Docket:	:	A.22-09-003
Exhibit Number	:	CADV-02
Commissioner	:	John Reynolds
Admin. Law Judge	:	Patricia Miles
Witness	:	Lucas Duffy

PUBLIC ADVOCATES OFFICE
California Public Utilities Commission

Opening Testimony of Lucas Duffy on Cost of Debt
Cost of Capital Proceeding
Application (A.) 22-09-003

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Cal PA Project Mgr.	:	Antoinette M. Floyd
Cal PA Expert Witness	:	Lucas Duffy

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San Francisco, California
May 24, 2023

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MEMORANDUM

This report is prepared by Lucas Duffy of the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) under the general supervision of Program & Project Supervisor, Antoinette M. Floyd. Attachment A to this testimony presents a statement of qualifications from Lucas Duffy. Cal Advocates is represented by attorneys Jamie Ormond and Wayne Parker in this proceeding.

This testimony is comprised of the following chapters:

Chapter	Description
I	**Analysis and Calculation of Cost of Debt & Considerations for Cost of Debt Forecasting**

In preparing this testimony, Cal Advocates has made every effort to comprehensively review the Application of Calaveras Telephone Company, Cal-Ore Telephone Co., Ducor Telephone Company, Foresthill Telephone Company, Kerman Telephone Co., Pinnacles Telephone Co., The Ponderosa Telephone Co., Sierra Telephone Company, Inc., The Siskiyou Telephone Company, and Volcano Telephone Company (collectively, the Small Incumbent Local Exchange Carriers (Small ILECs) or Applicants) for a Determination of Applicants' Cost of Capital for Ratemaking Purposes (Application) and to prioritize its analysis and recommendations to the Commission given the schedule of this proceeding. The absence from this testimony of analysis or recommendation on any particular item contained within the Application, the proceeding's Scoping Ruling, or data request responses does not constitute either acceptance of, or agreement with, the information in the Application.

CHAPTER 1 : COST OF DEBT

I. EXECUTIVE SUMMARY

On September 1, 2022, the Applicants jointly filed Application (A.) 22-09-003 (Application) for a determination of Applicants' cost of capital for ratemaking purposes with the California Public Utilities Commission (Commission). This testimony presents analyses and recommendations on the cost of debt.

In this testimony, I calculate the actual cost of debt for each Small ILEC based on each company's most recent financial information available, using established methods used by the National Association for Utility Regulators, the Federal Communications Commission (FCC), and the California Public Utilities Commission itself. I discuss historical regulatory precedent, both specific to the Commission and in a broader regulatory context, provide additional context on Rural Utilities Services (RUS) loan terms and availability, and rebut the Applicants' unreasonable cost of debt recommendations to show that the most reasonable, appropriate method of calculating cost of debt in this proceeding is using the most recent year's actual interest expenses divided by the average of debt outstanding at the beginning and end of the most recent year.

II. SUMMARY OF RECOMMENDATIONS

The Commission should set the cost of debt in this proceeding separately for each of the Small ILECs (summarized in Table 2).

1) For Small ILECs with long term debt on their most recent balance sheets, the Commission should set their cost of debt as their actual 2022 debt cost, determined by using a numerator of their 2022 interest expense and a denominator of the average debt outstanding including current maturities. This approach is consistent with the Commission's previous decisions, the Federal Communications Commission rules, and is standard practice for regulated entities.
2) For Small ILECs without long term debt on their most recent balance sheets, the Commission should set their cost of debt as

the weighted average 2022 debt cost of the other Small ILECs with debt.

I. INTRODUCTION

The "cost of debt" refers to the pre-tax interest and issuance expenses for all long term debt including long term bonds, notes, and any other sources of debt financing.[1] "Long term debt" refers to any amount of outstanding debt a company must pay that has a maturity of 12 months or longer, also known as any non-current liability, while "current maturities" refer to loan costs that must be paid in a given year.[2] In this proceeding, one of the Commission's responsibilities is to set a cost of debt that adequately compensates the Small ILECs for their debt costs, authorizing them to collect these costs from their ratepayers. Selecting a cost of debt that adequately compensates the Small ILECs and *does not* place undue burdens on the Small ILECs' ratepayers is of critical importance.

The Commission is responsible for calculating the cost of debt by utilizing a reasonable method among those already regarded as reasonable. Additionally, the Commission should consider the unique, favorable debt available to the Small ILECs where applicable.

As of the most recent financial data available, six out of ten Small ILECs had long-term debt on their balance sheets.[3] In their Application and the *Pre-filed Opening Testimony of Mark E. Zmijewski on Behalf of the Applicants* (Zmijewski Testimony), the Small ILECs request a cost of debt totaling 5.1%,[4] the yield to maturity for "Baa" rated debt as of June 30, 2022,[5] as the cost of debt for each of the Independent Small ILECs

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[1] Saalmuller, Lauren, 2022. "Cost of Capital: What it is & How to calculate it," Harvard Business School Online. Available at: https://online.hbs.edu/blog/post/cost-of-capital, last accessed May 23, 2023.

[2] CFI Team, 2022. "Long Term Debt," Corporate Finance Institute. Available at: https://corporatefinanceinstitute.com/resources/accounting/long-term-debt-ltd/, last accessed May 23, 2023.

[3] See Cal Advocates Exhibit B-2 "Combined Data Request Responses" at 2-12.

[4] Application, at 2 and 13.

[5] Zmijewski Testimony, at 70.

(including those without debt currently). The following testimony shows that this approach is unreasonable given the Small LECs actual debt costs.

The Commission should adopt reasonable costs of debt based on the respective companies' most recent actual debt costs. The Commission should use this approach because 1) it is grounded in the Commission's past decisions[6] and standard practice for regulated entities[7] 2) it is reasonable given the debt available to the Small ILECs and 3) it ensures no unnecessary financial burdens to the Small ILECs' customers. The following testimony calculates costs of debt, describes the primary debt source available to the Small ILECs and why the Applicants' claim that RUS debt is too costly to acquire is unsupported, and shows why the Applicants' requested cost of debt is unreasonable. The data and information displayed in the tables found in this testimony are supported by information contained in Cal Advocates' Confidential Exhibit B-1, Duffy Cost of Debt Calculations, which uses information synthesized from Data Request Responses from the Small ILECs.

III. ANALYSIS

A. The Commission Should Set the Cost of Debt as the Small ILECs' Individual Most Recent Actual Debt Cost, Calculated Using Interest Rates on Existing Loans

Cost of debt for ratemaking purposes is calculated using the actual cost of the company's debt, usually using the effective interest rate for all outstanding long-term debt securities as of the balance sheet date, or the total interest payment, divided by total debt. In "A Primer for Utility Regulators", the National Association of Utility Regulatory Commissioners (NARUC) and United States Agency for International Development state that the cost of long-term debt is usually calculated as the average of

[6] As elaborated below Section III A, see Decision 16-12-035, *Decision Determining the Cost of Capital for Ratemaking Purposes for California's Independent Small Telephone Companies*, at 42-43.

[7] As elaborated below in Section III A, National Association of Utility Regulators, United States Agency for International Development, "A Primer for Utility Regulators," available at: https://pubs.naruc.org/pub.cfm?id=CAD801A0-155D-0A36-316A-B9E8C935EE4D, at 14, last accessed May 14, 2023.

pre-established interest rates associated with all outstanding long-term debt securities.[8] This approach is also substantiated by more nuanced academic settings where market conditions are not directly observable and the effective interest rate can be used as a direct proxy for the cost of debt.[9] Mr. Zmijewski also uses established interest rates to calculate the historical cost of debt for each of the Small ILECs from 2017-2021.[10] Using the actual cost of debt based on existing interest rates is not only standard practice, but the most reasonable approach given that limited public market information on the debt the Small ILECs have issued for future looking projections, as the Applicants themselves implicitly admit.[11] Indeed, if we attempt to search for the market bond price of the Small ILECs' debt – the FINRA Morningstar bond search tool, which returns the yield to maturity on bonds issued by various types of companies, does not return information on the Small ILECs.[12]

The Federal Communications Commission has already done significant work to validate appropriate methods for calculating the cost of debt ***within the context*** of voice and broadband service in areas served by rate-of-return carrier,[13] and suggests calculating cost of debt using existing actual debt costs just as NARUC does, and just as the

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[8] National Association of Utility Regulators, United States Agency for International Development, "A Primer for Utility Regulators," available at: https://pubs.naruc.org/pub.cfm?id=CAD801A0-155D-0A36-316A-B9E8C935EE4D, at 14, last accessed May 14, 2023.

[9] See for example Byun, H. Y. et al, 2013. "Business group affiliation, ownership structure, and the cost of debt" Journal of Corporate Finance, at 327: "Since lagged credit spreads for bond issuance are unavailable for a significant portion of our sample, we add a lagged effective interest rate (*Interest_lagged*) as a proxy for the lagged cost of debt, to our regression models."

[10] See *Zmijewski Opening Testimony Exhibits,* "Kd and Capital Structure" tabs.

[11] Mr. Zmijewski does not calculate the cost of debt using strategies b, c, or d outlined in Zmijewski Testimony, at 68, which require market information that is not readily available for the Small ILECs.

[12] For example, search "AT&T" vs. "Calaveras Telephone Company" in the lookup tool available at: https://finra-markets.morningstar.com/BondCenter/Default.jsp?part=3, last accessed May 13, 2023.

[13] *In the Matter of Connect America Fund ETC Annual Reports and Certifications, Developing a Unified Intercarrier Compensation Regime* (FCC 16-33; WC Docket No. 10-90; WC Docket No. 14-58; CC Docket No. 01-92), Report and Order, Order and Order on Reconsideration, and Further Notice of Proposed Rulemaking, Adopted March 23, 2016. Available at: https://docs.fcc.gov/public/attachments/FCC-16-33A1.pdf, last accessed May 13, 2023.

Commission correctly specifies in the Scoping Ruling of this proceeding.[14] Therefore, to set the cost of debt in this proceeding, the Commission should use the most recent, actual debt costs of each individual Small ILEC. This is in accordance with the Commission's last Decision on this topic.[15] Indeed, during that proceeding, the Applicants and Cal Advocates (then the Office of Ratepayer Advocates) were in agreement that actual debt costs for the Small ILECs that have debt should be used to establish the cost of capital.[16] Given the information available, including the Small ILECs' loan agreements, financial statements, and balance sheets, the cost of debt can be calculated as described above: existing debt costs based on the amount of each debt obligation outstanding and its corresponding interest rate.[17,18] Using the rules developed by the Federal Communications Commission, for a given year, the cost of debt is calculated using the following procedure:[19]

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[14] See Application 22-09-003, *Assigned Commissioner's Scoping Memo and Ruling*, at 2: "The Commission will establish a cost of capital for each Small ILEC based on… the current cost of debt for each of the companies with debt and a hypothetical cost of debt for those without debt." Available at: https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K522/506522858.PDF, last accessed May 13, 2023.

[15] See Decision 16-12-035, *Decision Determining the Cost of Capital for Ratemaking Purposes for California's Independent Small Telephone Companies*, at 42-43.

[16] See above Decision, at 39.

[17] National Association of Utility Regulators, United States Agency for International Development, "A Primer for Utility Regulators," available at: https://pubs.naruc.org/pub.cfm?id=CAD801A0-155D-0A36-316A-B9E8C935EE4D, at 14, at last accessed May 14, 2023.

[18] A plethora of popular financial information and training websites also define cost of debt this way. See for example Investopedia (https://www.investopedia.com/terms/c/costofdebt.asp, last accessed May 14, 2023), Bench Accounting (https://bench.co/blog/accounting/cost-of-debt/, last accessed May 14, 2023), and Wall Street Prep (https://www.wallstreetprep.com/knowledge/cost-of-debt/, last accessed May 14, 2023).

[19] *In the Matter of Connect America Fund ETC Annual Reports and Certifications, Developing a Unified Intercarrier Compensation Regime* (FCC 16-33; WC Docket No. 10-90; WC Docket No. 14-58; CC Docket No. 01-92), Report and Order, Order and Order on Reconsideration, and Further Notice of Proposed Rulemaking, Adopted March 23, 2016, at 105: "Embedded Cost of Debt = Previous Year's Interest Expense/Average of Debt Outstanding at the Beginning and at the End of the Previous Year". Available at: https://docs.fcc.gov/public/attachments/FCC-16-33A1.pdf, last accessed May 13, 2023.

1. For a given loan, multiply the amount outstanding of that loan including current maturities by the corresponding interest rate (equaling that year's interest expense).
2. Calculate the quantity described in Step 1 for each loan, then add all individual loan numbers together.
3. Divide the quantity described in Step 2 by the average of that year's total sum of the outstanding loans including current maturities at the beginning and end of the year.

1. Calculations of Individual Cost of Debt and Consideration for Small ILECs' Without Debt

Six out of ten Small ILECs have long-term debt on their most recent balance sheets. Table 1 below provides actual debt costs, using interest rates from existing long-term debt, for each Small ILEC with debt on its most recent balance sheet.[20,21]

[20] Cal-Ore, Ducor, Pinnacles, Siskiyou had no long term debt on their most recent balance sheets.

[21] See Exhibit B-2, "Combined Data Request Responses" at 2-78.

Table 1: Cal Advocates Recommendation, Actual Cost of Existing Debt Across all Small ILECs with Debt[22]

Company	Cost of Debt
Calaveras	2.665%
Foresthill	2.662%
Kerman	2.794%
Ponderosa	2.410%
Sierra	3.834%
Volcano	4.789%

By setting the cost of debt in this proceeding as the actual individual values of the Small ILECs' cost of debt, the Commission will ensure that the companies are authorized to collect a fair return based on actual costs and prevent an overcharging of ratepayers.

As described above, for companies with debt, the Commission should adopt the actual cost of debt during the last regulatory period, as is consistent with both the Commission's prior approach and standard cost of capital practices for regulated entities. Meanwhile, the weighted average cost of debt of the companies with debt should be the cost of debt that the Commission adopts for companies *without* debt, as the Commission

[22] For these calculations, see Cal Advocates Exhibit B-1, Duffy Cost of Debt Calculations, "Cost of Debt Summary" tab, supported by the individual company sheets.

did in the last cost of capital proceeding.[23] Table 2 summarizes these recommendations for each respective Small ILEC.

Table 2: Cal Advocates' Cost of Debt Recommendation to be Adopted in this Proceeding, based on Actual Costs of Debt for 2022

Individualized Cost of Debt for each Small ILEC based on most recent data		
Company	Recommended Cost of Debt	Debt reported in most recent data or not
Calaveras	2.665%	Debt Reported
Cal-Ore	3.209%	No Debt Reported
Ducor	3.209%	No Debt Reported
Foresthill	2.662%	Debt Reported
Kerman	2.794%	Debt Reported
Pinnacles	3.209%	No Debt Reported
Ponderosa	2.410%	Debt Reported
Sierra	3.834%	Debt Reported
Siskiyou	3.209%	No Debt Reported
Volcano	4.789 %	Debt Reported

The approach outlined in Table 2 will help ensure California ratepayers are not unduly burdened with unnecessary costs. In summary, Table 2 captures each Small ILEC's actual debt costs for companies with debt and recommends using the weighted average debt cost (calculated in Table 1) of all Small ILECs to quantify cost of debt for Small ILECs without debt.

It is worth noting that this approach is supported by details of the Small ILECs' current financial performance. Had the Commission adopted the Small ILECs' proposal in the last Cost of Capital proceeding, their actual cost of debt in 2022 would have been 42% lower than authorized, corresponding to an overcharging of ratepayers.[24] Adopting

[23] See Decision 16-12-035, *Decision Determining the Cost of Capital for Ratemaking Purposes for California's Independent Small Telephone Companies*, at 43.

[24] For these calculations, see Cal Advocates Exhibit B-1, Duffy Cost of Debt Calculations, "Cost of Debt Summary" tab, under "Percent differences for current debt cost compared to Applicants' request in last proceeding".

a uniform cost of debt that is higher than the weighted average value across the Small ILECs, as the Applicants suggest,[25] would result in further overcharging ratepayers and allowing recovery of a cost of debt that is far higher than necessary. The Commission should adopt the recommendations in Table 2 so that the authorized rate of return follows the Small ILECs' actual cost of debt.

B. The Commission should Reject the Applicants' Misleading Characterization of Burden of Applying to RUS Debt

The Small ILECs' Opening Testimony on debt issuance contains misleading claims that must be addressed in the record.[26] In determining the Small ILECs' cost of debt, the Commission should recognize the availability of RUS loans for each company – the loan program which administers these loans is specifically designed for companies like the Small ILECs that provide communications services in rural areas, so the Commission should reject the Small ILECs' claim that the favorable loans they can receive from RUS for deploying infrastructure have "hidden costs" because they are burdensome to apply for. The Small ILECs acknowledge these RUS loans provide much more favorable interest rates than other forms of debt.[27] Yet, the Applicants fail to show how applying for this debt is costly on a financial, quantitative basis. Mr. Duval asserts, "…[the] borrower must submit a detailed application, including extensive corporate information, an engineered design of the infrastructure projects to be undertaken, environmental analyses, historical and forecasted financial information, and a variety of other information and certifications. The application process is generally very long and detailed and can therefore be a very costly undertaking, which can be a hidden cost of RUS debt."[28] He offers no explanation on how this transactional cost differs from any other kind of loan application from other sources. In fact, out of all ten Small ILECs,

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[25] Zmijewski Testimony, at 70. Zmijewski chooses 5.1% as the uniform cost of debt for all Small LECs.

[26] This section addresses Duval Testimony at 41-46.

[27] Mr. Duval acknowledges this more favorable interest. See, Duval Testimony at 42.

[28] Duval Testimony at 41.

only three even currently maintain records of the issuance expenses associated with their loans, one of those currently has no debt, and another just took on new debt.[29]

The Commission should reject the Small ILECs argument that RUS financing is difficult or costly for them to obtain. The nature of the RUS telecommunications loan program means that the Small ILECs have a high probability of success,[30] and the requirements for the program are documents that the Small ILECs require for ***themselves*** to function as successful businesses, even if they were to deploy infrastructure using only equity. Applications for debt financing are a normal and expected part of doing business. Additionally, RUS employs General Field Representatives who provide one-on-one assistance to applicants with respect to their loan applications.[31] RUS offers multiple rounds of feedback to ensure applications are complete: "If the applicant responds by the specified date but does not satisfactorily address the issues identified, program staff will assess the applicant's progress towards the submission of a complete application. If the applicant has made acceptable progress, a second notification of incompleteness may be provided. If the applicant's progress is not acceptable, RUS will reject the application." Even if an application is rejected, it may be resubmitted (with an unspecified, first-come first-serve timeline), and RUS staff provide support in this endeavor.[32,33]

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[29] See Cal Advocates Exhibit B-2, "Combined Data Request Responses", at 57-62.

[30] See RUS's mission statement at: https://www.rd.usda.gov/about-rd/agencies/rural-utilities-service, last accessed May 14, 2023.

[31] RUS Infrastructure Grant Application Guide, at 11. Available at: https://www.rd.usda.gov/files/2018_InfrastructureApp_Guide.pdf, last accessed May 22, 2023.

[32] RUS Infrastructure Grant Application Guide, at 12. Available at: https://www.rd.usda.gov/files/2018_InfrastructureApp_Guide.pdf, last accessed May 22, 2023.

[33] A complete application consists of: the company's information, project title, technology type, loan amount, etc., maps of funded and non-funded service areas, list of project milestones, explanation of reasonableness, cost schedules, telecommunications plant retired, service miles, tower sites, Depreciable equipment and facilities, Assets acquired from other companies, Subscriber Projections, Non-operating Revenue, Balance Sheet, Income Statement, Cash Flows, Debt and Equity Funding, Identification of Competitors, Environmental Considerations, & Endangered Species. The most intensive pieces of the application are the Attachments Subtab, which includes up to 19 subsections and the Licenses and Agreements subtab, which includes up to 13 subsections.

Furthermore, the Small ILECs' own financial information undermines their arguments that RUS debt is not favorable. Forty-nine out of the fifty-one loans appearing on the Small ILECs' most recent financial information is administered by the RUS or the Rural Telephone Bank (a similar program also run by the U.S. Department of Agriculture).[34] [35]

Based upon the lack of evidence provided in the Application and the fact that almost all the Small ILECs' loans are from RUS or other U.S. Department of Agriculture Programs, the Commission should reject the argument that RUS debt is too burdensome for the Applicants to apply to. This argument is meant to distract the Commission away from using actual debt costs, which are tied to the interest rates provided by RUS,[36] since the Small ILECs primarily use RUS for their loans.[37]

[34] See federal register notification indicating that RUS is repealing the Rural Telephone Bank loan program: https://www.federalregister.gov/documents/2019/11/07/2019-24310/repeal-of-regulations-concerning-the-rural-telephone-bank-the-public-television-station-digital. Last accessed May 22, 2023.

[35] For these statistics, see Cal Advocates Exhibit B-1, Duffy Cost of Debt Calculations, "Cost of Debt Summary" tab, "Most Recent Obligations by Administrator" table.

[36] From RUS' website, loans are explicitly tied to U.S. Treasury rates: https://www.rd.usda.gov/programs-services/telecommunications-programs/telecommunications-infrastructure-loans-loan-guarantees, last accessed May 22, 2023.

- Cost-of-money loans: fixed rate at current U.S. Treasury rates depending on loan maturity at time of each advance
- Loan Guarantees: fixed rate primarily from the Federal Financing Bank (FFB). Interest rates (Treasury rate plus 1/8%) vary depending on call options and the interim maturity rate selected at each advance, which may be as short as 90 days, with auto-rollover. Current rates available online, scroll down to "Treasury Constant Maturities" add 0.125% for FFB rate
- Hardship loans: fixed interest rate of 5% for up to 20 years and requires special qualifications

[37] From 2016 – 2022, 49 out of 51 of the Small ILECs' loans have been administered through government subsidized programs like RUS through the US Department of Agriculture. For this breakdown, see Cal Advocates Exhibit B-1, Duffy Cost of Debt Calculations, "Cost of Debt Summary" tab, under "Most Recent Obligations by Administrator".

C. The Commission Should Reject the Applicants' Proposal of Using Corporate Bond Rates for Cost of Debt, and Instead Use Actual Cost of Debt Calculated Through the FCC's Methodology.

The Commission should reject the Applicant's cost of debt proposal because it deviates from the broad regulatory knowledge base established by the Federal Communications Commission and this Commission (the same knowledge base cited above), and because it is much larger than the Small ILEC's actual current debt costs to be considered reasonable.

The Small ILECs' witness, Mr. Zmijewski, argues it is "appropriate and necessary" to use market rates for the Small ILECs' cost of debt. As discussed in the previous section of this testimony, Mr. Zmijewski used market-based yield to maturity rates for Baa-rated debt as of June 30, 2022, for the Small ILECs cost of debt forecast of 5.1%.[38] This choice is flawed for several reasons. Most importantly, corporate bond rates do not reflect the Small ILECs' debt costs. Because of the unusual, favorable debt landscape faced by the Small ILECs described above, the cost of debt cannot be equivalent to the corporate bond rate of unregulated corporations. Unlike the Small ILECs, most of these unregulated corporations do not have guaranteed profits through the ability to generate a fair rate of return through a general rate case process. Additionally, most unregulated corporations do not have rural userbases with little customer choice, nor do they have access to state level subsidies through the California High-Cost Fund-A or access to a dedicated, subsidized federal loan program to finance their operations. Mr. Zmijewski's choice to use Baa-rated debt is the foundation of the Small ILECs' cost of debt argument, and the arguments that follow it are flawed as well.

First, though Mr. Zmijewski argues that the weighted average interest rate cannot be used to calculate the cost of debt,[39] he does not provide any fact-based reasons or

[38] Zmijewski Testimony, at 69-70.

[39] Zmijewski Testimony, at 67, Q&A #137.

citations supporting this claim.[40] Second, Mr. Zmijewski's choice of using the Baa-rated bonds' market rate for the Small ILECs' investment grade debt, as opposed to U.S. Treasury rates for example, is not justified because the portion of Mr. Duval's testimony upon which it relies is erroneous. Mr. Duval cites 7 C.F.R. Section 1735.21(a) to state that RUS will disallow the Small ILECs from refinancing to achieve the 70%/30% capital structure adopted by the Commission in the previous cost of capital proceeding.[41] However, 7 C.F.R. Section 1735.21(a)[42] describes how loan recipients may use new loans provided under the Rural Electrification Act to refinance *existing loans*. This does not mean existing loans are barred from being refinanced and does not constitute a limit on the Small ILECs' ability to take out new loans to refinance their current operations, or in other words, use RUS financing to change their capital structure. Contrary to what Mr. Duval's testimony claims, "refinancing their operations through RUS to attain the 70%/30% capital structure"[43] is feasible if the Small ILECs take on new debt from RUS. Third, even if a uniform cost of debt value were appropriate in this setting (which it is not, because the Small ILECs have measurably different debt costs), using Baa debt is not logically sound when the Small ILECs' debt financing is directly, explicitly tied to US Treasury interest rates. As of the time of this testimony's writing, current U.S. Treasury rates for securities at twenty and thirty-year constant maturities are 3.82% and 3.73% respectively,[44] compared to the 5.1% corporate rate suggested by the Applicants. The Applicants' recommendation to use Baa rated debt, therefore, is not logically supported, appears to be arbitrarily high, and should be rejected in favor of the established methodology utilized by the FCC (see Table 2).

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[40] Zmijewski Testimony, at 45.

[41] Decision 16-12-035, at 39.

[42] Available at: https://www.ecfr.gov/current/title-7/subtitle-B/chapter-XVII/part-1735/subpart-B/section-1735.21, last accessed May 14, 2023.

[43] Duval Testimony, at 45.

[44] These values taken these values from https://fred.stlouisfed.org/series/DGS20 and https://fred.stlouisfed.org/series/DGS30 respectively on 5/13/2023.

1. The Magnitude of Small ILECs' Cost of Debt Selection versus Actual Cost of Debt Shows that the Applicants' Recommendation is Unreasonable

The cost of debt requested by the Small ILECs (5.1%) is unreasonably high given the historical cost of debt of the Applicants. Mr. Zmijewski acknowledges that all but one Small ILEC has a weighted average interest rate below his selected cost of debt,[45] but fails to demonstrate how much lower the Small ILECs' actual costs of debt are compared to his selection. For 2022, the most recent year of financial data, all the Small ILECs with long term debt, Volcano excepted, had costs of debt well under 4%. In other words, excepting Volcano, Mr. Zmijewski's selection for cost of debt greatly exceeds actual cost of debt. In fact, depending on the Small ILEC, Mr. Zmijewski's selection is 33% to 91% higher (depending on the Small ILEC) than the actual cost of debt in 2022. Table 3 summarizes these percentage differences between the Small ILECs' actual cost of debt (for those with debt) and the Applicants' recommendation.[46]

[45] Zmijewski Testimony, at 70.

[46] See Cal Advocates Exhibit B-1, Duffy Cost of Debt Calculations, "Cost of Debt Summary" tab, under "Table 3".

Table 3: Percent Difference Between Actual Costs of Debt and Applicants' Recommended Cost of Debt

Company	Actual Cost of Debt Percent Difference Compared to Applicants' Recommendation
Calaveras	91.4%
Foresthill	91.6%
Kerman	82.6%
Ponderosa	111.7%
Sierra	33.0%
Volcano	6.5%

As the above table shows, the Applicants' recommendation of 5.1% is unreasonably high compared to the most recent actual cost of debt from 2022.

2. Historical U.S. Treasury Interest Rates Confirm that the Small ILECs' Cost of Debt Proposal is Unrealistic

Not only is the Applicants' request significantly higher than their actual current debt costs, but historical U.S. Treasury interest rates also confirm the request is significantly higher than the average interest rates on loans supplied from RUS for the last 20 years, as shown below. The interest rates the Small ILECs receive from RUS's main programs, as outlined by the Applicants,[47] are cost of money loans (fixed at current

[47] Duval Testimony at 41-42.

U.S. Treasury rates) and Loan Guarantees through the Federal Financing Bank (fixed at U.S. Treasury rates plus .00125).[48] As described above, because all but two of the Small ILECs' fifty-one loans are from RUS programs, the vast majority of the Small ILECs' debt is tied to U.S. Treasury interest rates, specifically market yield on U.S. Treasury securities at twenty- and thirty-year constant maturity.[49] As of January 20, 2023, looking back over the last ten and twenty years, the average interest rates shown in Table 4 are all significantly lower than the Small ILECs' proposed 5.1%. In fact, the Applicant's proposal is 44% - 95% higher than the historical interest rates.

Table 4: U.S. Treasury Interest Rates at 20 and 30 Year Constant Maturities from 2013 – 2023 and 2003 – 2023 versus the Small ILECs' Proposed Cost of Debt

Constant Maturity, Time Period	Average Interest Rate	Average Historical Interest Rate Percent Difference Compared to Applicants' Recommendation
20-Year, 2013-2023	2.61%	95%
20-Year, 2003-2023	3.43%	49%
30-Year, 2013-2023	2.78%	83%
30-Year, 2003-2023	3.55%	44%

Rather than accept the Applicants' unreasonable cost of debt recommendation, which is significantly larger than their actual cost of debt and the average historical

[48] See directly from USDA's Website: Telecommunications Infrastructure Loans & Loan Guarantees, available at: https://www.rd.usda.gov/programs-services/telecommunications-programs/telecommunications-infrastructure-loans-loan-guarantees, last accessed May 14, 2023.

[49] The Applicants confirm this in Duval Testimony at 41-42.

interest rates that dictate their debt costs, the Commission should adopt the most recent actual costs of debt as summarized above in Table 2 as the costs of debt in this proceeding.

IV. CONCLUSION

The most reasonable method to calculate the cost of debt is setting individual costs of debt for each Small ILEC based on their most recent actual costs of debt, calculated using the Federal Communications Commission's methodology: interest expense for the current year divided by the average of the current and previous years' total debt including current maturities. For Small ILECs without debt, the Commission should set their cost of debt as the weighted average debt cost of those Small ILECs with debt.

This approach is consistent with regulatory precedent both within the Commission and through the National Association for Regulatory Utility Commissions. Current actual costs of debt will be close to future costs of debt because the Small LECs' primary loan administrator (comprising forty-nine out of the total fifty-one most recent loans issued by the Small ILECs), RUS, provides interest rates that are tied to U.S. Treasury rates. The Commission should reject the Applicants' argument that RUS debt is overly costly to apply for. The cost of debt proposed by the Applicants is unreasonable because it is far higher than the Small ILECs' actual debt costs, and is also far higher than the average U.S. Treasury interest rates upon which the Small ILECs' debt costs are based. Cal Advocates summarizes its individual cost of debt recommendations in the below Table 2.

Table 2: Cal Advocates' Cost of Debt Recommendation to be Adopted in this Proceeding, based on Actual Costs of Debt for 2022 (Reproduced from above for convenience)

Individualized Cost of Debt for each Small ILEC based on most recent data		
Company	Recommended Cost of Debt	Debt reported in most recent data or not
Calaveras	2.665%	Debt Reported
Cal-Ore	3.209%	No Debt Reported
Ducor	3.209%	No Debt Reported
Foresthill	2.662%	Debt Reported
Kerman	2.794%	Debt Reported
Pinnacles	3.209%	No Debt Reported
Ponderosa	2.410%	Debt Reported
Sierra	3.834%	Debt Reported
Siskiyou	3.209%	No Debt Reported
Volcano	4.789 %	Debt Reported

ATTACHMENT A

Statement of Qualifications and Experience of Lucas Duffy

STATEMENT OF QUALIFICATIONS AND EXPERIENCE
OF
LUCAS DUFFY

My name is Lucas Duffy. I am currently employed by the California Public Utilities Commission (Commission) as a Public Utilities Regulatory Analyst III in the Public Advocates Office Communications and Water Policy Branch, Policy Section. I have a Bachelor of Science in Environmental Engineering from Johns Hopkins University Whiting School of Engineering and a Master of Development Practice from the University of California-Berkeley Rausser College of Natural Resources/Goldman School of Public Policy. My undergraduate studies included courses in applied computing, environmental economics, environmental regulation, and environmental engineering systems design. My graduate studies included economic development policy, applied statistics for impact evaluation, and various topics in renewable energy including regulation, infrastructure optimization, and business development.

I joined the Public Advocates Office as a Public Utilities Regulatory Analyst I on July 27, 2020. My work at the Public Advocates Office began with evaluating California Advanced Services Fund (CASF) Broadband Infrastructure Grant applications. The CASF program funds broadband deployment projects in unserved or underserved areas of California and involves, among other items, evaluating utility financial information. Over the course of three years, I have conducted quantitative redlining analysis on broadband availability across California to evaluate correlations between whether households are served with broadband service and whether they are low-income. As part of the Verizon-TracFone merger application, I drafted expert witness testimony and testified under oath before the Commission. I have created and supported comment filings in the Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California (R.20-09-001), supported comment filings in the Order Instituting Investigation into the Creation of a Shared Database or Statewide Census of Utility Poles and Conduit in California (I.17-06-027), and supported analysis on emerging telecommunications legislation from

the California State Senate and Assembly. In parallel with my work experience at the Public Advocates Office, I have received training from the National Association of Utility Regulatory Commissioners Regulatory Training Initiative. I am also an active participant in the California Strategic Growth Council's Capitol Collaborative on Race & Equity, where I work to identify and implement opportunities for advancing racial equity through the Commission's internal and external policies and programs.