

DESCRIPTION & JUSTIFICATION INTERSTATE ACCESS TARIFF REVISIONS

Transmittal No. 117
Effective November 1, 2019

Introduction

The Chillicothe Telephone Company (Chillicothe) submits the accompanying access tariff revisions to its Interstate Access Tariff No. 1. Chillicothe filed the 2019-2020 annual access tariff under 61.38, electing not to file in an odd number year except for modifying the rates to comply with the prescribed rate-of-return of 10.25 percent for this tariff year. Immediately following the annual filing, Chillicothe's special access demand materially changed from the data used to support the 2019-2020 filing made July 2, 2019.

The purpose of this filing is to adjust for the recent disconnects of DS1 circuits with channel mileage facility charges and disconnects of full DS3 circuits, and amend the rates for all the special access channel termination and channel mileage services. The Company, in addition to the DS1 and DS3 demands, will adjust all other special access service types to current billing counts, although these adjustments are minor.

The following is a description and justification (including statements of cost and rate development which are in accordance with Section 61.38 of the Commission's Rules), supporting the information contained in this filing. Exhibit I is the Revenue Price Out using effective demand and rates, as well as prospective demand and rates. Exhibit VI is the effective and prospective demand of all special access services.

Description & Justification

Special Access Revenue Requirement

Chillicothe under-earned in special access for both 2018 and the 2017-2018 two-year period. The Company filed its Form 492 in September 2019 reporting an earned rate-of-return of 2.28% for 2018 and an earned rate-of-return of 8.46% for the cumulative period 2017-2018. Although Chillicothe did not meet the targeted authorized rate-of-return for the 2017-2018 tariff period, the Company is electing to stay congruent with the election not to file revised cost support (except for the required reduction in the rate-of-return) in this odd year.

Channel Termination Recurring Rates

Chillicothe elected to file its annual access tariff every other year in odd numbered years, except to adjust for the current authorized rate-of-return. The demand used in the July 2, 2019 annual filing is demand from the 2018-2019 forecast period. Immediately following the July 2, 2019 annual access tariff filing, Chillicothe received disconnect orders for 4 of its 9 High Capacity DS3 circuits, a decrease of -44%. A large utility customer exited the fiber transport business, disconnecting its circuits in the Chillicothe marketplace. Chillicothe proposes decreasing its High Capacity DS3 channel termination demand from 9 to 5. See Exhibit V for the history of actual to forecast demand for the 2019 tariff period.

Chillicothe uses a unit investment study to adjust its special access channel termination rates. A unit investment study identifies the average equipment needed to provide each special access service type including voice grade, digital data, High Capacity DS1 and High Capacity DS3. Each piece of equipment cost is multiplied by a factor if one circuit does not use 100% of the equipment. This results in a “typical unloaded investment” value for each piece of equipment. The unloaded investment is totaled for each service type. The unloaded investment by service type is multiplied by the service demand to calculate a weighted investment. Each service type’s weighted investment is divided by the total special access weighted investment to calculate a factor which is multiplied by the annual special access revenue requirement.

Essentially, the base equipment cost and demand for each service type is used to allocate the interstate special access revenue requirement to the individual special access services. The special access service type revenue requirement is divided by the service demand to calculate monthly rates. This type of analysis is performed separately for the channel termination, channel mileage termination, and channel mileage facility revenue requirements.

Exhibit I is the Revenue Price Out using effective demand and rates, as well as prospective demand and rates. Exhibit II details the revised channel termination unit investment study and identifies the proposed rates by service type.

Channel Mileage Recurring Rates

The demand used in the July 2, 2019 annual filing is prospective demand from the 2018-2019 forecast period. The projected High Capacity DS1 demand with facility mileage charges was 230. The DS1 channel mileage demand count has been declining steady since January 2019; the

beginning of the year count was 187 and is currently 136, with 20 disconnects occurring after the July 2, 2019 annual tariff filing. The impetus for this rapid decline is Interexchange Carriers have analyzed their facility costs and mindfully selected T1s with both channel mileage charges and migrated those circuits to existing DS3 circuits with spare capacity. This migration resulted in a reduction in channel mileage charges as the DS3 facility is assessed the channel mileage charge. The T1s still have a channel termination charge and the forecast demand for this charge element remains appropriate. In addition, Interexchange Carriers have built their own direct facilities to points-of-connection or have found alternative fiber routes to bypass Chillicothe's shared (with AT&T and Frontier) fiber loop.

Therefore, Chillicothe proposes decreasing its High Capacity DS1 channel mileage demand from 230 to 131. There are currently 5 disconnects pending, bringing the current count down from 136 to 131. As with channel termination rates, Chillicothe uses a unit investment study to adjust its special access channel mileage rates. Exhibit III details the revised Channel Mileage Termination and Channel Mileage Facility unit investment study. Exhibit IV is a composite of the Channel Mileage components and identifies the proposed per mile rates by service type. See Exhibit V for the history of high capacity actual to forecast demand for the 2019 tariff period, and Exhibit VI for the effective and prospective demand of all special access services.

EXHIBIT I

REVENUE PRICE OUT

Access Element	2019-2020		Complete	2019-2020	2019-2020	2019-2020	Effective Rate	Prospective Rate	Effective Revenue	Prospective Revenue	Total
	Effective	Effective	Effective	Prospective	Prospective	Prospective					
	Demand	BIP-Miles	Demand	Demand	BIP-Miles	Demand					
	a	b	c = (a*b)	d	e	f = d*e	g = Records	h = Exhibit II	i = c*g	j = f*h	k = h-g
Total Special Access									1,201,809	1,201,802	(7)
										Percent Change>	-0.0006%
CT-2W	-		-	-		-	119.53	119.53	-	-	-
CT-4W	48		48	48		48	161.77	187.44	7,765	8,997	1,232
CT-DDS (56K)	96		96	36		36	168.59	195.33	16,185	7,032	(9,153)
CT-HC (DS1)	2,160		2,160	2,160		2,160	323.55	374.88	698,868	809,744	110,876
CT-HF (DS3)	108		108	60		60	3,217.78	3,728.31	347,520	223,699	(123,822)
CT-HF (OC3)	24		24	24		24	5,477.96	6,347.09	131,471	152,330	20,859

Access Element	2019-2020		Complete	2019-2020	2019-2020	2019-2020	Effective Rate	Prospective Rate	Effective Revenue	Prospective Revenue	Total
	Effective	Effective	Effective	Prospective	Prospective	Prospective					
	Demand	BIP-Miles	Demand	Demand	BIP-Miles	Demand					
	a	b	c = (a*b)	d	e	f = d*e	g = Exhibit III	h = Exhibit II	i = c*g	j = f*h	k = h-g
Total Special Access									335,107	332,559	(2,548)
Percent Change											-0.76%
CT-4W Channel Mileage	60	7.6500	459	36	7.6500	275	5.10	7.91	2,341	2,178	(163)
CT-DDS (56K) - Channel Mileage	204	6.8100	1,389	156	6.8100	1,062	5.13	7.95	7,127	8,450	1,324
CT-HC (DS1) - Channel Mileage	2,760	7.2100	19,900	1,572	7.2100	11,334	13.44	20.83	267,451	236,035	(31,415)
CT-HF (DS3) - Channel Mileage	504	7.0100	3,533	480	7.0100	3,365	16.47	25.53	58,189	85,895	27,706

EXHIBIT II

UNIT INVESTMENT STUDY FOR CHANNEL TERMINATION – WITH PROSPECTIVE DEMAND

Type of Service		Typical Unloaded Investment	2019-2020 Monthly Demand	BIP and Miles	Monthly Demand Miles	Weighted Rate Relations	Weighting Distribution	Original Test Tear RRQ	Rate Per Year	Rate Per Month
[A]		[B]=Records	[C]=Input	[D]	[E]	[F]=[B]*[C]	[G]=[F]/Total [F]	[H]=[G]* Total [H]	[I]=[H]/[C]	[J]=[I]/12
Channel Termination Rate										
Voice Grade 2 Wire										
	<i>Total</i>	\$1,818.83	-	na	na	\$0	0.00%	\$0	\$0.00	\$119.53
Voice Grade 4 Wire										
	<i>Total</i>	\$1,818.83	4	na	na	\$7,275	0.75%	\$8,997	\$2,249.29	\$187.44
Digital Data										
	<i>Total</i>	\$1,895.42	3	na	na	\$5,686	0.59%	\$7,032	\$2,344.00	\$195.33
HI CAP DS1										
	<i>Total</i>	\$3,637.66	180	na	na	\$654,779	67.38%	\$809,744	\$4,498.58	\$374.88
HI CAP DS3										
	<i>Total</i>	\$36,177.65	5	na	na	\$180,888	18.61%	\$223,699	\$44,739.74	\$3,728.31
HI CAP OC3										
	<i>Total</i>	\$61,589.00	2	na	na	\$123,178	12.68%	\$152,330	\$76,165.13	\$6,347.09
Total						<u>\$971,807</u>		<u>\$1,201,802</u>		
Checksum								<u>\$1,201,802</u>		

Source and Calculations

[A] Tariffed Services

[B] The amount of investment item used by on service circuit type. Investment costs are per vendor quotes or CPRs.

[C] Estimated demand is forecast circuits based on historical data.

[D] Not applicable for channel termination billing.

[E] Not applicable for channel termination billing.

[F] Demand multiplied times the investment cost for one circuit.

[G] Distribution of the total in this column.

[H] The total revenue requirement for the respective Part 69 access element is allocated to individual service types by applying the individual weighting factors in column G.

[I] Annual revenue requirement divided by demand.

[J] Annual amount divided by 12.

EXHIBIT III

UNIT INVESTMENT STUDY FOR FACILITY CHANNEL MILEAGE – WITH PROSPECTIVE DEMAND

Type of Service	Investment	Monthly Demand	(BIP *MILES)	Monthly Demand Miles	Weighted Rate	RRQ	Rate per Year	Rate Per Month
[A]	[B]=[F]*[C]	[C]=Input	[D]=Input	[E]=[C]*[D]	[F]=[B]*[C]	[G]=[%[F]*[G]	[H]=[G]/[E]	[I]=[H]/12
Channel Mileage (Termination Revenue Requirement) - Per Mile								
Voice Grade 2 Wire	\$564.13	0	7.6500	0.00	\$0	\$0	\$0.00	\$0.00
Voice Grade 4 Wire	\$251.02	3	7.6500	22.95	\$753	\$104	\$4.54	\$0.38
Digital Data	\$251.02	13	6.8100	88.53	\$3,263	\$452	\$5.10	\$0.43
HI CAP (1.544)	\$533.44	131	7.2100	944.51	\$69,881	\$9,676	\$10.24	\$0.85
HI CAP DS3	\$533.44	40	7.0100	280.40	\$21,338	\$2,955	\$10.54	\$0.88
Checksum					<u>\$95,235</u>	<u>\$13,187</u>		
Channel Mileage (Facility Revenue Requirement) - Per Mile								
Voice Grade 4 Wire	\$3,164.04	3	7.6500	22.95	\$9,492	\$2,074	\$90.35	\$7.53
Digital Data	\$2,816.62	13	6.8100	88.53	\$36,616	\$7,999	\$90.35	\$7.53
HI CAP (1.544)	\$7,910.10	131	7.2100	944.51	\$1,036,223	\$226,359	\$239.66	\$19.97
HI CAP DS3	\$9,492.12	40	7.0100	280.40	\$379,685	\$82,941	\$295.79	\$24.65
Total					<u>\$1,462,016</u>	<u>\$319,372</u>		

EXHIBIT IV

COMPOSITE CHANNEL MILEAGE – WITH PROSPECTIVE DEMAND

Type of Service	Channel Mileage Term	Channel Mileage Facility	Composite Rate	Composite Miles * BIP	Demand	Composite Revenue	Monthly	Proposed
Voice - 2W	\$0.00	\$0.00	\$0.00					
Voice - 4W	\$0.38	\$7.53	\$7.91	7.6500	3	2,178	181	\$7.91
Digital Data	\$0.43	\$7.53	\$7.95	6.8100	13	8,450	704	\$7.95
Hi-CAP	\$0.85	\$19.97	\$20.83	7.2100	131	236,035	19,670	\$20.83
Hi-Cap DS3	\$0.88	\$24.65	\$25.53	7.0100	40	85,895	7,158	\$25.53
					<u>187</u>	<u>332,559</u>		

EXHIBIT V

HISTORICAL CHANGE IN DEMAND FOR HIGH CAPACITY DS1 AND DS3

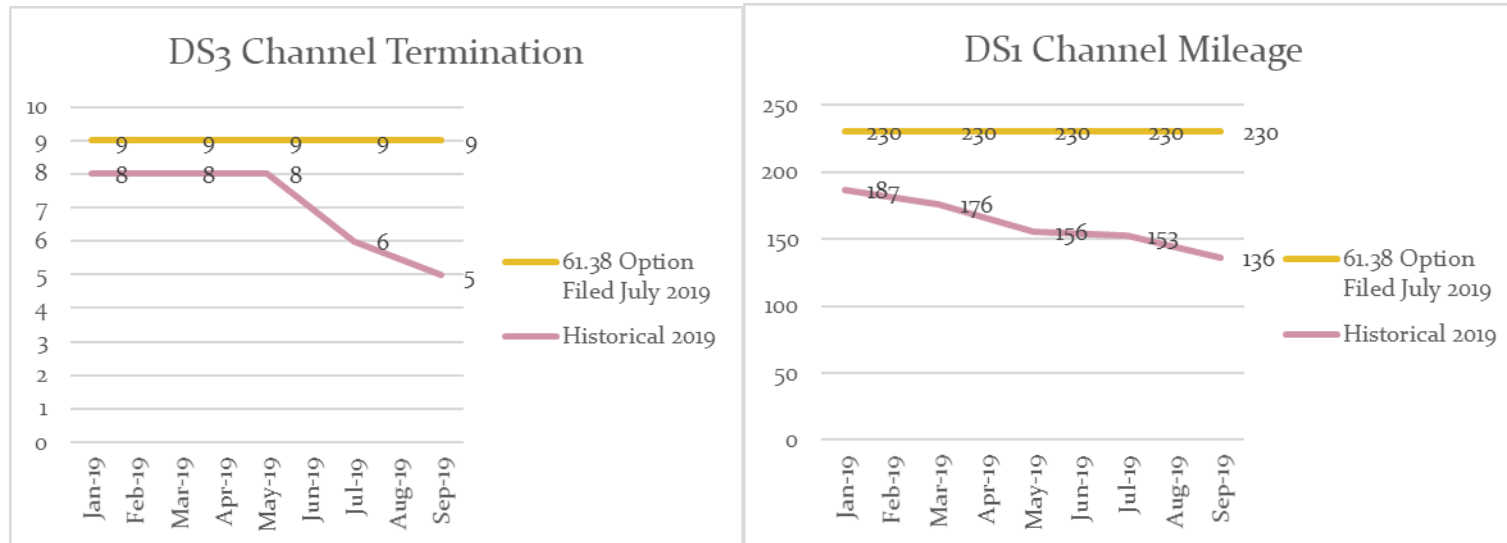


EXHIBIT VI

SUMMARY OF EFFECTIVE AND PROSPECTIVE DEMAND – ALL SERVICES

