least some of its previous claims and is rather vague, as CSXT first claims rates need to be found unreasonable on a case-by-case basis, and then turns to more of a quasi-policy assertion to the effect that congestion pricing might be needed in locations such as Chicago. *Id.*

---

[199] *Id.* at IV-69 nn.162-163.

[200] *Id.* at IV-69 n.163

[201] *Id.* at IV-69 n.162

[202] *Id.* at IV-70.

Both of CSXT's arguments fail. To obtain relief, a shipper must bring a rate case,[203] establish market dominance,[204] and show that the rate is unreasonable,[205] before relief is awarded.[206] A prior finding of revenue adequacy may help show that an increase in a particular railroad's captive rate is unreasonable under the Revenue Adequacy Constraint, but the carrier would retain the ability to show that the prior finding should not apply, circumstances have changed, or a higher rate is justified under the particular circumstances. 1 I.C.C.2d at 536 n.36.

CSXT itself raises the possibility that a carrier might claim a higher rate should apply in order to address congestion in a location such as Chicago.[207] CSXT made no such showing for the Campbell movement, nor could it as the Campbell movement had such a high R/VC ratio { }, before CSXT imposed the rates that triggered this case. Nonetheless, CSXT's ability to conceive of such a claim shows that there is no conclusive presumption of rate unreasonableness under the Revenue Adequacy Constraint.

---

[203] 49 U.S.C. § 11701(a).

[204] *Id.* at § 10707

[205] *Id.* at § 10701(d)(1)

[206] *Id.* at § 10704

[207] CSXT Reply at IV-70.

### c. CSXT's Incentive and Ability to Invest Would Remain

CSXT claims that the fictitious rate freeze would reduce its ability to invest to improve service and increase productivity and efficiency.[208] CSXT's claims are unfounded.

Relief under the Revenue Adequacy Constraint is available only if the carrier is revenue adequate, and a revenue adequate carrier can, by definition, obtain the capital needed for investments. CSXT does not need a higher return in order to attract capital and make investments.[209] Nonetheless, CSXT's return would continue to exceed the COC: the relief does not reduce CSXT's earnings to the revenue adequacy level, but only limits further rate increases. CSXT would retain pre-increase margins on protected traffic. And no restrictions would apply to its contract, exempt, and non-captive traffic, which form the majority of its customer base.

Even as to traffic potentially subject to relief, CSXT would retain the ability and the incentive to increase its margins by reducing its costs relative to the RCAF-A. CSXT also could enter into contracts to provide service or other benefits superior to those under the common carriage for additional compensation.

---

[208] *Id.* at IV-70-71. CSXT's heading, but not its text, refers to incentive.

[209] *Coal Rate Guidelines*, 1 I.C.C.2d at 535.

### d. Revenue Adequacy Relief Would Not Unreasonably Deter Transportation Contracting

CSXT next claims that the relief advocated by Consumers would create a disincentive to transportation contracting because a carrier would be reluctant to agree to a lower contract rate that might impede its ability to set a higher rate after the contract expired.[210]

CSXT's logic fails on multiple grounds. First, CSXT is effectively claiming that because it has exploited market power in its revenue inadequate past, it should be able to exercise additional market power to take further rate increases after achieving revenue adequacy. That claim flies in the face of the requirement that rates on captive traffic must be reasonable under 49 U.S.C. §§ 10701(d)(1).

Second, a regulatory backstop should provide a captive shipper with some bargaining ability in dealing with a market dominant carrier, and parties generally should take their regulatory options and risks into account in dealing with each other. Reaching voluntary agreements without actual Board intervention is efficient. However, such agreements should be voluntary, and relief should be available where parties cannot reach agreement. The railroads can use their market power to force captive shippers to enter into involuntary contracts of adhesion. The fact that the SAC rate constraint does not work at all for many, if

[210] CSXT Reply at IV-72.

not most, shippers creates an additional need for a meaningful Revenue Adequacy Constraint.[211]

Third, CSXT's concerns with the challenges of comparing certain potential contract and common carrier rates[212] are misplaced. CSXT has not identified any factor that complicates the comparison in Consumers' case. Insofar as there may be concerns in other cases, they are better addressed at that time. However, if comparisons do become difficult, it will be because the carrier exercises its flexibility to establish the initial rate and service terms for common carrier movements, subject to later review by the Board.[213] The carrier's ability to complicate the comparison between a new common carrier rate and an expiring contract rate is no reason to deny or preclude rate relief. Carriers should not be allowed to benefit from complications of their own making. And shippers and carriers always can negotiate mutually beneficial contracts after the Board has awarded relief, which has occurred on multiple occasions following previous Board decisions in rate cases.

Fourth, carriers have had more than ample time to transition to Ramsey-type rates that they consider to be adequately compensatory. The Staggers Act was enacted over thirty-five (35) years ago, and the *Coal Rate Guidelines*, including the Revenue Adequacy Constraint, was adopted over thirty

---

[211] *E.g., DuPont v. Norfolk Southern*, NOR 42125 (STB served Dec. 23, 2015) (Miller concurrence, and Begeman dissent).

[212] CSXT Reply at IV-72 & n.168.

[213] 49 U.S.C. §§ 10701(c) and (d)(1).

(30) years ago. During that time, most shippers have lacked an effective rate remedy. If some transitional issues arise, they are not a reason to suspend an element of CMP that was established so long ago.

### e. CSXT's Concerns with Market Distortions Are Unfounded and Misdirected

CSXT claims that the imaginary rate freeze "would distort market signals by preventing price adjustments based upon consumer demand," as carriers would be unwilling or unable to make needed investments.[214] These claims are without merit.

The "price adjustments" that CSXT has in mind are rate increases, as CSXT always can reduce rates if it chooses. CSXT's desire to increase a rate above a maximum reasonable level must give way to the requirement in 49 U.S.C. §§ 10701(d)(1) and 10701(2) that rates on captive traffic must be reasonable. The restriction applies only if there is a lack of effective competition. Where that is the case, market signals already are distorted, creating the need for regulatory intervention.

CSXT's speculation that revenue adequacy relief will incent it "to devote its scarce capital resources to routes that are subject to effective competition" instead of captive movements[215] defies logic. A carrier that has incentive to invest in its competitive movements has at least an equal incentive to

---

[214] CSXT Reply at IV-72.

[215] *Id.* at IV-72.

invest in its more profitable captive movements, which would remain more profitable than competitive ones even after relief under the Revenue Adequacy Constraint is awarded. The R/VC ratios on captive movements will continue to exceed the jurisdictional threshold, and will exceed the markups on the majority of CSXT's other traffic.

CSXT also ignores the fact that competitive and captive movements share facilities, such that investment that benefits one group also benefits the other. For example, the Campbell movement traverses the Chicago area, and CSXT will not withhold investment there simply because it benefits a very profitable captive movement along with less profitable competitive traffic.

### f. CSXT's Concerns with Challenges to the Adequacy of the Level of Rail Service are also Misplaced

CSXT advances the rather odd claim that additional problems with the non-existent rate freeze will occur if the level of service is not also frozen, as if there has always been some sort of lock-step relationship between rate levels and service quality.[216]

It is unclear how CSXT's concern here is any different from that presented regarding the alleged disincentive to contract and other market distortions.[217] As noted *supra*, the lack of effective competition exposes captive shippers to both high rates and poor service, because captive shippers pay higher

---

[216] *Id.* at IV-73.

[217] *Id.* at IV-71-72

rates, carriers receive revenues more than sufficient to provide adequate service to those shippers. Moreover, contract commitments to competitive shippers should not leave carriers unable to serve their captive traffic that is subject to relief under the *Coal Rate Guidelines*. "Commitments which deprive a carrier of its ability to respond to reasonable requests for common carrier service are not reasonable."[218]

**g. CSXT's Concerns About Cross-Subsidies Are Unfounded**

CSXT's concluding argument is that the non-existent rate freeze would create improper cross-subsidies because the captive shippers "would ... benefit from 'locked in' rates" that are not available "to new shippers or shippers with shifting movement pattern resulting from a more fluid network of customers and suppliers."[219] CSXT's point is vague, because CSXT left the nature of this additional traffic so undefined. Regardless, CSXT's assertions seem to duplicate its earlier claims and are defective for much the same reasons.

A captive shipper, like Consumers, that receives relief already is paying higher rates to a revenue adequate carrier, so other shippers are not cross-subsidizing Consumers, and awarding relief to Consumers does not limit the relief available to others. Instead, CSXT is receiving excess revenue relative to what it requires in order to be able to meet its current and future service needs.

Competitive shippers may have bargaining leverage that captive shippers lack, and shifting movement patterns may reflect the presence of

---

[218] 49 U.S.C. § 11101(a).

[219] CSXT Reply at IV-73.

competitive forces and leverage. However, a captive shipper should not be forced to bear an otherwise unreasonable rate increase just so a revenue adequate carrier can handle an additional unit of competitive or less compensatory traffic. Doing so forces the captive shipper to bear an excessive share of the carrier's unattributable costs, and violates the Long-Cannon factors at 49 U.S.C. § 10701(d)(2).

# V Witness Qualifications & Verifications

# PART V

## WITNESS QUALIFICATIONS AND VERIFICATIONS

This Part contains the Statements of Qualifications of additional witnesses who have not previously sponsored evidence on behalf of Consumers Energy Company in this proceeding. It also contains the Verifications of Consumers' other witnesses, whose Statements of Qualifications appear in Part V of Consumers' Opening Evidence.

### 1. MICHAEL J. PETRO

Mr. Petro is a Principal Consultant, Transportation and Logistics, and Global Practice Lead for Intermodal at Advisian Inc. His business address is 10500 Richmond Avenue, Houston, TX 77042. The specific evidence that Mr. Petro is co-sponsoring (together with Paul Bovitz) addresses whether vessel transportation represented an effective competitive alternative to rail and the differences between Muskegon Lake and Pigeon Lake. This evidence appears in Part II-B-2 of Consumers' Rebuttal Evidence.

Mr. Petro is a proven leader in the transportation industry for more than 30 years, with extensive experience in the intermodal, steamship, rail, and trucking industries. He holds a B.S. in Commerce from the McIntire School of Commerce at University of Virginia. His areas of expertise include business strategy, operations management, service design, organizational transformation, process improvement, systems design and implementation, and fleet management.

Mr. Petro has performed transportation project work for over 50 separate clients, including shippers, terminal operators, port authorities, government agencies,

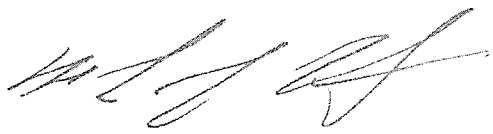
railroads, insurance companies, and private equity firms. He has managed over 20 multimodal transportation projects in North America and globally.

Prior to joining Advisian, Mr. Petro was Managing Partner of Point B Logistics, a Transportation and Logistics Consultancy he founded in 2001. Prior to 2001, Mr. Petro held executive positions with CSX Intermodal, American President Lines, and CSX Transportation.

He served as Managing Director of Service Design for CSXT managing a portfolio of rail assets valued at more than $1 billion. Mr. Petro has managed transportation projects in North America, South America, Asia, Africa and Europe, and has contributed to project teams in more than a dozen countries.

## VERIFICATION

I, Michael J. Petro, verify under penalty of perjury that I have read the Rebuttal Evidence of Consumers Energy Company in this proceeding that I have co-sponsored (together with Paul Bovitz) related to Part II-B, as described in the Statement of Qualifications; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Michael J. Petro

Executed on May 16, 2016

## 2. PAUL J. BOVITZ

Mr. Bovitz is a Principal Consultant, Science and Ecology, at Advisian Inc. His business address is 10500 Richmond Avenue, Houston, TX 77042. The specific evidence that Mr. Bovitz is co-sponsoring (together with Michael Petro) addresses whether vessel transportation represented an effective competitive alternative to rail and the differences between Muskegon Lake and Pigeon Lake. This evidence appears in Part II-B-2 of Consumers' Rebuttal Evidence.

Mr. Bovitz has over 30 years of professional experience in managing environmental investigations, assessing ecological impacts from both proposed and legacy projects, and preparing permits for projects, including energy and transportation. He has worked extensively with assessing risks from contaminated sediments and recently presented a short course at Rutgers University on making ecologically-based remedial action decisions at contaminated sites. He is familiar with port activities having managed multi-year environmental call-in contracts for the Port of New York and New Jersey.

Mr. Bovitz has participated as a peer review panel member for several NEPA reviews of USACE environmental impact statements throughout the U.S., including for the Chicago District. He has worked extensively with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency and other state and local agencies, including Michigan DEQ and Michigan DNR (the latter on the Kalamazoo River oil spill). He is an experienced project manager who has managed multi-million dollar contracts and is aware of pricing and costs for permitting projects.

Mr. Bovitz holds a B.S. in Wildlife Biology from Colorado State University as well as an M.S. in Ecology and an executive MBA with a concentration in Finance from Rutgers University.

Mr. Bovitz is a member of the Licensed Site Remediation Professional Association of New Jersey and the Rutgers University Financial Alumni Association.

Mr. Bovitz is also a certified Professional Wetland Scientist, Society of Wetland Scientists, and LEED AP. He serves as an acting member of the New Jersey Governor's Science Advisory Board, Ecological Sciences Committee and formerly served on the Comparative Risk Analysis Panel of NJDEP.

## VERIFICATION

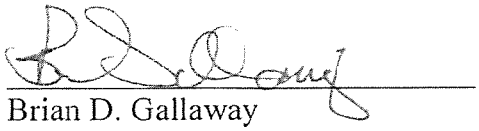
I, Paul J. Bovitz, verify under penalty of perjury that I have read the Rebuttal Evidence of Consumers Energy Company in this proceeding that I have co-sponsored (together with Michael Petro) related to Part II-B, as described in the Statement of Qualifications; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Paul J. Bovitz

Executed on May 17, 2016

## VERIFICATION

I, Brian D. Gallaway, verify under penalty of perjury that I am the same Brian D. Gallaway whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part II-B and Part III-A.2 of the Rebuttal Evidence that I am sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Brian D. Gallaway

Executed on May 17, 2016

## VERIFICATION

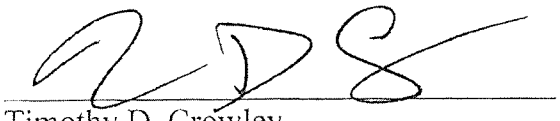
I, Ralph W. Barbaro, Ph.D., verify under penalty of perjury that I am the same Ralph W. Barbaro, Ph.D. whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part II of the Rebuttal Evidence that I am sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Ralph W. Barbaro, Ph.D.

Executed on May 13, 2016

## VERIFICATION

I, Timothy D. Crowley, verify under penalty of perjury that I am the same Timothy D. Crowley whose Statement of Qualifications appears in Part V of the narrative portion of Consumers Energy Company Opening Evidence in this proceeding: that I have coordinated the workpaper production of all electronic files in accordance with the Surface Transportation Board's ("STB") March 12, 2001 decision in Ex Parte No. 347 (Sub-No. 3), *General Procedures For Presenting Evidence in Stand-Alone Cost Rate Cases* and the STB's July 10, 2015 decision in NOR 42142 *Consumers Energy Co. vs. CSXT* for the format of evidence to be presented, that I have read the Rebuttal Evidence related to quantitative market dominance in Part II-A and the roadbed preparation/earthworks component of the road property investment cost of the SARR in Part III-F that I am sponsoring, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Timothy D. Crowley

Executed on May 16, 2016

## VERIFICATION

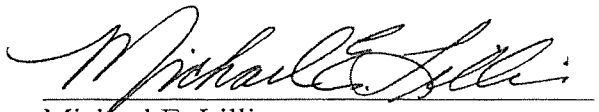
I, Daniel L. Fapp, verify under penalty of perjury that I am the same Daniel L. Fapp whose Statement of Qualifications appears in Part V of the narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read the Rebuttal Evidence related to the SARR traffic selection and revenue in Part III-A that I am sponsoring as well as Part III-G and Part III-H of the Rebuttal Evidence that I am co-sponsoring with Witness Thomas D. Crowley, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Daniel L. Fapp

Executed on May 16, 2016

## VERIFICATION

I, Michael E. Lillis, verify under penalty of perjury that I am the same Michael E. Lillis whose Statement of Qualifications appears in Part V of the narrative portion of Consumers Energy Company Opening Evidence in this proceeding: that I have read the Rebuttal Evidence related to the forecast of the SARR traffic group and related revenues in Part III-A that I am sponsoring, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Michael E. Lillis

Executed on May 18, 2016

## VERIFICATION

I, Robert D. Mulholland, verify under penalty of perjury that I am the same Robert D. Mulholland whose Statement of Qualifications appears in Part V of the narrative portion of Consumers Energy Company Opening Evidence in this proceeding: that I have read the Rebuttal Evidence related to the development of the base year and peak period train lists in Part III-C that I am sponsoring, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Robert D. Mulholland

Executed on May 18, 2016

## VERIFICATION

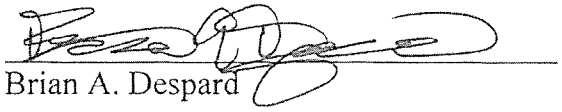
I, John W. McLaughlin, verify under penalty of perjury that I am the same John W. McLaughlin whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read the evidence related to train speeds and locomotives per train from the RTC Model simulation of the CERR's operations in Part III-C-2 that I am sponsoring and that I have read the evidence related to the simulation and validation of the CERR's infrastructure and operating plan, as well as development of certain operating statistics discussed in Part III-C and Part III-D that I am co-sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

John W. McLaughlin

Executed on May 15, 2016

## VERIFICATION

I, Brian A. Despard, verify under penalty of perjury that I am the same Brian A. Despard whose Statement of Qualifications appears in Part V of the narrative portion of Consumers Energy Company Opening Evidence in this proceeding: that I have read the Rebuttal Evidence related to the analysis of joint facilities costs in Part III-C and the development of operating expenses in Part III-D that I am sponsoring, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Brian A. Despard

Executed on May 18, 2016

## VERIFICATION

I, John W. Orrison, verify under penalty of perjury that I am the same John W. Orrison whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read the evidence that I co-sponsored in Part III-B related to the CERR system's configuration and facilities, Part III-C related to the CERR's operating plan, and Part III-D related to the operating personnel and their equipment needs as well as the CERR's outsourcing plan; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

John W. Orrison

Executed on May 17, 2016

## VERIFICATION

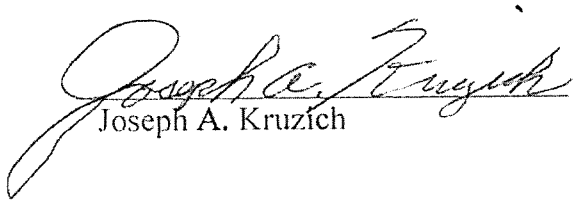
I, Robert T. Holmstrom, verify under penalty of perjury that I am the same Robert T. Holmstrom whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read the portions of the Rebuttal Evidence that I am co-sponsoring, including Part III-B related to the CERR system's configuration and facilities including its route, track and yard facilities, and traffic control system, Part III-C related to the CERR's operating plan, and Part III-D related to the operating personnel and their equipment needs, and the CERR's outsourcing plan; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Robert T. Holmstrom

Executed on May 17, 2016

## VERIFICATION

I, Joseph A. Kruzich, verify under penalty of perjury that I am the same Joseph A. Kruzich whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-D of the Rebuttal Evidence related to Transportation Management Systems, and Information Technology personnel and hardware/software that I am sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Joseph A. Kruzich

Executed on May 14, 2016

## VERIFICATION

I, R. Lee Meadows, Jr., verify under penalty of perjury that I am the same R. Lee Meadows, Jr. whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-D of the Rebuttal Evidence related to maintenance of way plan, personnel and costs evidence that I am sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

R. Lee Meadows

R. Lee Meadows, Jr.

Executed on May 18, 2016

## VERIFICATION

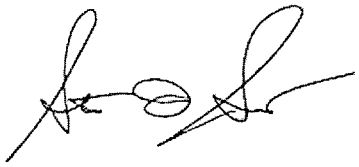
I, Thomas D. Crowley, verify under penalty of perjury that I am the same Thomas D. Crowley whose Statement of Qualifications appears in Part V of the narrative portion of Consumers Energy Company Opening Evidence in this proceeding: that I have read Part III-G and Part III-H of the Rebuttal Evidence that I am co-sponsoring with Witness Daniel L. Fapp, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Thomas D. Crowley

Executed on May 18, 2016

## VERIFICATION

I, Stuart I. Smith, verify under penalty of perjury that I am the same Stuart I. Smith whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-F-1 of the Rebuttal Evidence related to land valuation costs that I am sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Stuart I. Smith

Executed on May 16, 2016

## VERIFICATION

I, Victor F. Grappone, verify under penalty of perjury that I am the same Victor F. Grappone whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-F of the Rebuttal Evidence related to the signals and communications plan and cost evidence that I am sponsoring, and Part III-D-4 related to certain elements of signals maintenance that I am co-sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Victor F. Grappone

Executed on May 14, 2016

## VERIFICATION

I, Harvey H. Stone, verify under penalty of perjury that I am the same Harvey H. Stone whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-B regarding the CERR system's configuration and facilities and Part III-F regarding SARR construction costs of the Rebuttal Evidence that I am co-sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Harvey H. Stone

Executed on May 10, 2016

## VERIFICATION

I, John M. Ludwig, P.E., verify under penalty of perjury that I am the same John M. Ludwig, P.E. whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-F-5 of the Rebuttal Evidence related to bridge design and costs that I am sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

John M. Ludwig, P.E.

Executed on May 16, 2016

## VERIFICATION

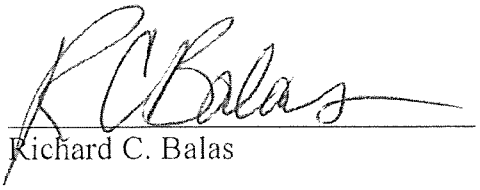
I, Walter H. Schuchmann, verify under penalty of perjury that I am the same Walter H. Schuchmann whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-C of the Rebuttal Evidence related to the simulation and validation of the CERR's infrastructure and operating plan, as well as development of certain operating statistics that I am co-sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Walter H. Schuchmann

Executed on May 16, 2016

## VERIFICATION

I, Richard C. Balas, verify under penalty of perjury that I am the same Richard C. Balas whose Statement of Qualifications appears in Part V of the Narrative portion of Consumers Energy Company Opening Evidence in this proceeding; that I have read Part III-F of the Rebuttal Evidence regarding SARR construction costs that I am co-sponsoring; that I know the contents thereof; and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Richard C. Balas

Executed on May 16, 2016

## VERIFICATION

I, John F. Hennigan, Ph.D., verify under penalty of perjury that I have read the Rebuttal Evidence of Consumers Energy Company in this proceeding that I have sponsored, as described in the Statement of Qualifications, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

John F. Hennigan, Ph.D.

Executed on May 12, 2016