

**THE CHILLICOTHE TELEPHONE COMPANY**  
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**2021-2022**

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## Section 1 INTRODUCTION AND SUMMARY

This Description and Justification (D&J) is designed to provide an overview of the Chillicothe tariff. The following will discuss, in general, tariff support material, and an overview of the cost and rate development methodology.

### I. **Tariff Support Material**

Prior to July 1, 2016, rate-of-return incumbent LECs using projected cost and demand data pursuant to section 61.38 filed access tariff revisions only in even-numbered years and carriers using historical cost and demand data pursuant to section 61.39 filed only in odd-numbered years.<sup>1</sup> Beginning July 1, 2016, however, all rate-of-return incumbent LECs must file access service tariff revisions each year in order to implement the required annual reductions to the authorized rate of return.<sup>2</sup> In addition, pursuant to the *USF/ICC Transformation Order*, all rate-of-return incumbent LECs must file a TRP this year to comply with the requirements of sections 51.909(i), 51.917(d)(iv), and 51.917(e) of the Commission's rules.

Chillicothe will file this year pursuant to section 61.38. In addition to filing a TRP, The Company will submit the 2021-2022 tariff filing period cost support with the revised rate-of-return of 9.75%. The revised cost support will be displayed in the updated TRP.

### II. **Summary of Cost and Rate Development**

Chillicothe has used a multi-step process to determine its interstate revenue requirement and associated rates for the test year. In developing the Company's test year rates, the Company first prepared a test year budget (using FCC Part 32 rules). The budget was then input into cost study models in accordance with Parts 36 and 69 of the Commission Rules. Chillicothe followed Commission Rules for plant and expense categorization, and starting in 2021-2022, Chillicothe performed special studies to identify cost characteristics of wideband and special access services and used these studies to 'weight' the costs of these services accordingly.

Demand projections were also completed to accurately develop Chillicothe's cost-based rates. Detailed descriptions of each step are included in the remaining sections of this D&J.

### III. **Summary of Accounting Changes**

On June 15, 2018, 100% of the outstanding stock of Horizon Telcom, Inc. was acquired by Horizon Acquisition Parent, LLC (Parent). The acquisition was affected by Horizon Acquisition Merger Sub, Inc., a transitory subsidiary of Parent that simultaneously merged with the Company. Horizon Telcom, Inc. was the surviving entity. The Company elected push-down accounting, which results in acquisition date fair values reflected on the balance sheet of the Company at the acquisition date.

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<sup>1</sup> 47 CFR §§ 61.38-61.39, 69.3(f)(1), (2).

<sup>2</sup> *Rate-of-Return Reform Order*, 31 FCC Rcd at 3212, para. 326.

## **Section 2 DESCRIPTION OF TARIFF**

### **I. Filing Information**

Under Special Permission No. 86-696, dated September 19, 1986; Chillicothe established and filed its own interstate access service tariff. This tariff, developed in accordance with selected sections of Part 61 of Chapter 1 of TITLE 47 of the Code of Federal Regulations, is entitled The Chillicothe Telephone Company Tariff F.C.C. No. 1 (hereinafter referred to as the Chillicothe tariff). The effective date of Chillicothe's tariff is January 1, 1987. It was established for the provision of interstate access services to customers within Chillicothe's operating territory. Revisions to tariff language and rates filed June 16, 2021, will be effective July 1, 2021.

The Chillicothe tariff establishes a comprehensive rate structure for the provision of access services to all Interexchange Carriers (ICs) and End Users. The Chillicothe tariff is designed to offer interstate access services to all ICs on a nondiscriminatory basis.

### **II. Inter-carrier Compensation Reform**

On November 18, 2011, the FCC comprehensively reformed the Inter-carrier compensation system. The FCC adopted bill-and-keep as the default methodology for all Inter-carrier compensation traffic. Rate-of-return carriers have nine years to transition to bill-and-keep.

Per paragraph 778 of the Order, the FCC adopted transition rules only with respect to terminating access. Meanwhile, there is a cap on interstate originating and terminating access rates at their current level, pending a FNPRM. The following Inter-carrier Compensation Reform Timeline identifies adopted rules affecting the June 16, 2021, interstate access tariff filing.

<b>Effective Date</b>	<b>For Rate-of-Return Carriers and CLECs that benchmark access rates to rate-of-return carriers</b>
Effective Date of the rules	All interstate switched access rate elements, including all originating, and terminating rates and reciprocal compensation rates are capped. Intrastate terminating rates are also capped.
July 1, 2020	Terminating switched end office and reciprocal compensation rates are reduced to bill and keep and the rates are \$0.00

### **III. Developing a Unified Inter-carrier Compensation Regime**

In WC Docket No. 01-92, "Developing a Unified Inter-carrier Compensation Regime", released March 31, 2014, the FCC discusses Section 51.907(d) and 51.909(d) of the Commission's rules specifying the access charge rate reductions that price cap and rate-of-return carriers, respectively, must make to terminating end office access rates in 2020. The process is for carriers to calculate the "2011 Baseline Composite Terminating End Office Access Rate," which is calculated in using Fiscal Year 2011 demand and the

End Office Access Service rates at the levels in effect on December 29, 2011. Chillicothe has complied with this requirement. The calculation is identified in the “2021 RoR ILEC ICC Data” workbook: “2021 Eligible Recovery Summary” Excel sheet. The CAF ICC charts are filed concurrently with the interstate access tariff filing.

Furthermore, per paragraph 17, *Single Per-Minute Rate Element for Terminating End Office Access Service*, the FCC clarifies that rate-of-return carriers may tariff the single composite rate as a terminating local switching access rate, consistent with the ICC transition, as-long-as all other rate elements associated with terminating end office access service are reduced to zero. Chillicothe has elected a single terminating end office rate and it is identified as local switching – per terminating access minute in the tariff sheet Page 365. The information surcharge – per terminating access minute rate is zero.

#### IV. **Connect America Fund**

WC Docket No. 10-90, Connect America Fund, released November 18, 2011, the FCC adopted a transitional recovery mechanism to facilitate incumbent LECs’ gradual transition away from ICC revenues reduced as part of this Order. This mechanism allows LECs to recover ICC revenues reduced as part of Intercarrier compensation reforms, up to a defined baseline, from alternate revenue sources: incremental, and limited increases in end user rates and, where appropriate, universal service support through the Connect America Fund (CAF). The recovery mechanism is limited in time and carefully balances the benefits of certainty and a gradual transition with the goal of keeping the federal universal service fund on a budget and minimizing the overall burden on end users.

The recovery mechanism has two basic components. First the revenue incumbent LECs are eligible to recover, which is referred to as “Eligible Recovery.” Second, the FCC specifies how incumbent LECs may recover Eligible Recovery through limited end-user charges and, where eligible and if a carrier elects to receive it, CAF support.

The Chillicothe Telephone Company is eligible for CAF support and in this tariff filing, hereby elects to continue receiving CAF support. In addition, the appropriate certifications have been provided at the end of this D&J.

The 2021-2022 Eligible Recovery revenue includes a true-up for 2019-2020 maximum intrastate revenues (excluding disputed revenues) and proposed 2021-2022 intrastate units excluding forecast demand identified as intraMTA traffic. In addition, Tariffed Access Recovery Charge (ARC) revenue and Expected CAF ICC support have been provided with this filing. The data is provided using the following TRP Excel workbooks:

- *2021\_RoR\_ILEC\_ICC\_Data* (2021 Eligible Recovery Summary, 2021 RoR ILEC Interstate Rates, 2021 RoR ILEC Intrastate Rates, 2021 RoR Rec. Comp Rates), 2021 8YY Intrastate Rates.
- *2021\_Rateceiling\_CAF\_RoR\_ILEC* (ARC-CAF 1, ARC-CAF-2, and ARC-CAF-3)
- *2021\_Tariff\_Rate\_Comp\_CAF\_RoR\_ILEC* (Exchange Level ARC)
- *2021\_True-up\_RoR\_ILEC* (ARC True Up Calc and ARC True Up Summary)
- *2021\_RoR\_ILEC\_Summary* (Non-NECA ROR Sum)

**V. Access Charge Recovery**

As discussed above, incumbent LECs may recover Eligible Recovery through limited end-user charges. Consistent with past ICC reforms, the FCC permits carriers to recover a limited portion of their Eligible Recovery from their end users through a monthly fixed charge called an ARC.

1. Limit the annual increase in consumer ARCs to \$0.50. Carriers may not charge an ARC on any Lifeline customers. This charge is calculated independently from, and has no bearing on, existing SLCs, although for administrative and billing efficiencies carriers are permitted to combine the charges as a single line item on a bill.
2. There is a Residential Rate Ceiling that prohibits imposing an ARC on any consumer paying an inclusive local monthly phone rate of \$30 or more.
3. Although the FCC does not adopt a business rate ceiling, the FCC does take measures to ensure that multi-line businesses' total SLC plus ARC line items are just and reasonable. The current multi-line business SLC is capped at \$9.20. To minimize the burden on multi-line businesses, the FCC will not permit LECs to charge a multi-line business ARC where the SLC plus ARC would exceed \$12.20 per line. This limits the ARC for multi-line businesses for entities at the current \$9.20 cap to \$3.00.

In summary, to recover Eligible Recovery, rate-of-return incumbent LECs are permitted to implement monthly end user ARCs with six annual increases of no more than \$0.50 (per month) for residential/single-line business consumers, for a total ARC of no more than \$3.00 in the sixth year; and \$1.00 (per month) per line for multi-line business customers for a total of \$6.00 per line in the sixth year, provided that: (1) such increases would not result in regulated residential end-user rates that exceed the \$30 Residential Rate Ceiling; and (2) any multi-line business customer's total SLC plus ARC does not exceed \$12.20.

The residential, single line and multi-line business ARC rates are no longer eligible for increases.

**VI. Rate-of-Return Reform Order**

On March 16, 2016, the Commission released the *Rate-of-Return Reform Order*, which, among other things, re-prescribed the authorized rate of return from 11.25% to 9.75%. The rate of return is a key input in the rate-of-return revenue requirement calculation. Beginning July 1, 2016, the 11.25% rate of return will be reduced by 25 basis points per year until July 1, 2021, when it stops at the 9.75% rate-of-return. The 2021-2022 rate-of-return is 9.75%.

**VII. 8YY Access Charge Reform**

Consistent with the Commission's commitment to move all intercarrier compensation to bill-and-keep an arrangement under which carriers look to their subscribers rather than other carriers to cover the costs of their networks, 8YY originating end office access charges will move to bill-and-keep over approximately three years. As a part of the transition, beginning July 1, 2021, rate-of-return incumbent LEC's are required to tariff

separate rate elements for toll free and non-toll free interstate and intrastate originating end office access services. The revised tariff rate elements are in Chillicothe's Access Service Tariff, Section 17.1.2 (A) and (B).

Furthermore, 8YY originating transport and originating tandem switching will be combined into a single nationwide tandem switched transport access service rate capped at \$0.001 per minute, for all toll free calls. This rate is in Chillicothe's Access Service Tariff, Section 17.1.1(B)(4).

Finally, charges for the 8YY database queries needed to route all 8YY calls will be transitioned to \$0.0002 over approximately three years and carriers will be prohibited from charging for more than one such query per call. As a part of the transition, beginning July 1, 2021, rate-of-return incumbent LEC's are required to reduce the intrastate and interstate toll free database query charges in their tariff to no more than \$.004248. These charges are in Chillicothe's Access Service Tariff, Section 17.1.2(C).

### Section 3 TARIFF MATRIX

#### I. Overview

The following is a tariff matrix denoting any Chillicothe tariff text and rate changes effective July 1, 2021, and a brief description explaining such changes. The matrix is formatted by sequential Chillicothe tariff sections and has been developed to simplify the Commission's review efforts. The following table contains analyses of Tariff Section 17.

**Table 1**

Current Version			Version to be Effective July 1, 2020			Description
Page	Section	Version	Page	Section	Version	
365	17.1.2(A)and(B)	18th Revised	365	17.1.2(A)and(B)	19th Revised	Revised Rates
367	17.2.2(A)and(B)	21st Revised	367	17.2.2(A)and(B)	22nd Revised	Revised Rates
370	17.2.4(A)and(B)	21st Revised	370	17.2.4(A)and(B)	22nd Revised	Revised Rates
371	17.2.5(A)and(B)	22nd Revised	371	17.2.5(A)and(B)	23rd Revised	Revised Rates



## Section 4 REVENUE REQUIREMENT DEVELOPMENT

### I. **Jurisdictional Cost Allocations**

#### A. Uniform System of Accounts (FCC Part 32)

Chillicothe's interstate access tariff reflects the implementation of the current Uniform System of Accounts ("USOA") rules and the associated separations procedures and cost allocations that are used in conjunction with the USOA.

#### B. Test Year Budget

Per Order DA 88-1554, "In the Matter of Commission Requirements for Cost Support Material to be filed with 1989 Annual Access Tariffs," released October 3, 1988, Chillicothe is classified as a Tier 2B company. Tier 2B companies, which are small telephone companies, may develop rates based on historical or prospective cost support.

Per WC Docket No. 21-148, "In the Matter of July 1, 2021, Annual Access Charge Tariff Filings," released May 14, 2021, Chillicothe adopts the 2021-2022 prospective test year for developing rates. Chillicothe also adopts this Order's PYCOS period of January 1, 2020, through December 31, 2020.

Chillicothe complied with this Order in preparing their operating budget formatted in Part 32's account structure. The budget was developed by using 2020 year-end total company account balances and Chillicothe's internally generated 5-year forecast based upon individual studies of particular asset, reserve, and expense accounts.

#### C. Regulated / Non-Regulated Cost Allocations (FCC Part 64)

Concurrent with the development of the Part 32 budget was an analysis pertaining to regulated/non-regulated activities. CC Docket 86-111 (Part X) deals with the adoption of accounting and cost allocation rules for separating the costs of regulated telephone service from the costs of a telephone company's non-regulated lines of business.

Chillicothe analyzes quarterly what business activities are regulated and non-regulated. Activities that are not directly identifiable are termed as being "common" and appropriate allocation factors are developed. Part X factors were appropriately applied to the test year budget, per each Part 32 account. The regulated total company balances were used for cost study purposes.

#### D. Private Line Direct Cost Study

Per Section 36.2(a) of the Commission's rules – "Separations are intended to apportion costs among categories or jurisdictions by actual use or by direct assignment. Separations are made on the "actual use" basis, which gives consideration to relative occupancy and relative time measurements." Chillicothe analyzes the actual use of all its interstate private line circuits and directly assigns their costs to interstate. Chillicothe uses Electronics and Cable Cost Investment studies to develop estimates of the investment related to channel terminations and channel mileage (termination and facility) for Voice Grade, Digital Data and High-Capacity Services. Investment estimates are based on the company's actual cost information from Continuing Property Records (CPRs), cable work orders and other financial data. The results of the Special Access Direct Cost Study are directly assigned in the Part 36 model (Section E following).

a. Circuit Equipment Costs

Equipment cost estimates were calculated for such items as equipment chassis, interface circuit cards, equipment relay racks, shelves, cross connect panels, fiber distribution panel, fuse and alarm panel, clock, cable pins, power cabling to power board, and customer designated premise equipment. Other costs such as building, lighting and central office DC power were not included in the circuit investment calculations.

Equipment costs were identified in the CPRs. The CPR costs are fully loaded costs and include installation costs, engineering, and taxes. The OC3 Special Access Direct Cost Study was not updated for this filing. The OC3 direct cost study was filed May 10, 2003.

b. Cable and Wire Facilities Costs

The company used 100 percent population size for its special access circuits to prepare this analysis. The mileage from the customer's serving wire center to the customer designated premise was calculated. In addition, the mileage from the customers serving wire center to the interexchange carrier point-of-connection was calculated. Per mile costs to customers were calculated using a typical fiber cable with 24 strands and an average company specific cost per foot. Per mile costs to interexchange carrier point-of-connection are based on actual historical cable route work orders. Fill factors were applied to costs to account for cable not in use.

c. Study Results

The Special Access Direct Cost Study resulted in a -29.07% decrease in total dedicated private line demand and a corresponding decrease in total direct costs of -18.96%.

**Table 2**

	Change in Demand 2019-2020	Total Direct Cost Study		
		Current Study	Prior Study	Difference
Central Office to CDP	(53)	671,671	992,576	(320,905)
Central Office to CDPs - Wireless	-	638,541	638,541	-
Terminating in Central Office	(7)	200,581	233,137	(32,556)
Total	(60)	1,510,793	1,864,254	(353,461)
Percent Difference	-29.70%			-18.96%

E. Separations Cost Study (FCC Part 36)

Having developed regulated test year balances under a Part 32 format; Chillicothe calculated its interstate Part 36's rate base, expense summary, and resulting revenue requirement. To calculate the interstate revenue requirement, Chillicothe uses an industry software package. This computer model quantitatively incorporates the Commission's current separations procedures prescribed by Part 36 Rules. The software package includes both Part 36 and Part 69 elements. In compliance with the

FCC's May 22, 2001, Report and Order in CC Docket No. 80-286, and the most recent Report and Order "In the Matter of Jurisdictional Separations and Referral to the Federal State Joint Board", CC Docket No. 80-286, Released May 15, 2017, extending through December 31, 2018, the existing freeze of the rules regarding jurisdictional separations, Chillicothe has frozen the allocation factors at the calendar year 2000 level. Chillicothe did not elect to adopt the optional freeze of categories and continues to review and update, as needed, the categorization on an annual basis.

The model's output is organized by schedules as follows:

**Table 3**

Index to Separations Forms	Schedule
Revenue Requirement/Income Tax Summary	S-1
Separated Telecommunications Plant Summary	S-2
Separated Expense Summary	S-3
General Support Facilities	S-4
Central Office Equipment	S-5
Information Origination/Termination Equipment	S-6
Cable and Wire Facilities	S-7
Amortizable Assets	S-8
Telecommunications Plant - Other Accounts	S-9
Certain Income Accounts and Adjustments	S-10
Plant Specific Expenses	S-11
Plant Nonspecific Expenses	S-12
Customer Operations Expenses	S-13
Corporate Operations, Taxes, and Equal Access Expenses	S-14
Reserves and Deferrals	S-15

In general, each schedule shows the Part 32 account number, account title, category number and name (if applicable), total company balance and the apportionment of the total company balance to each jurisdiction.

## II. **Access Charge Analysis**

### A. Access Charges Cost Study (FCC Part 69)

The cost allocation/projection process described in the preceding section produced projected test year interstate plant investment and expenses, per primary operating account. These results were then allocated to access charge rate elements to produce projected test year interstate revenue requirements by type of service. Chillicothe has adhered strictly to the FCC's Part 69, Access Charges. The corresponding revenue requirements, adjusted for the MAG Plan, were then divided by projected demand quantities to produce access service rates per element.

For purposes of this filing, Chillicothe has used the following rate elements for the determination of its revenue requirement and rates, if applicable, per service offering:

**Table 4**

Rate Element	Description
<b>Switched Access</b>	
a. Local Transport	The Local Transport rate category provides the transmission facilities between the telephone company's serving wire center and the interexchange carrier.
b. End Office	The End Office rate category provides the local end office switching and user termination functions necessary to complete the transmission of switched access communications to and from the end users served by the local end office.
<b>Special Access</b>	Cost of private line services. Direct investments include Cable and Wire Facilities and Category 4 Central Office Equipment (Circuit).

The allocation procedures meet the requirements of the FCC's Part 69 Rules and Regulations by further dividing a jurisdictional revenue requirement into four major access components including common line, traffic sensitive, billing and collection, and the interexchange category. Each of these major access components is further subdivided into specific rate elements as mandated by the FCC in Docket 78-72.

The model output is organized by schedules as follows:

**Table 5**

Index to Access Charges Forms	Schedule
Revenue Requirement Summary	A-1
Separated Telecommunications Plant Summary	A-2
Separated Expense Summary	A-3
General Support Facilities	A-4
Central Office Equipment	A-5
Information Origination/Termination Equipment	A-6
Cable and Wire Facilities	A-7
Amortizable Assets	A-8
Telecommunications Plant - Other Accounts	A-9
Certain Income Accounts and Adjustments	A-10
Plant Specific Expenses	A-11
Plant Nonspecific Expenses	A-12
Customer Operations Expenses	A-13
Corporate Operations, Taxes, and Equal Access Expense	A-14
Reserves and Deferrals	A-15

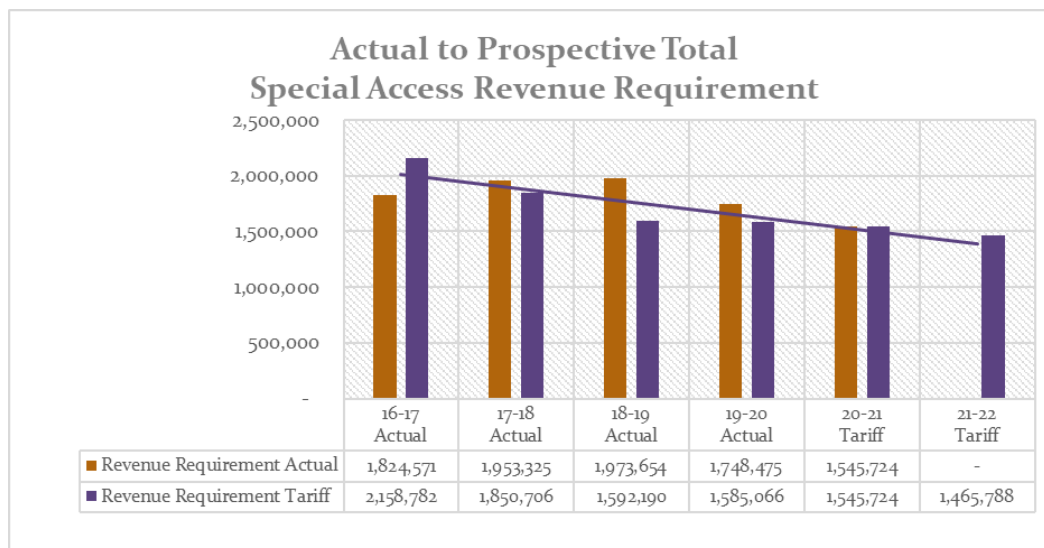
Chillicothe's year-over-year special access revenue requirement for recurring rate making continues to decrease, with a -5.74% change from the 2020-2021 to the 2021-2022 tariff period (refer to Table 6 for the annual special access recurring revenue

requirement). Moreover, as depicted in Table 7, the PYCOS revenue requirement has exceeded the tariff period revenue requirement for the past four tariff filing periods, since 2017-2018. Chillicothe has not pursued a true-up for these shortfalls in special access revenue, resulting in rate-of-return earnings of 8.46% for 2017-2018 and 6.31% for 2019-2020, as shown in ERN-1 of the 2021-2022 ROR-ACAM Tariff Review Plan.

**Table 6**

Filing Year	Recurring RRQ ('000)	CT RRQ	% Change	CM RRQ	% Change	Total % Change
2014-2015	2,167	1,702,923	32.09%	463,825	0.89%	23.89%
2015-2016	2,122	1,643,238	-3.50%	478,457	3.15%	-2.08%
2016-2017	2,094	1,616,008	-1.66%	477,885	-0.12%	-1.31%
2017-2018	1,816	1,427,196	-11.68%	389,179	-18.56%	-13.25%
2018-2019	1,544	1,207,584	-15.39%	336,416	-13.56%	-15.00%
2019-2020	1,537	1,201,802	-0.48%	335,059	-0.40%	-0.46%
2020-2021	1,568	1,224,505	1.89%	343,352	2.48%	2.02%
2021-2022	1,482	1,093,413	-10.71%	388,734	13.22%	-5.47%

**Table 7**



The year-over-year revenue requirement decline coupled with billable demand units decline, results in a revenue price out reduction of -5.37% or \$(79,477) for the 2021-2022 tariff period. Exhibit I, Section 7, includes the total special access “recurring” monthly revenue price out using 2020-2021 demand and current rates compared to 2021-2022 prospective demand and prospective rates.

## B. COS-2 TRP

The COS-2 worksheet in the 2021-2022 ROR-ACAM Tariff Review Plan corroborates the year-over-year declining revenue requirement. Operating expenses and FIT, on average, are 83% of the special access revenue requirement; these components have been driving down the year-over-year decline in special access revenue requirement at an average rate of -2.70%, as depicted in Table 8. However, it is important to remind the reader that Chillicothe was part of a merger in 2018, at which time The Company elected push-down accounting, resulting in acquisition date fair values reflected on the balance sheet of the Company, and a reset of depreciation. Excluding depreciation expense in Table 8 would result in a revenue requirement reduction of -11.99%.

The Return component makes up the remaining 17% of the special access revenue requirement. As referenced in the proceeding sections, direct costs associated with special access service has declined -18.96%, as shown in Table 2.

**Table 8**

COS-2 TRP	2018-2019	2019-2020	% Change Prior Filing*	2020-2021	% Change Prior Filing	2021-2022	% Change Prior Filing	Average of Filings
Depreciation/Amortization	305,753	305,753	0.00%	360,401	17.87%	613,352	70.19%	29.35%
Expense Less Dep & Amor	967,570	967,571	0.00%	858,649	-11.26%	539,443	-37.18%	-16.14%
Taxes Less FIT	19,665	19,665	0.00%	14,431	-26.62%	12,969	-10.13%	-12.25%
Return	236,370	230,741	-2.38%	258,463	12.01%	247,954	-4.07%	1.86%
FIT	62,832	61,336	-2.38%	53,780	-12.32%	52,070	-3.18%	-5.96%
Revenue Requirement	1,592,190	1,585,066	-0.45%	1,545,724	-2.48%	1,465,788	-5.17%	-2.70%

\*61.38 optional filing with new rate-of-return

## Section 5 DEMAND QUANTIFICATIONS

### I. **Overview**

This volume sets forth the demand forecasting process used to establish prospective switched revenue for Connect America Fund and the proposed rates for special access services. The requirements for demand quantification are summarized. The methods used to meet these requirements are then described for the various services, features, and rate categories provided as a part of this tariff. These include Local Switching, Local Transport including Tandem Switching, Information Surcharge, and Special Access.

The forecasting process is explained, including the compilation of historical data and its use in forecasting.

### II. **Switched Access Demand Forecasting**

This section describes the methods used to develop forecasts of the switched access demand quantities. Demand quantities are used in the development of 2021-2022 Eligible Recovery calculations for Connect America Fund. Demand quantities are no longer used in the development of rates since switched access (end office and transport elements) rates are frozen and capped, with some of the end office rates subject to ICC phase down. Chillicothe forecast demand for the time-period from July 1, 2020, to June 30, 2021, based on historical demand quantities. Sources for the required historical demand data include carrier access billing records, access service requests, and other telephone company records.

#### A. Compilation of Historical Data

Company records of access service usage are maintained on a calendar month basis, so there was no need to annualize the access minutes-of-use derived from these sources. Any retroactive billing adjustments had already been made to the usage data in these records. Traffic sensitive minutes-of-use by month, by feature group, were compiled for the past 12 months.

#### B. Switched Access Minutes of Use Forecasting Methodology

Historical traffic sensitive minutes-of-use were used to forecast traffic sensitive minutes-of-use. An econometric model of interstate access minutes was constructed using a software application called Forecast by Intex Solutions, Inc. A time series analysis, with linear trending, was used for historical data. Results were not reasonable and under-estimated demand. Chillicothe chose to use an average of 2020-2021 YTD data for minutes-of-use for all rate elements.

Beginning for test year 2021-2022, minutes-of-use are separated into toll originating and terminating, and non-toll originating and terminating. Separating these demand units complies with the 8YY Access Charge Reform Order and assists with tracking demand units and revenues on a toll and non-toll originating basis.

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#### C. Local Switching

The Local Switching rate for originating and for terminating is charged to all feature groups minutes-of-use, respectively. Analysis was performed to forecast terminating local switching minutes-of-use for Interstate and Intrastate.

D. Local Transport

Local Transport demand quantities include inventories of facilities for the flat-rated elements (i.e., entrance facilities and direct-trunk transport charges) and tandem-switched minutes of use.

*Flat-Rated Facilities* – The current and historical inventory was analyzed as of March 30, 2021, for the purpose of determining demand quantities for prospective flat-rate charges.

*Tandem-Switched Minutes of Use* – Analysis was performed to forecast terminating Tandem-switched minutes of use for Interstate and only terminating Tandem-switched minutes of use for Intrastate.

E. Information Surcharge

The Information Surcharge is applied per access minute-of-use for originating. The terminating rate has been added to the local switching terminating rate and the tariffed Information Surcharge rate has been reduced to zero.

III. **Special Access Demand Forecasting**

This section describes the methods used to develop forecasts of the special access demand quantities for rate elements Chillicothe plans to offer effective July 1, 2020. Forecasting demand for the period 2020-2021 based on historical demand quantities developed the required data. Sources for the required historical demand data include carrier access billing records. Specific examples of the rate elements quantified are numbers of channel terminations and channel mileage for the various categories of special access.

A. Compilation of Historical Data

Historical inventories of interstate special access services provided to all interexchange carriers, and other customers were compiled. This compilation was organized by rate element and by service category. Chillicothe provides the following categories of interstate special access: Voice Grade (DS0), Digital Data (DS0), and High Capacity (DS1, DS3 and OC3).

B. Special Access Demand Forecasting Methodology

To forecast demand for the tariff period by rate element, changes in demand during the period January 2020 through April 2021 were analyzed. Trends were identified and simple regression analyses conducted to estimate the future demand for specific rate elements in each service category for the period 2021-2022.

Chillicothe has reduced the total special access channel termination circuits in this filing by -33 circuits, or -22.12%, as compared to the 2020-2021 annual tariff filing (Table 9 below), with the majority being DS1 circuits.

The Company also reduced the total special access channel mileage circuits -32, or -19.23%.



**Table 9**

Special Access Prospective Demand				
	2020-2021	2021-2022	# Change	% Change
<b>Channel Termination</b>				Year-to-Year
Voice Grade	3	3	-	0.00%
Digital Data	5	5	-	0.00%
High Capacity DS1	137	105	(32)	-23.55%
High Capacity DS3	5	4	(1)	-18.33%
High Capacity OC3	-	-	-	0.00%
<b>Total</b>	<b>150</b>	<b>117</b>	<b>(33)</b>	<b>-22.12%</b>
<b>Channel Mileage</b>				
Voice Grade	2	2	-	0.00%
Digital Data	11	11	-	0.00%
High Capacity DS1	118	86	(32)	-27.38%
High Capacity DS3	34	35	1	1.72%
High Capacity OC3	-	-	-	0.00%
<b>Total</b>	<b>165</b>	<b>133</b>	<b>(32)</b>	<b>-19.23%</b>

IV. Non-recurring Access Charge Demand Forecasting

Non-recurring charges apply for the installation of various switched and special access services and for moves and changes to service.

A. Switched Access Non-Recurring Demand

The historical billed revenues generated from installations and other chargeable items were compiled from Company records monthly for the January 2020 through December 2020 period. Estimates of the potential revenue earned from these types of charges in the test year were based on trends in the historical period.

B. Special Access Non-Recurring Demand

The historical revenues generated from installations and other chargeable items were compiled from Company records monthly for the January 2020 through December 2020 period. Estimates of the potential revenue earned from these types of charges occurring in the test year were based on trends in the historical period.

## **Section 6 RATE DEVELOPMENT**

This section describes in detail the development of the rates for the individual access service rate elements. Rate development is based upon amended Part 69 Rules; effective test year revenue requirements divided by the test year demand quantities described in preceding sections.

### **I. Switched Access**

Switched access service provides for a point-to-point communications path between the Interexchange carrier terminal location and telephone exchange service location. The costs and rates for switched access apply to the use of common terminating, switching and trunk facilities of the Telephone Company's network by interexchange carriers for their use in providing Toll and Toll-like services.

While the elements of Chillicothe's switched access services are described below, no rate changes for Local Transport and End Office - originating services are proposed in this filing, as all interstate switched access rate elements have been capped as of December 29, 2011, pursuant to paragraph 801 of the Commission's *USF/ICC Transformation Order*. However, Chillicothe calculated the "2011 Baseline Composite Terminating End Office Access Rate," which is calculated in using Fiscal Year 2011 demand and the End Office Access Service rates at the levels in effect on December 29, 2011. The calculation is identified in the CAF-ICC TRP "Eligible Recovery" Excel file. the terminating switched end office rates are \$0.

Furthermore, rate-of-return carriers may tariff the single composite rate as a terminating local switching access rate, consistent with the ICC transition, as long as all other rate elements associated with terminating end office access service are reduced to zero. Chillicothe has elected a single terminating end office rate and it is identified as local switching – per terminating access minute in the tariff sheet Page 365. The information surcharge – per terminating access minute rate has been reduced to zero.

The two general rate categories, which apply to switched access service, are Local Transport and End Office.

#### **A. Local Transport**

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer-designated premises) and in the terminating direction (from the customer-designated premises to the end office switch), but not simultaneously.

Local Transport rates are made up of Entrance Facility and Direct-Trunk Termination and Direct-Trunked Facility rates, which are assessed on a per circuit basis, and per-mile basis. The rates are flat-rated charges for dedicated switched facilities. Chillicothe also has Tandem Switching charge for terminating interexchange carrier wireless traffic. These rates are frozen.

Effective July 1, 2021, a new charge has been added to the interstate access service tariff. The charge is for Joint Tandem Switched Transport. The Joint Tandem Switched Transport rate is applied on a per originating toll free access minute per tandem basis in lieu of the Tandem Switching, Tandem Switched Facility, and Tandem Switched Termination rates and is only billed by the tandem company that performs the tandem switching function.

B. End Office

The End Office rate category provides the local end office switching and end user termination functions necessary to complete the transmission of switched access communications to and from the end users served by the local end office. The End Office rate category includes Local Switching and the Information Surcharge rate elements.

- Local Switching

The Local Switching rate element establishes the charges related to the use of end office switching equipment, the terminations in the end office of end user lines, and the terminations of calls with the Telephone Company's intercept operators or recordings.

In 2014, the end office access service elements are separated between originating and terminating. The terminating Local Switching and terminating Information Surcharge elements have been combined into a terminating Local Switching composite rate. The Information Surcharge – terminating per access minute rate is zero rated. In 2020, the composite rate has been reduced to \$0.

In 2021, the originating elements have been separated between non-toll free and toll free only. The toll-free only elements for “800 Series” calls will be reduced to bill-and-keep over a three-year period.

- Information Surcharge

The Information Surcharge rate is comprised of components dealing specifically with directory assistance and other local directory functions. The Information Surcharge rate is assessed to a customer based on the total number of access minutes. The Information Surcharge rate is applied as discussed above under Local Switching.

II. **Special Access Service**

Special access service includes all exchange access arrangements, which generally do not use local end office switching, and thus involves the most basic of transmission capabilities. Special access service also includes supplemental features to improve the quality and utility of the transmission between two or more points. Special access service consists of two basic rate categories: (1) Channel Termination and (2) Channel Mileage.

A. Channel Termination

The Channel Termination rate category provides for the communications path between a customer-designated premise and the serving wire center of that premise. One Channel Termination charge applies per customer-designated

premises at which the channel is terminated. This charge will apply even if the customer-designated premise and the serving wire center are collocated in a Telephone Company building.

B. Channel Mileage

The Channel Mileage rate category provides for the end office terminating equipment and the transmission facilities between the serving wire-centers associated with two customer-designated premises and between a serving wire center associated with a customer-designated premise and a Telephone Company hub. The Channel Mileage rate recovers the cost of the transmission path, which extends between the Telephone Company serving wire centers and/or hub and includes primarily outside plant and central office equipment used to provide the facility.

C. Rate Calculation

Per Section 69.114 of the Commission's rules – "sub-elements shall be designed to produce total annual revenue that is equal to the projected annual revenue requirement for the Special Access element". In addition, the rule states "charges for individual sub-elements shall be designed to reflect cost differences among sub-elements."

Chillicothe uses a unit investment study to develop special access 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, DS3 and OC3. The Special Access Direct Cost Study is the underlying support for the equipment costs. This study is discussed in further detail in Section 4.

Each piece of equipment cost is multiplied by a factor of 1.00 if the circuit uses 100% of the equipment, or a factor less than 1.00 if the equipment can be used for multiple circuits. 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 (the revenue requirement is the total cost study revenue requirement reduced for nonrecurring charges, optional features and functions, and a fully distributed revenue requirement of DSL).

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 (channel mileage termination and facility are combined for carrier access billing).

Exhibit I, Section 7, includes the total special access "recurring" monthly revenue price out using 2020 demand and current rates compared to 2021-2022 prospective demand and prospective rates. Although rates are increasing due to

the decline in demand being a composite -20.60% (Table 9) compared to revenue requirement decline of -5.47% (Table 6), prospective revenue price out results in a -5.37% or \$(79,477) decline in tariff period revenues.

### ***Channel Termination Recurring Rates***

The high-capacity demand for DS1 circuits continues to drop year-over-year. The 2020-2021 filing's high capacity DS1 demand with termination charges was 137. As of May 2021, the demand has further declined from 137 to 121. The decline is due to end user business disconnects.

Therefore, Chillicothe proposes decreasing its High Capacity DS1 channel termination demand from 137 to an average of 105. Chillicothe uses a unit investment study to adjust its special access channel mileage rates. Exhibit II details the revised Channel Termination unit investment study. Exhibit V details the timeline trend for high-capacity circuits.

### ***Channel Mileage Recurring Rates***

The high-capacity demand for DS1 circuits continues to decline year-over-year. The 2020-2021 filing's high capacity DS1 demand with facility mileage charges was 118. As of May 2021, the demand has further declined to 99, driven by end user disconnects, carrier grooming, and re-routing to fiber-based-services.

Therefore, Chillicothe proposes decreasing its High Capacity DS1 channel mileage demand average of 86. 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 2021-2022 tariff period.

**Section 7**  
**SPECIAL ACCESS REVENUE, RATES AND DEMAND EXHIBITS**

## EXHIBIT I SPECIAL ACCESS REVENUE PRICE OUT

Exhibit I is a Special Access Revenue Price Out with 2020 year-end demand and rates compared to prospective 2021-2022 demand and rates. Prospective revenue is estimated to decrease -79,477, or -5.37%.

Access Element	2020-2021			2021-2022 Prospective Demand	2021-2022 Prospective BIP-Miles	2021-2022 Prospective Demand	Effective Rate	Prospective Rate	Effective Revenue	Prospective Revenue	Total
	Effective Midcourse Demand	Effective BIP-Miles	Effective Test Year Demand								
	a	b	c = (a*b)								
<b>Total Special Access</b>									<b>1,478,827</b>	<b>1,399,349</b>	<b>(79,477)</b>
Percent Change											-5.37%
CT-2W	-		-	-		-	119.53	119.53	-	-	-
CT-4W	36		36	36		36	242.13	281.76	8,717	10,143	1,427
CT-4W Channel Mileage	24	6.6500	160	24	6.6500	160	10.62	14.90	1,694	2,378	684
CT-DDS (56K)	60		60	60		60	252.33	293.62	15,140	17,617	2,478
CT-DDS (56K) - Channel Mileage	132	6.0400	797	132	6.0400	797	10.68	14.97	8,513	11,938	3,425
CT-HC (T1)	1,650		1,650	1,257		1,257	484.26	563.51	798,850	708,244	(90,607)
CT-HC (T1) - Channel Mileage	1,414	7.3400	10,379	1,028	7.3400	7,548	23.68	33.50	245,739	252,835	7,095
CT-HF (DS3)	65		65	49		49	4,816.13	5,604.31	313,048	274,611	(38,437)
CT-HF (DS3) - Channel Mileage	412	7.5000	3,088	415	7.5000	3,113	28.22	39.06	87,125	121,583	34,458

## EXHIBIT II

### CHANNEL TERMINATION UNIT INVESTMENT STUDY

Type of Service		Typical Unloaded Investment	Effective 2021-2022 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	[H]=[G]* Total	[I]=[H]/[C]	[J]=[I]/12
<b>Channel Termination Rate</b>										
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	3	na	na	\$5,456	1.00%	\$10,143	\$3,381.08	\$281.76
Digital Data										
	<i>Total</i>	\$1,895.42	5	na	na	\$9,477	1.74%	\$17,617	\$3,523.45	\$293.62
HI CAP DS1										
	<i>Total</i>	\$3,637.66	105	na	na	\$380,995	70.08%	\$708,244	\$6,762.16	\$563.51
HI CAP DS3										
	<i>Total</i>	\$36,177.65	4	na	na	\$147,725	27.17%	\$274,611	\$67,251.73	\$5,604.31
Total						<u>\$543,654</u>		<u>\$1,010,615</u>		



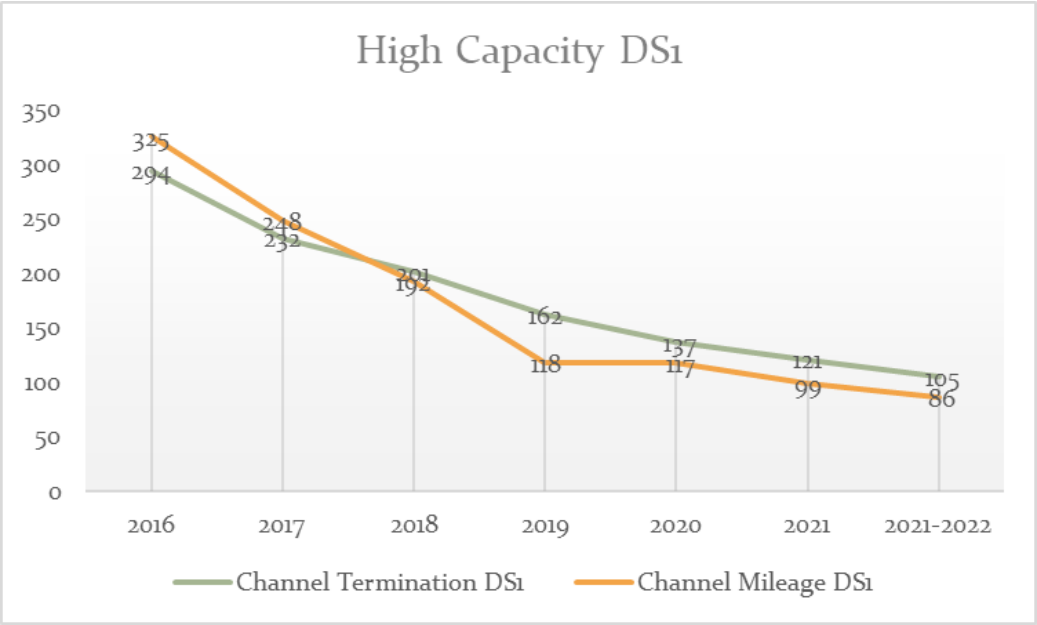
**EXHIBIT III**  
**FACILITY CHANNEL MILEAGE UNIT INVESTMENT STUDY**

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
<b>Channel Mileage (Termination Revenue Requirement) - Per Mile</b>								
Voice Grade 2 Wire	\$564.13	0	6.6500	0.00	\$0	\$0	\$0.00	\$0.00
Voice Grade 4 Wire	\$251.02	2	6.6500	13.30	\$502	\$117	\$8.81	\$0.73
Digital Data	\$251.02	11	6.0400	66.44	\$2,761	\$644	\$9.70	\$0.81
HI CAP (1.544)	\$533.44	86	7.3400	628.99	\$45,712	\$10,666	\$16.96	\$1.41
HI CAP DS3	\$533.44	35	7.5000	259.38	\$18,448	\$4,305	\$16.60	\$1.38
Checksum					<u>\$67,424</u>	<u>\$15,732</u>		
<b>Channel Mileage (Facility Revenue Requirement) - Per Mile</b>								
Voice Grade 4 Wire	\$2,750.44	2	6.6500	13.30	\$5,501	\$2,261	\$169.98	\$14.17
Digital Data	\$2,498.14	11	6.0400	66.44	\$27,480	\$11,294	\$169.98	\$14.17
HI CAP (1.544)	\$6,876.10	86	7.3400	628.99	\$589,236	\$242,169	\$385.01	\$32.08
HI CAP DS3	\$8,251.32	34.583333	7.5000	259.38	\$285,358	\$117,279	\$452.16	\$37.68
Total					<u>\$907,575</u>	<u>\$373,002</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	\$0.73	\$14.17	\$14.90	6.6500	2	2,378	198	\$14.90
Digital Data	\$0.81	\$14.17	\$14.97	6.0400	11	11,938	995	\$14.97
Hi-CAP	\$1.41	\$32.08	\$33.50	7.3400	86	252,835	21,070	\$33.50
Hi-Cap DS3	\$1.38	\$37.68	\$39.06	7.5000	35	121,583	10,132	\$39.06
					<u>133</u>	<u>388,734</u>		

**EXHIBIT V**  
**HISTORICAL CHANGE IN DEMAND FOR HIGH CAPACITY DS1**




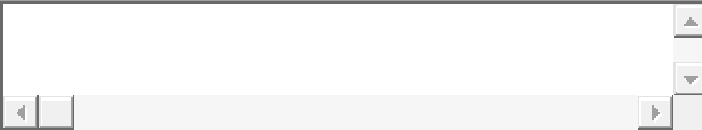
## Section 8

### CERTIFICATIONS

## Certification of Officer for Rate-of-Return Carrier Not Seeking Duplicative Recovery

**Program Year 2021-2022**

 I certify that I am an officer of the reporting carrier and that, to the best of my knowledge, this reporting carrier is not seeking duplicative recovery in the state jurisdiction for any Eligible Recovery subject to the recovery mechanism as per §51.917(d)(vii).

Name of Reporting Carrier	The Chillicothe Telephone Company
Signature of Authorized Officer	
Signature Date:	6/10/2021
Printed Name of Authorized Officer:	Mr. Pete Holland
Title or position of Authorized Officer:	CFO
Telephone number of Authorized Officer:	740.772.8547
Study Area Code of Reporting Carrier:	30059
Filing Due Date:	06/16/2021

Persons willfully making false statements on this form can be punished by fine or forfeiture under the Communications Act of 1934, 47 U.S.C. §§ 502, 503(b), or fine or imprisonment under Title 18 of the United States Code, 18 U.S.C. § 1001.

Certification of Officer as to the Accuracy of the Data Reported –

**Program Year 2021-2022**



**I certify that I am an officer of the reporting carrier; my responsibilities include ensuring the accuracy of the actual data reported; and, to the best of my knowledge, the information reported on this form is accurate.**

Name of Reporting Carrier

The Chillicothe Telephone Company

Signature of Authorized Officer

Signature Date:

6/10/2021

Printed Name of Authorized Officer:

Mr. Pete Holland

Title or position of Authorized Officer:

CFO

Telephone number of Authorized Officer:

740.772.8547

Study Area Code of Reporting Carrier:

30059

Filing Due Date:

06/16/2021

Persons willfully making false statements on this form can be punished by fine or forfeiture under the Communications Act of 1934, 47 U.S.C. §§ 502, 503(b), or fine or imprisonment under Title 18 of the United States Code, 18 U.S.C. § 1001.

**Program Year 2021-2022**

**I certify that I am an officer of the reporting carrier and that, to the best of my knowledge, the reporting carrier on this form certifies that it has complied with Eligible Recovery §51.917(d) and Access Recovery Charge §51.917(e) and is eligible to receive the CAF ICC support requested pursuant to §51.917(f).**

Name of Reporting Carrier	The Chillicothe Telephone Company
Signature of Authorized Officer	
Signature Date:	6/10/2021
Printed Name of Authorized Officer:	Mr. Pete Holland
Title or position of Authorized Officer:	CFO
Telephone number of Authorized Officer:	740.772.8547
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## CERTIFICATION

I am the Chief Financial Officer of The Chillicothe Telephone Company. I hereby certify that I have reviewed the preparation of all data supporting The Chillicothe Telephone Company June 16, 2021, Interstate Access Tariff filing and that I am authorized to execute this certification. Based upon information provided to me by employees responsible for the preparation of, or for supervision of the preparation of, the data submitted in support of the rates contained in the proposed tariff, I hereby certify that the data have been examined and reviewed and are true, correct, and complete.

Date: 6.11.2021

A handwritten signature in black ink, appearing to be "P. H. M.", written over a horizontal line.