

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

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**Ex Parte 711 (Sub-No. 1)
RECIPROCAL SWITCHING**

**COMMENTS OF
RAIL CENTS ENTERPRISES, INC.**

I. Background

These comments will supplement those regarding Ex Parte 711 that were submitted to the Board on December 4, 2019 by the author in his capacity as the President of Rail Cents Enterprises,¹ and also those submitted on July 30, 2016 by the author in his capacity as Board Member of the Big Spring Rail System. The instant comments stem out of the Board's solicitation of written comments on the subject proceedings from interested persons in conjunction with its Notice of Public Hearing on March 15 and 16, 2022, and also stem from failed conditions of reciprocal switching that were uncovered during the author's role as contractor to Strategic Rail Finance² during its engagement by the Nevada Department of Transportation from October of 2019 to September of 2020 in order to update the Nevada State Rail Plan.³

II. Failure to Prosecute Reciprocal Switching in Nevada

Appendix 1 to the 2020 Nevada State Rail Plan is a snapshot of every sidetrack that could reasonably originate/terminate carloads in the state of Nevada, where the Union Pacific Railroad

¹ Rail Cents Enterprises, Inc., a railroad consultancy incorporated in 1998, Thomas F. Erickson, Jr., President

² Strategic Finance & Marketing Consultants, Inc., a railroad consultancy doing business as Strategic Rail Finance since 1994, Michael Sussman, President

³ <https://www.dot.nv.gov/mobility/rail-planning/state-rail-plan>

(UP) is the only common carrier of freight that owns right-of-way. As part of its approval of UP's control over and merger with Southern Pacific Transportation (SP) in 1996,⁴ the Board awarded BNSF competitive access to those portions of UP's Nevada rail network that had been competitive between SP and UP. Said sidetrack inventory documented ninety-seven (97) sidetracks to which BNSF could have access, and also documented that BNSF had exercised its access to only thirty-two (32)⁵ of those sidetracks, and not by reciprocal switching but by contract switching from UP crews at undisclosed cost. That is, since 1996 BNSF has never exercised its right to reciprocal switching in Nevada, where the Board stipulated a reciprocal switching fee that stands at \$174.36 per car, which in all likelihood is less than BNSF's out-of-pocket costs for contract switching.⁶

Neither BNSF nor UP domicile any commercial employees in Nevada.⁷ BNSF's single Economic Development person who covers Nevada lives in Colorado and also covers all of Colorado, Utah, and Wyoming. UP's single Economic & Industrial Development person who covers Nevada lives in southern California and also covers all of southern California.

Implication: Class I's cannot be relied upon to prosecute reciprocal switching, even when it would be to their monetary advantage.

⁴ STB Decision No. 44, Finance Docket No. 32760, decided August 6, 1996

⁵ Since publication of the Nevada State Rail Plan's Appendix 1, BNSF has exercised its access to at least one additional customer: the Truckee-Tahoe Lumber Company in Patrick, but not without undue delay. Brad Benamati, GM of Truckee-Tahoe, met with Tyler Reddington of BNSF on October 15, 2019 to request competitive access, but BNSF did not add Truckee-Tahoe to Railinc's SCRS (Serving Carrier Reciprocal Switching) file as directly BNSF served [by UP contract switching] until September 24, 2020.

⁶ BNSF's fees paid to UP for contract switching in Nevada are not a matter of public record, but we can reasonably presume that BNSF's fully-allocated costs for maintaining two switching locomotives in Nevada and for paying UP crews on those locomotives plus other UP-maintained switching locomotives are far in excess of \$174.36 per car.

⁷ Nationwide there is relatively little effort put into the solicitation, facilitation, and pricing of traffic by the Class I's. In 2020, the five Class I's that are headquartered in the U.S. spent only ½ of 1%, or \$197 million, of their total expenditures of \$39.6 billion on marketing, sales, and industrial development (per R-1 Reports, lines 604, 605, 606, and 620). When railroad employment peaked at 2.1 million in 1920, Class I's had 17,643 commercial agents in the field in the form of traveling agents and solicitors, station agents (not including telegraphers), and station masters (per the ICC's *Statistics of Railways in the United States*, 1920, Statement No. 16). Commercial duties were split between freight and passenger, but mostly freight, since 78% of Class I revenue came from freight in 1920 (*Statistics*, Statement No. 34). In 2022, the Class I's have no agents and no sales personnel responsible for carload traffic in geographic territories in the field, except for eighteen Field Sales Managers attached to Norfolk Southern's divisions.

III. Loss of Institutional Knowledge about Railroads by Nevada's Shippers

During discussions with various Nevada shippers in the process of creating Appendix 1 to the 2020 Nevada State Rail Plan, it was discovered that none of the contacted local transportation managers understood the meaning of the term “reciprocal switching,” and most had not heard of the term.

Implication: Notwithstanding the interest of shippers' organizations in Ex Parte 711, there has been a loss of institutional knowledge about railroad terminology and applications at the working face level, such that the widespread prosecution of local opportunities for reciprocal switching by shippers would require clarification and publicity regarding its meaning and use.

IV. Historical Considerations

Although statutory authority for the Interstate Commerce Commission to impose reciprocal switching per se was not enacted until the Staggers Act in 1980,⁸ the ICC began a steady stream of decisions regarding reciprocal switching soon after the Mann-Elkins Act gave the ICC authority to oversee routing in 1910. A legacy of these decisions concerning reciprocal switching is the concept of reciprocity. Rather than focusing on the computational fairness of a reciprocal switching charge—a calculation that is necessarily complex, subject to variation by location and current level of traffic, and therefore litigious—the ICC promoted reciprocal switching agreements having “mutual advantage.”⁹ Reciprocal switching was recognized as a competitive advantage to the rail mode in general and not to a specific rail carrier—as a level

⁸ However, the Transportation Act of 1920 stated that “if the Commission finds it to be in the public interest and to be practicable, without substantially impairing the ability of a carrier owning ... terminal facilities to handle its own business, it shall have the power to require the use of any such terminal facilities, including main-line track or tracks for a reasonable distance outside of such terminal, of any carrier, by another carrier” (Title IV, Section 405(4))

⁹ “The charges for reciprocal switching, as the term would imply, are generally established without regard to the cost of the particular service, on the theory that the services are of *mutual advantage* [emphasis added] to all of the carriers concerned, and will be performed by all at correspondingly low charges. They are generally less than the actual cost of performing the service.” (129 ICC 451, 456, decided July 19, 1927)

playing field with rough parity among rail carriers who all benefit from an increase in the traffic generated by each carrier's sidetracks and from a reduction in the costs associated with joint rate negotiations and divisions. However, the conditions of BNSF's access to Nevada that were negotiated between UP and BNSF and subsequently imposed by the STB in its FD 32760 decision did not accommodate reciprocity. At least considering Nevada in isolation, all the advantages of a perpetually low reciprocal switching fee—\$130 per car in 1995 and now \$174.36 per car in accordance with adjustment rules¹⁰—would accrue to BNSF.

Parenthetically, two other legacies of the ICC's decisions concerning reciprocal switching that would appear to have strong bearing on current considerations are that:

- Access should not be imposed to a carrier's own facilities, such as public team tracks.¹¹
- Access presupposes a practical interchange within a practical switching crew's range.¹²

Perhaps the most salient historical consideration is the genesis of reciprocal switching—its creation by the railroads themselves in the Nineteenth Century in order to serve their best interests. In a previous age with no intermodal containers and no unit trains, carload traffic was the only engine of growth, so the railroads created switching districts where trunk carriers could reach shippers' sidetracks in their served markets with both operating and administrative efficiency.

¹⁰ FD 32760, Joint Submission of Restated and Amended BNSF Settlement Agreement, entered March 4, 2002, §9(i) for \$130 per car rate as of September 25, 1995, and §12 for methodology of only partial adjustment for inflation

¹¹ "It is a common custom for carriers to publish switching charges for intraterminal movements between industries located upon private sidetracks on their lines and the point of interchange with other carriers; and the carrier performing the line haul into the terminal generally absorbs such charges, thus in practical effect placing such industries upon the line-haul carrier's rails. The switching of cars in such service is called reciprocal switching. It is, however, not the custom for carriers to render intraterminal switching service between their team tracks and connections with other lines, as such team tracks are their private terminals, maintained at their own expense to accommodate patrons of their line-haul service." (262 ICC 437, 438, decided May 18, 1945)

¹² "Reciprocal switching is practicable and in the public interest when it generally meets the following criteria: (1) *interchange and switching must be feasible* [emphasis added]; (2) the terminal facilities must be able to accommodate the traffic of both competing carriers; (3) the presence of reciprocal switching must not unduly hamper the ability of either carrier to serve its shippers; and (4) the benefits to shippers from improved service or reduced rates must outweigh the detriments, if any, to either carrier." (366 ICC 845, 848, decided December 10, 1982)

We have entered into a new transportation age, one in which:

- Population growth and the maturing of local markets are shortening average truck hauls;
- Bulk movements of coal and other primary commodities are in evolutionary decline;
- Growth of intermodal traffic is hindered by the high costs of local drayage and terminals;
- Supply chains will pay for road degradation and congestion, pollution and fossil fuel use.

Current Class I strategy has only addressed the numerator of the operating ratio—cost cutting.¹³

Strategy that eschews carload traffic will be a growth-proof strategy. Achieving carload growth will require close cooperation among railroad departments, proactive solicitation, and attractive switching service, meaning switching that is reliable, frequent, and connected to the entire rail network. Short lines tend to do this naturally when they are not encumbered with paper barriers, which is one reason why Class III carriers should be exempt from imposed reciprocal switching.

IV. Investment Considerations

In its Notice of Public Hearing, the Board notes that many commenters to Ex Parte 711 who generally oppose an expansion of reciprocal switching argue that such a scenario “would drive rates down to the point of ... threatening the ability of carriers to make the investments necessary to maintain and operate the rail network efficiently and effectively.”¹⁴ If reciprocal switching were to be imposed by the Board, there would certainly need to be stipulations for the commonly-used incentive of carload refunds by the serving railroad to reimburse a shipper for at least part of its turnout and other rail infrastructure costs. The presumption that contribution to overhead would decrease as a result of new reciprocal switching has merit in many situations, but it is speculative in the aggregate. An alternative speculation is that new rail shippers and a net increase in contribution to overhead could be attracted with the prospect of competitive linehaul service and stable switching service, both of which are promulgated by reciprocal switching.

¹³ All in constant 2019 dollars, 2019 Class I revenue, \$88.4 billion, was 1% less than in 2011, \$89.0 billion, and in the same period all freight expenditures grew 24%, from \$854 billion to \$1,059 billion (CSCMP *State of Logistics* reports).

¹⁴ Docket No. EP 711 (Sub-No. 1), Notice of Public Hearing, decided 27 Dec 21, page 5

Concerning the general state of capital investment by Class I railroads, Exhibit 1 aggregates capital investment claimed by the seven Class I railroads during the decade 2010-to-2019: \$152.1 billion, \$26.4 billion of which represents the portion of capital expenditures that was discretionary and spent in order to increase the railroad's rate of return, where the \$125.5 billion difference is comprised of non-discretionary items that would not increase the railroad's rate of return and would not be classified as capital expenditures in most other industries, as follows:

- \$85.4 billion spent on track and bridges, primarily replacements in kind;
- \$30.9 billion spent on locomotives and freight cars, again almost entirely replacements in kind, where locomotives were not new Tier 4 environmentally compliant power, but rebuilt lower Tier motive power and where locomotive work, as measured by gross ton-miles moved, was flat¹⁵ during the decade, and where cars replaced did not keep up with cars retired, since railroad-controlled car fleets decreased 24% from 2010 to 2019¹⁶; and
- \$9.4 billion spent on Positive Train Control, a safety technology mandated by Congress in 2008, having negligible commercial or operating expense benefits.¹⁷

Exhibit 2 to these comments aggregates distributions to shareholders by the seven Class I railroads during the same decade, 2010-to-2019: \$164.2 billion. That is, during the decade before the Covid-19 crisis, the Class I's returned over six times¹⁸ as much money to shareholders (\$164.2 billion) as they spent on projects to increase their rates of return (\$26.4 billion).

Implication: senior management at the Class I's has had great difficulty in finding investments with returns in excess of their cost of capital,¹⁹ suggesting that new strategies are needed in order to open up lucrative opportunities for investment and franchise growth.

¹⁵ Freight ton-miles moved by the seven Class I's was basically flat from 2010 (2.21 trillion) to 2019 (2.29 trillion).

¹⁶ Freight cars owned and leased by Class I's decreased 24% from 461,849 in 2010 to 351,032 in 2019.

¹⁷ In fact, PTC has a markedly negative effect on new carload traffic by multiplying the cost of a new mainline switch.

¹⁸ \$164.2 billion divided by \$26.4 billion is 6.2, which changes very little (to 6.1) if all numbers for the decade are converted into constant dollars in order to erase the effects of inflation.

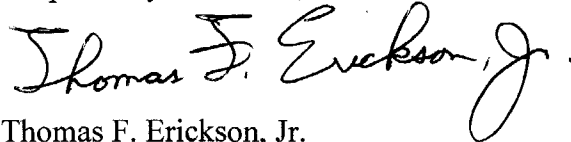
¹⁹ A company increases in value when it invests in projects having a return above its cost of capital, but the purchase of treasury stock has no effect on a company's rate of return. As described by James Van Horne in his 3rd edition to *Financial Management and Policy* (Prentice-Hall, Englewood Cliffs, NJ, 1974): "Rather than invest in projects providing a lower return [than the firm's cost of capital], the firm should distribute the earnings to stockholders and let them invest on the own." (p. 111) "If a firm has excess cash and insufficient profitable investment opportunities to justify the use of these funds, it may be in the shareholders' best interests to distribute the funds. The distribution can be accomplished either by the repurchase of stock or by paying the funds out in increased dividends." (p. 295)

V. Conclusion

As a way forward, two exploratory options may be more acceptable to both shippers and railroads:

1. The Board could clarify and publicize reciprocal switching by codifying its definition from both points of view, something along the lines of:
Reciprocal switching is the short and efficient switching of a car or small block of cars by a carrier serving a private sidetrack from and to an interchange with a line-haul carrier, wherein the line-haul carrier absorbs a charge for the switching service that has been agreed upon between the sidetrack owner and serving carrier or between the carriers or that has been imposed by the Surface Transportation Board in accordance with its mandate to balance the promotion of rail competition²⁰ with the financial viability of the rail carriers.²¹
2. The Board could limit its imposition of reciprocal switching to applications by facilities not currently served by sidetrack or not yet constructed, thereby eliminating a crush of appeals by existing sidetrack owners while signaling a path to future rail traffic growth.

Respectfully submitted,



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²⁰ The "Executive Order on Promoting Competition in the American Economy" of July 9, 2021, encourages the Chair of the Surface Transportation Board "to work with the rest of the Board to: (i) consider commencing or continuing a rulemaking to strengthen regulations pertaining to reciprocal switching agreements pursuant to 49 U.S.C. 11102(c), if the Chair determines such rulemaking to be in the public interest or necessary to provide competitive rail service...." (Section 5(n))

²¹ The Transportation Act of 1920 stated that the Commission's oversight of rates should be guided "so that carriers as a whole ... will, under honest, efficient and economical management and reasonable expenditures for maintenance of way, structures and equipment, earn ... a fair return upon the aggregate value of the railway property...." (Title IV, Section 422(2))

Exhibit 1
Class I Capital Investment as reported (millions of US Dollars)

Note: Since BNSF and NS reported capital investments in different categories from the others, their investments inside the solid-line boxes have been estimated as the same percentages of total capital investments as 1) UP for BNSF: "track/road" 51%, "cars/engines" 22% & 2) CSX for NS: "track/road" 57%, "cars/engines" 16%. Since R-1 Reports did not detail PTC expenditures until 2013, PTC investments inside the dotted-line boxes have been estimated from cumulative pre-2013 expenditures: 40% in 2012, 30% in 2011, and 20% in 2010.

RR	Account	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Decade
BNSF	track/road	1,160	1,696	1,809	1,998	2,674	2,868	1,703	1,663	1,625	1,840	19,037
	cars/eng.	500	732	781	862	1,153	1,237	735	717	701	794	8,212
	PTC (R-1)	145	218	291	175	242	288	162	130	86	136	1,873
	other	469	680	667	883	1,174	1,230	740	750	774	838	8,205
	BNSF sub-T	2,274	3,325	3,548	3,918	5,243	5,624	3,339	3,261	3,187	3,608	37,327
CN	track/road	1,001	1,198	1,352	1,359	1,452	1,450	1,385	1,486	1,807	1,705	14,195
	cars/eng.	403	197	206	278	294	375	373	174	334	753	3,388
	est. @ 2%	31	33	35	38	42	42	41	41	54	58	415
	other	105	215	139	240	291	248	236	360	530	397	2,762
	CN sub-T	1,539	1,643	1,732	1,916	2,079	2,116	2,036	2,062	2,725	2,913	20,760
CP	track/road	572	764	744	807	915	875	683	739	745	757	7,600
	cars/eng.	25	181	155	164	198	124	79	153	245	296	1,621
	PTC	18	29	38	50	47	42	25	31	36	20	337
	other	89	142	211	180	151	149	106	111	171	168	1,478
	CP sub-T	705	1,116	1,149	1,200	1,311	1,190	893	1,034	1,197	1,242	11,036
CSX	track/road	1,252	1,206	1,221	1,208	1,288	1,357	1,147	1,303	1,262	1,353	12,597
	cars/eng.	182	515	466	401	380	555	798	36	12	72	3,417
	PTC (R-1)	84	125	167	244	263	269	246	230	195	85	1,908
	other	286	451	487	460	518	381	514	471	276	147	3,991
	CSX sub-T	1,804	2,297	2,341	2,313	2,449	2,562	2,705	2,040	1,745	1,657	21,913
KCS	track/road	225	274	294	316	311	306	272	269	246	265	2,778
	cars/eng.	13	189	139	195	245	206	113	76	101	183	1,460
	PTC (R-1)	9	13	18	12	7	40	50	52	59	16	276
	other	40	19	89	72	105	136	129	188	114	123	1,015
	KCS sub-T	287	495	540	595	668	688	564	585	520	587	5,529
NS	track/road	838	1,231	1,277	1,123	1,207	1,359	1,076	982	1,112	1,151	11,357
	cars/eng.	388	570	592	520	559	630	498	455	515	533	5,261
	PTC (R-1)	75	112	149	157	202	228	265	247	253	106	1,794
	other	169	246	223	170	149	168	48	39	71	229	1,512
	NS sub-T	1,470	2,160	2,241	1,971	2,118	2,385	1,887	1,723	1,951	2,019	19,925
UP	track/road	1,625	1,702	1,708	1,733	1,746	1,860	1,837	1,833	1,844	1,953	17,841
	cars/eng.	330	675	658	580	1,067	1,436	854	607	716	610	7,533
	PTC (R-1)	84	229	349	419	384	381	361	336	158	95	2,796
	other	443	570	1,023	764	1,149	973	553	462	719	795	7,451
	UP sub-T	2,482	3,176	3,738	3,496	4,346	4,650	3,605	3,238	3,437	3,453	35,621
Total	track/road	6,672	8,071	8,406	8,545	9,593	10,076	8,102	8,275	8,641	9,024	85,405
	cars/eng.	1,841	3,059	2,997	3,000	3,897	4,563	3,450	2,218	2,625	3,241	30,892
	PTC	446	759	1,047	1,095	1,187	1,291	1,150	1,067	842	517	9,399
	other	1,601	2,323	2,839	2,769	3,538	3,285	2,326	2,381	2,654	2,697	26,414
	Totals	10,561	14,212	15,288	15,409	18,215	19,215	15,028	13,942	14,762	15,479	152,111

Exhibit 2

Class I Distributions to Shareholders (millions of US Dollars)

<u>RR</u>	<u>Account</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Decade</u>
BNSF	cash distrib.	1,250	3,500	3,750	4,000	3,500	4,000	2,500	4,575	5,450	4,425	36,950
CN	dividends	488	591	652	703	740	779	875	956	1,029	1,164	7,978
	buybacks	<u>886</u>	<u>1,435</u>	<u>1,401</u>	<u>1,359</u>	<u>1,362</u>	<u>1,442</u>	<u>1,561</u>	<u>1,617</u>	<u>1,585</u>	<u>1,315</u>	<u>13,963</u>
	CN distrib.	1,374	2,027	2,053	2,062	2,103	2,221	2,437	2,572	2,614	2,478	21,941
CP	dividends	169	195	223	237	221	177	193	239	269	311	2,232
	buybacks	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,855</u>	<u>2,179</u>	<u>914</u>	<u>294</u>	<u>851</u>	<u>855</u>	<u>6,948</u>
	CP distrib.	169	195	223	237	2,076	2,356	1,107	533	1,120	1,165	9,181
CSX	dividends	113	605	558	600	629	686	680	708	751	763	6,093
	buybacks	<u>1,452</u>	<u>1,564</u>	<u>734</u>	<u>353</u>	<u>517</u>	<u>804</u>	<u>1,056</u>	<u>1,970</u>	<u>4,671</u>	<u>3,373</u>	<u>16,494</u>
	CSX distrib.	1,565	2,169	1,292	953	1,146	1,490	1,736	2,678	5,422	4,136	22,587
KCS	dividends	11	3	86	72	117	140	143	143	148	144	1,007
	buybacks	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>194</u>	<u>185</u>	<u>376</u>	<u>244</u>	<u>793</u>	<u>1,792</u>
	KCS distrib.	11	3	86	72	117	334	328	519	392	937	2,799
NS	dividends	514	576	624	637	687	713	695	703	844	949	6,942
	buybacks	<u>863</u>	<u>2,051</u>	<u>1,288</u>	<u>627</u>	<u>318</u>	<u>1,075</u>	<u>803</u>	<u>1,012</u>	<u>2,781</u>	<u>2,099</u>	<u>12,917</u>
	NS distrib.	1,377	2,627	1,912	1,264	1,005	1,788	1,498	1,715	3,625	3,048	19,859
UP	dividends	602	837	1,146	1,333	1,632	2,344	1,879	1,982	2,299	2,598	16,652
	buybacks	<u>1,249</u>	<u>1,418</u>	<u>1,474</u>	<u>2,218</u>	<u>3,225</u>	<u>3,465</u>	<u>3,105</u>	<u>4,013</u>	<u>8,225</u>	<u>5,804</u>	<u>34,196</u>
	UP distrib.	1,851	2,255	2,620	3,551	4,857	5,809	4,984	5,995	10,524	8,402	50,848
Totals	cash distrib.	1,250	3,500	3,750	4,000	3,500	4,000	2,500	4,575	5,450	4,425	36,950
	dividends	1,897	2,807	3,289	3,582	4,026	4,838	4,465	4,731	5,339	5,928	40,904
	buybacks	<u>4,450</u>	<u>6,468</u>	<u>4,897</u>	<u>4,557</u>	<u>7,278</u>	<u>9,159</u>	<u>7,624</u>	<u>9,282</u>	<u>18,357</u>	<u>14,238</u>	<u>86,311</u>
	tot distrib.	7,597	12,776	11,936	12,139	14,804	17,997	14,589	18,587	29,146	24,592	164,165