PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

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Ratesetting

TO PARTIES OF RECORD IN APPLICATION 15-09-005:

This is the proposed decision of Administrative Law Judge Robert W. Haga. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission's December 1, 2016 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission's website 10 days before each Business Meeting.

Upon the request of any Commissioner, a Ratesetting Deliberative Meeting (RDM) may be held. If that occurs, the Commission will prepare and publish an agenda for the RDM 10 days beforehand. When the RDM is held, there is a related ex parte communications prohibition period. (See Rule 8.3(c)(4).)

Parties of record may file comments on the proposed decision as provided in Rule 14.3 of the Commission's Rules of Practice and Procedure.

/s/ DARWIN E. FARRAR for
Karen V. Clopton, Chief
Administrative Law Judge

KVC:ek4
Attachment

Decision **PROPOSED DECISION OF ALJ HAGA** (Mailing 11/1/2016)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Calaveras Telephone Company (U1004C), Cal-Ore Telephone Co. (U1006C), Ducor Telephone Company (U1007C), Foresthill Telephone Company (U1009C), Kerman Telephone Co. (U1012C), Pinnacles Telephone Co. (U1013C), The Ponderosa Telephone Co. (U1014C), Sierra Telephone Company, Inc. (U1016C), The Siskiyou Telephone Company (U1017C), Volcano Telephone Company (U1019C) ("INDEPENDENT SMALL LECS") for a Determination of Applicants' Cost of Capital for Ratemaking Purposes.	Application 15-09-005 (Filed September 1, 2015)

DECISION DETERMINING THE COST OF CAPITAL FOR RATEMAKING PURPOSES FOR CALIFORNIA'S INDEPENDENT SMALL TELEPHONE COMPANIES

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DECISION DETERMINING THE COST OF CAPITAL FOR RATEMAKING PURPOSES FOR CALIFORNIA'S INDEPENDENT SMALL TELEPHONE COMPANIES

Summary

This decision establishes a Local Exchange Carrier Cost of Capital that will be applied in any pending and future General Rate Case application cycles for Calaveras Telephone Company, Cal-Ore Telephone Co., Ducor Telephone Company, Foresthill Telephone Company, Pinnacles Telephone Co., The Ponderosa Telephone Co., and Sierra Telephone Company, Inc. This decision also establishes the Local Exchange Carrier Cost of Capital for the recently concluded General Rate Cases of Kerman Telephone Co. (D.16-06-053), The Siskiyou Telephone Company (D.16-09-047), and Volcano Telephone Company (D.16-09-049) pursuant to the terms of those decisions.

The decision adopts a hypothetical capital structure (70% equity/30% debt) that is the average of the capital structures of the ten companies, and is consistent with our past findings with respect to the regulatory capital structure of these companies. The decision adopts a 10.80% cost of equity and uses the actual debt costs for the companies with debt and a 5.2% debt cost for the three companies that currently have no debt equity.

The resulting cost of capital for each company is as follows.

Company	Equity Cost	Debt Cost	Total Cost of Capital
Calaveras	10.80%	4.50%	8.91%
Cal-Ore	10.80%	5.20%	9.12%
Ducor	10.80%	5.10%	9.09%
Foresthill	10.80%	4.77%	8.99%
Kerman	10.80%	3.66%	8.66%
Ponderosa	10.80%	2.93%	8.44%
Pinnacles	10.80%	5.20%	9.12%

Sierra	10.80%	5.53%	9.22%
Siskiyou	10.80%	5.20%	9.12%
Volcano	10.80%	5.20%	9.12%

1. Factual Background

In Decision (D.)15-06-048 the Commission adopted a General Rate Case Plan for California High Cost Fund-A (CHCF-A) recipients.[1] The CHCF-A provides supplemental funding to small independent telephone companies (also known as Small Local Exchange Carriers or Small LECs) that continue to be regulated under a rate-of-return regulatory structure.[2]

This decision implements the first step of the General Rate Case Plan adopted in D.15-06-048. In that decision the Commission determined there should be a consolidated proceeding to examine the issue of cost of capital for each of the ten CHCF-A companies (Applicants).[3] The Commission approved a schedule beginning with the filing of this application to determine the Small LECs' cost of capital on September 1, 2015.

Decision 15-06-048 ordered that this case will result in a consolidated small Local Exchange Carrier Cost of Capital that will be applied in any pending and

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[1] D.15-06-048 in Rulemaking (R.)11-11-007 at Ordering Paragraph 2.

[2] Public Utilities Code § 275.6. All statutory references herein are to the Public Utilities Code unless otherwise noted.

[3] The ten CHCF-A recipients that filed this application are: Calaveras Telephone Company; Cal-Ore Telephone Company; Ducor Telephone Company; Foresthill Telephone Company; Kerman Telephone Company; Pinnacles Telephone Company; The Ponderosa Telephone Company; Sierra Telephone Company Inc.; The Siskiyou Telephone Company; and Volcano Telephone Company. Happy Valley telephone Company, Hornitos Telephone Company, and Winterhaven Telephone Company (collectively referred to as TDS Telecom) are eligible for CHCF-A subsidies but currently do not draw from the CHCF-A, and thus were not required to be included in the consolidated cost of capital proceeding.

future General Rate Case application cycles for each of the ten current California High Cost Fund-A recipient companies. Thus, in this proceeding we have examined what the cost of capital will be for those ten companies.

The Applicants proposed the Commission should not adopt a specific capital structure, but should leave the calculation for the cost of debt for each company to its individual rate case. The Applicants also proposed that if a single cost of capital is adopted for all companies, it should be 14.6% based on a 70% equity to 30% debt capital structure with a 5.5% cost of debt and a 18.5% cost of equity.

The Office of Ratepayer Advocates (ORA) timely filed a Protest on October 12, 2015. ORA states that the Applicants proposed rate of equity is far above amounts previously authorized. ORA disputed the Applicants claims of risk with respect to ongoing operations, and opposed the use of a hypothetical capital structure unless the actual capital structure would lead to unreasonable results. ORA also disputed the use of a single cost of debt and its impact on the weighted average cost of capital and resulting revenue requirement. The Applicants submitted a Reply to the Protest on October 22, 2015 disputing several factual and legal issues raised by ORA in its Protest.

In its testimony ORA recommended that the Commission adopt an individual cost of capital for each of the applicant companies. ORA proposed specific costs of capital for each company ranging from 6.24% to 7.67%. To calculate those costs of capital, ORA used the actual capital structure for seven companies and the average of those seven (56.82% equity to 43.18% debt) for the three companies that currently have a 100% equity structure. ORA proposed the Commission use the actual cost of existing debt for the seven companies with debt (ranging from 2.93% to 5.53%) and an average debt cost from those seven companies, 4.53%, for the three companies without any current long-term debt. Finally, ORA proposed the Commission use the same cost of equity, 8.79%, for all the companies.

1.1. Procedural Background

Notice of the application appeared on the Commission's Daily Calendar of September 11, 2015. A prehearing conference (PHC) was held on January 5, 2016 in San Francisco before Administrative Law Judge (ALJ) Robert Haga to receive appearances, identify procedural concerns, and to schedule evidentiary hearings.

On October 20, 2015, ORA submitted a Motion to Strike Kerman Telephone Company from this proceeding. Applicants submitted a Response opposing the motion on November 4, 2015. The Joint Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge issued on March 11, 2016, denied ORA's motion to strike and determined that the issue of whether to replace any cost of capital determinations in the then pending Kerman GRC case (Application (A.) 11-12-011) with those found in this case is an issue within the scope of this case.[4]

An evidentiary hearing was held before the ALJ in San Francisco on April 7 and 8, 2016. Twenty-three exhibits were received into evidence during the evidentiary hearing. Opening and reply briefs were received on May 13, 2016, and June 3, 2016, respectively. Neither party made a request for a final oral argument pursuant to Rule 13.13(b) of the Commission's Rules of Practice and Procedure.

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[4] *See also*, D.16-06-053, Decision Adopting Intrastate Rates and Charges, Rate of Return, and Modifying Selected Rates for Kerman Telephone Company (A.11-12-011) at mimeo 27-28.

On June 24, 2016, the Applicants submitted a request that the Commission take official notice of an "open letter" dated May 10, 2016, from the Assistant Administrator of the Rural Utilities Service (RUS) of the Department of Agriculture of the United States to all telecommunications loan applicants and borrowers (RUS Letter). The RUS Letter was attached to the request and is also available at http://www.rd.usda.eov/files/Openletter-AAT.pdf. The ALJ issued a Ruling on October 11, 2016 taking official notice of the RUS Letter, marking it as exhibit Applicants-18, and accepting the motion to move it into the record for this proceeding. This proceeding was submitted on October 18, 2016.

2. Jurisdiction

The Commission has jurisdiction in this matter in order to determine just and reasonable rates to be charged by the Applicants.[5]

The Applicants are relatively small telephone companies serving different service territories in California.[6] Each of the Applicants is regulated under a rate-of-return regulatory structure according to Public Utilities Code Section 275.6. Generally, the Applicants serve parts of the state that are more remote and sparsely populated and thus have different cost structures and infrastructure densities than the large telecommunication companies that are regulated by this Commission under the Uniform Regulatory Framework decisions.[7]

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[5] *See, e.g.*, Cal. Pub. Util. Code §§ 451, 454, 455, and 728.

[6] *See*, Cal. Pub. Util. Code § 234.

[7] The Uniform Regulatory Framework (URF) found expression in a number of decisions – beginning with R.05-04-005, including D.06-12-044, D.07-09-018, D.07-09-019 and other decisions, and running through R.09-06-019 and the decisions in that docket – of which D.06-08-030 (URF I) and D.08-09-042 (URF II) may be considered the cornerstones. *See generally*, I.15-11-007 at pp. 2-6 for a discussion of the URF proceedings.

3. Issues Before the Commission

This proceeding was initiated to determine the cost of capital for each of the ten CHCF-A recipient companies. The cost of capital determined in this decision for each of those companies will be applied in any pending and future General Rate Case filings. The following sections examine the elements of determining a cost of capital for each company and associated issues with that determination.

3.1. How to Determine a Cost of Capital for the Ten Current CHCF-A recipient companies.

3.1.1. Applicants' Position

Applicants begin with the Fifth Amendment to the United States (U.S.) Constitution as applied to states through the Fourteenth Amendment to the U.S. Constitution. Applicants state that the standard for setting the fair rate of return is set forth in the three U.S. Supreme Court cases of *Bluefield*,[8] *Hope*,[9] and *Duquesne*.[10] Applicants also point to Public Utilities Code Section 275.6 as statutory authority that entitles telephone corporations a "fair opportunity to earn a reasonable rate of return."[11]

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8 Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923) (Bluefield).

9 Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944) (Hope).

10 Duquesne Light Company v. Barasch, 488 U.S. 299 (1989) (Duquesne).

11 Opening Brief of Calaveras Telephone Company (U1004C), Cal-Ore Telephone Co. (U1006C), Ducor Telephone Company (U1007C), Foresthill Telephone Company (U1009C), Kerman Telephone Co. (U1012C), Pinnacles Telephone Co. (U 1013 C), The Ponderosa Telephone Co. (U1014C), Sierra Telephone Company, Inc. (U 1016 C), The Siskiyou Telephone Company (U1017C), and Volcano Telephone Company (U 1019 C) at p. 13 (May 13, 2016) (Opening Brief of the Independent Small LECs), *citing* Pub. Util. Code §§ 275.6(a), 275.6(b)(2), 275.6(b)(5), 275.6(c)(2), and 275.6(c)(5).

Applicants then discuss the public policy objectives they believe should guide the Commission in setting a cost of capital for the companies. Applicants state that this proceeding will determine the level of investment incentives that exist to deploy modern, broadband-capable infrastructure in rural areas served by the Applicants. Applicants claim that if the cost of capital is too low, investment will not be made. Applicants state that the paramount concern of this proceeding should be the potential for a diminution in investment. Applicants claim that it would be much worse for ratepayers to unreasonably reduce the cost of capital than to have ratepayers have a marginal increase in rates, or miniscule increases in the CHCF-A surcharge amount. To support their arguments regarding the policy objectives that the Commission should use in this proceeding, Applicants cite policies set forth by the Federal Communications Commission, the California Legislature (SB 379 (2012)), and the Commission regarding the need for continued investment in California to help bridge the digital divide and promote universal service objectives.[12]

Applicants then discuss three sets of precedents that the Commission should consider in setting the cost of capital in this proceeding: First, the most recent Commission decisions making cost of capital determinations for the Applicants;[13] Second, recent water company decisions placing the cost of capital for those utilities in the 8.24% to 9.10% range; and Third, the FCC's recent determination that the interstate rate of return should be set at 9.75%. Applicants

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[12] Opening Brief of the Independent Small LECs at 15-16.

[13] 71 CPUC 2d 506 (1997) (D. 97-04-032), 71 CPUC 2d 530 (D. 97-04-033), 71 CPUC 2d 552 (D. 97-04-034), 71 CPUC 2d 574 (D.97-04-035), 71 CPUC 2d 596 (D.97-04-036), Res. T-16003 (May 6, 1997), Res. T-16004 (April 9, 1997), Res. T-16005 (April 23, 1997), Res. T-16006 (April 23, 1997), Res. T-16007 (April 9, 1997).

seek to distinguish each of these precedents to explain why their costs of capital have increased and that 13.85% to 14.60% is a reasonable range for these costs going forward.[14]

Applicants next discuss the role of valuation formulas and cost of capital models in making cost of capital determinations. Applicants point out that while the Commission has found formulas and models useful in informing the decision-making process, the Commission has also determined that the ultimate decision regarding a cost of capital must involve judgement based on the particular circumstances of a utility.[15]

Finally, Applicants encourage the Commission to review valuation information reflected in market transactions involving telecommunications carriers. Applicants state that a review of transactional data in analyzing the cost of capital is an important step in checking the accuracy and overall reasonableness of valuation models.[16]

3.1.2. ORA's Position

ORA states that the Commission should establish a cost of capital for each Small LEC based on: 1) the actual capital structure for each carrier; 2) the current costs of debt for each carrier; and 3) a reasonable cost of equity for all the carriers.[17] ORA explains that its recommendations are consistent with its statutory mandate to seek a cost of capital for a regulated utility that is the lowest rate sufficient to allow the company to raise enough capital to support its efforts

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14 Opening Brief of the Independent Small LECs at 16-21.

15 Opening Brief of the Independent Small LECs at 21-22.

16 Opening Brief of the Independent Small LECs at 22-23.

17 Opening Brief of ORA at 6.

to provide safe and reliable service at reasonable rates.[18] ORA is satisfied that its recommendation ensure the financial stability of the carriers, provide investors the opportunity to earn a fair return on their investment, and avoid excessive rates of return that are harmful to ratepayers.[19]

3.1.3. Discussion of establishing a cost of capital for the ten current CHCF-A recipient companies

As discussed in more detail below, the Commission will establish an individualized cost of capital for each Small LEC based on: 1) a hypothetical capital structure applied to each carrier; 2) the current cost of debt for each carrier with debt and a hypothetical cost of debt for those without debt; and 3) a reasonable cost of equity for all the carriers. In establishing the individualized cost of capital for each carrier we have followed establish standards for setting a fair rate of return, considered and evaluated similarities and differences with recent Commission decisions covering the same subject, evaluated valuation information, and exercised our judgement based on the particular circumstances of a utility. After consideration, evaluation, and weighting of Applicants' and ORA's evidence, we have determined this decision is consistent with the requirements of Public Utilities Code Section 275.6.

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[18] Opening Brief of ORA at 7, *citing*, Pub. Util. Code § 309.5.

[19] ORA-1 at pp. 18-19, *citing*, D. 07-12-049, conclusion of law 9 ("An ROE is set at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility obligation.").

3.2. How that Cost of Capital Should Be Applied and Implemented As Part of Company-Specific Ratemaking Determinations in Each of the Rate Cases for Those Companies Submitted Before 2021

3.2.1. Applicants' Position

Applicants advocate adopting a specific cost of capital methodology based on a common cost of capital of 18.5%, a hypothetical capital structure of 70% equity, and the actual, embedded, weighted cost of debt ascertained at the time of a general rate case. Applicants state that while it is expedient to use this proceeding to develop the methodology to compute cost of capital, the actual calculation and implementation of this methodology is best left to the individual rate cases, where the Commission can consider the impact of its ratemaking conclusions in total.[20]

Under the Applicants' proposal, both cost of equity and capital structure would be fixed in this proceeding. The only element of the cost of capital application that would remain for determination in a rate case would be the cost of debt. Applicants advocate computing the actual, weighted, embedded cost of debt during each rate case. Applicants put forth four reasons why the cost of debt should be left to the individual rate cases:

1) It would be more accurate to use the actual cost of debt measured at the time of the rate case.
2) Computation of the embedded, weighted cost of debt is not controversial and does not involve any policy or broader ratemaking disputes.
3) It is consistent with the cost of capital adjustment mechanism that was adopted for water and energy companies to reflect their actual cost of debt.

[20] Opening Brief of the Independent Small LECs at 23.

4) The cost of debt over the recent period is lower than at any point in relevant history and will likely increase over time.[21]

Applicants disagree with ORA's suggestion that the Commission immediately implement the cost of capital for the Independent Small LECs. The Applicants urge the Commission not to deviate from its previously articulated judgment that the rate cases are the best place for cost of capital to be implemented, and present a number of arguments supporting their position.[22]

3.2.2. ORA's Position

ORA advocates determining the cost of capital for each of the Applicants in this proceeding. ORA points to D.15-06-048 that established the general rate case plan for the Applicants and called for the cost of capital to be determined in this proceeding and applied to pending and future GRC application cycles.[23]

ORA states that once the cost of capital is determined for each of the Small LECs, the resulting rate should be applied to the ratebase calculated in each of the Applicants GRCs. This would involve an individualized determination of each Applicants' capital structure and debt cost, and a standardized rate of return on equity which should be applied to all the Applicants equally.[24]

ORA also recommends applying the resulting rates of return immediate to each of the Applicants. ORA argues that since the companies have different GRC schedules pursuant to D.15-06-048, that it would not be fair to have some of the

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[21] Opening Brief of the Independent Small LECs at 24-25.

[22] Reply Brief of the Independent Small LECs at 6-10.

[23] Opening Brief of ORA at 7-8.

[24] Opening Brief of ORA at 8.

Applicants with rates and subsidy amounts calculated using equity return rates different from each other and different from what the Commission will have found to be fair and reasonable. ORA states that it would not be administratively difficult to implement the change immediately and pointed to the water company cost of capital proceeding where the resulting rates for cost of capital were applied to the water companies through an advice letter process. ORA would have the Commission provide 30 days from the adoption of this decision for the Applicants to file an advice letter with information sufficient to establish the cost of capital for that carrier and, if necessary, modify the CHCF-A subsidy for each carrier.[25]

3.2.3. Discussion of Applying and Implementing the Cost of Capital As Part of Company-Specific Ratemaking Determinations in Each of the Rate Cases for Those Companies Submitted Before 2021

The Commission determined in D.15-06-048 when established the general rate case plan for the Applicants that the cost of capital would be determined in this proceeding and then applied to pending and future GRC application cycles.[26] Once the cost of capital is determined for each of the Small LECs, it can be applied to the ratebase calculated in each of their GRCs. We are not going to deviate from the judgment made in D.15-06-048. Parties in this case participated in that proceeding and had a full and fair opportunity to be heard on the issue, and their arguments in this case do not persuade us to revisit the issue.

Further, in addition to the respect accorded the fairness or justness of the judgment reached in D.15-06-048, there is a conservation of Commission

[25] Opening Brief of ORA at 8-10.

[26] D.15-06-048 at 20, Finding of Fact 14, 25.

resources in ensuring the determination of the cost of capital is done in this proceeding and not left to be re-litigated in whole or in part in the individual GRCs. The four reasons put forth by the Applicants why the cost of debt should be left to the individual rate cases are not persuasive. The arguments in favor of achieving a consistent cost of capital determination for all of the Small LECs outweigh the potentially minor variations that might occur if the cost of debt is calculated in each individual GRC. We recognize that the cost of capital calculations could be slightly higher or lower if we were to wait to calculate the cost of debt in each individual GRC, but we are not persuaded that waiting will result in a better overall result for the Small LECs or their ratepayers.

Similarly, we are not persuaded by ORA's arguments that the resulting rates of return should immediately be applied to each of the Small LECs. By adopting the schedule set forth in D.15-06-048, the Commission clearly contemplated that some carriers would adopt the new cost of capital through their GRCs before other carriers. ORA provides no new arguments or changed circumstances that lead us to even contemplate revisiting the determinations adopted in D.15-06-048. We remain convinced that GRCs are the place for cost of capital to be implemented.

3.3. Use of the Cost of Capital Established in This Proceeding in Rate Cases Submitted After 2020.

3.3.1. Applicants' Position

Applicants state that the cost of capital established in this proceeding should be limited to rate cases filed between 2016 and 2019, and should not for cases filed in 2020 and beyond. Applicants argue that the results of this proceeding are likely to be stale, and that cost of capital should be reexamined in individual rate cases, or be the subject of a renewed examination of cost of capital for all Independent Small LECs.

Applicants argue that limiting the results of this proceeding to the current round of rate cases would be consistent with the Commission's practice over the past 18 years of independently examining cost of capital in Independent Small LECs' rate cases. Applicants state that in each of the Independent Small LEC's rate cases filed since 1997, the Commission considered the cost of capital, finding that a 10% rate of return was reasonable as applied to each company, though making clear that approval in one rate case did not set a precedent for any future or pending small LEC GRC proceeding. [27]

3.3.2. ORA's Position

ORA states that a new cost of capital proceeding should be initiated in 2019-2020. If no new cost of capital proceeding is initiated, ORA argues that the carriers' rates of return should remain at the levels set in this proceeding.[28]

3.3.3. Discussion of Using the Cost of Capital Established in This Proceeding for Rate Cases Submitted After 2020

The parties appear to agree that the results of this cost of capital proceeding need not be applied beyond the 2016-2020 rate case cycle. We agree. Following the conclusion of the instant rate case cycle, i.e., beginning with any GRCs filed in 2021, cost of capital determinations may be considered in individual rate cases, or, alternatively, in another generic cost of capital proceeding.

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[27] Opening Brief of the Independent Small LECs at 25-27.

[28] Opening Brief of ORA at p. 10. Reply Brief of ORA at 8.

3.4. The Commission Should Calculate an Individualized Weighted Cost of Capital for each of the CHCF-A Recipient Companies

3.4.1. Applicants' Position

Applicants argue the Commission should calculate a weighted cost of capital for each of the Independent Small LECs based on two common findings: (1) a cost of equity of 18.50%; and (2) a hypothetical capital structure of 70% equity and 30% debt. Applicants then state the Commission should complete the remainder of the weighted cost of capital equation by incorporating the companies' individual costs of debt. According to Applicants, the companies' individual cost of debt would be based on a computation of the embedded, weighted cost of debt at the time of each company's rate case. Applicants state that this approach will result in consistent and reasonable overall incentives, while recognizing individual company circumstances due to different composite debt rates.[29] Applicants disagree with ORA's recommendation that the Commission assess the Independent Small LECs' debt costs in this proceeding.[30]

3.4.2. ORA's Position

ORA argues that of the three components of the cost of capital calculation, determining the capital structure and the cost of debt for each company is relatively straightforward. ORA recommends using a standard return on equity in addition to the actual capital structure and debt costs for each company. This will produce an individualized cost of capital for each company.

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[29] Opening Brief of the Independent Small LECs at 27-28.

[30] Reply Brief of the Independent Small LECs at 11.

3.4.3. Discussion of Whether the Commission Should Calculate an Individualized Weighted Cost of Capital for Each of the CHCF-A Recipient Companies

The weighted average cost of capital sums the costs of debt and equity, each weighted by its proportion in the real or hypothetical capital structure of the subject companies.[31] Parties disagree as to the inputs for each of the companies, and whether any adjustments should be made to those inputs, but they do agree on the basic formula:[32]

WACC = ((% of capital that is equity) * (cost of equity)) +
((% of capital that is debt) * (cost of debt))

The parties agree that an individualized weighted average cost of capital should be calculated for each Small LEC. The parties agree that such a calculation should use a common cost of equity for all the companies. D.15-06-048 notes that the Small LECs asked for the Commission to conduct this proceeding and incorporate the results into the final results of the 2015-2016 round of rate cases.[33] The Commission agreed with the Small LECs and directed in Ordering Paragraph 3 of D.15-06-048 that the issue of cost of capital for each of the ten current CHCF-A recipient companies will be examined in a consolidated proceeding.[34] The record is sufficient for the Commission to calculate an individualized weighted average cost of capital for each of the Applicants.[35]

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31 Applicants-1 at 15:9-10.

32 Applicants-1 at pp. 15-16; ORA-1 at 6.

33 D.15-06-048 at p. 20, *citing*, Small ILEC Comments on the proposed General Rate CSE Plan, 2:20-23.

34 D.15-06-048 at OP 3.

35 *See e.g.*, Applicants-1, Table 9, p. 75:1-2, ORA-1, Table 1, p. 6:6-7, and Attachment 8.

Accordingly, the cost of capital issue for all ten Applicants will be decided in this proceeding.

3.5. What is a Reasonable Cost of Equity for Each Company?

3.5.1. Applicants' Position

Applicants propose a 18.5% cost of equity for each company. Applicants state that establishing a reasonable cost of equity involves careful financial analysis and the exercise of judgment about the risk profile of the subject company relative to the proposed return on utility investments. Applicants' testimony employs a variant of the Capital Asset Pricing Model (CAPM) to measure the risks they state come with the Small LECs' operations. Applicants' testimony also explains how transactional data can be used to corroborate the proposed result. Applicants also propose to use a wide range of risk factors including fiscal, size, liquidity, competitive, and regulatory risks as the basis for modifying the CAPM.

Applicants explain that the CAPM framework can be used to estimate an appropriate cost of equity. Applicants rely on the CAPM framework, which involves identifying the rate of return on a "riskless" investment and then adding specific "risk premia" to account for the added risks of the subject investment relative to the "riskless" investment. Applicants cite to prior Commission decisions for telecommunications and other utilities that have used the CAPM method in some capacity to justify its use here. Applicants propose a variant of CAPM that builds-up elements to reach a recommended cost of equity. This "build-up" CAPM method breaks out the risk factors into specific premia that, taken together, generate the proposed cost of equity.

Applicants criticize ORA's cost of equity arguments as not correctly accounting for precedent or the record in this case. Applicants claim that ORA did not address or consider a wide range or risk factors facing the Small LECs, including fiscal, size, liquidity, competitive, and regulatory risks. As a result, Applicants state that ORA's return on equity cannot pass constitutional muster.

Applicants propose that the modeling of cost of equity should involve four steps. First, the Commission should identify an appropriate "risk-free" rate for the starting point of the analysis. Applicants propose that the 20-year U.S. Treasury bonds provide such a starting point, averaged out over an appropriate period to even out eccentricities in the rate and to reflect the long-term nature of Small LEC investments in telecommunications plant.[36] Applicants propose a "risk-free" rate in the range of 5.07% to 6.61%.[37]

Applicants note that while ORA agrees that the 20-year U.S. Treasury Bond should be the basis for the "risk-free" rate, ORA proposes a recent 3-year average instead of the longer ranges offered by Applicants. Applicants point to numerous problems with ORA's 3-year average, including a mismatch with the period used for the ORA's recommended equity premium, the fact that U.S. Treasury rates are at historically low levels for the 3-year period, and that such a short period fails to reflect the long-term nature of Small LEC investments in telecommunications plant.[38]

Applicants state that ORA mischaracterizes market trends since 1997 and that any market trends that support the contention that rates of return on equity have been declining the last two decades are incomplete and inapplicable to the

[36] Applicants-1 at 53-55.

[37] Applicants-1, Table 3 at 53.

[38] Applicants-2 at 13-14.

Small LECs.[39] Applicants state that such a mischaracterization causes ORA to depart from any reasonable risk analysis, and thus creates a recommendation from ORA that cannot pass constitutional muster and would not serve the public interest.

Second, Applicants propose an equity risk premium should be added to reflect the additional risk associate with equity investments beyond the investments in U.S. Treasury bonds. Applicants propose a straightforward method of taking the total market return or expectation, based on historical data, for equities and subtracting the risk-free rate.[40] Applicants propose applying an equity risk premium in the range of 5.05% to 7.00% based on their proposed method.[41]

Third, Applicants propose an industry-specific premium should be added to reflect the relative industry-specific risk, over and above the risk for equities generally. Applicants state that this is necessary to comply with the *Hope* decision, *supra*, 320 U.S. at 593. Applicants state that their focus on rural markets and relatively undiversified service platforms make them fundamentally different from larger companies like AT&T and Verizon. Thus, Applicants adjusted the industry risk premium to exclude non-LEC and very large carriers and based on more rural-focused sub-set of LEC companies.[42] Applicants thus

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39 Applicants-2 at 31-34.

40 Applicants-1 at 57-58.

41 Applicants-1 at 58.

42 Applicants-1 at 57.

calculated a 1.06 beta multiplier, resulting in an industry risk premium between 0.30% and 0.42%.[43]

Fourth, Applicants propose a size premium should be added to reflect the significant increase in risk for companies that are among the smallest in the telecommunications industry. Applicants state that the size premium is founded on the well-established premise that smaller firms present higher risks than larger ones.[44] Applicants propose a 5.78% size premium be applied in this case.[45]

Applicants state that ORA is not correct that the Commission rejected the size premium in the 1997 rate cases. Applicants state that the Commission did not explicitly reject any premium because it did not calculate a cost of equity using the premia. Applicants state that even though no size premium was applied, the 1997 decisions reflect that the Commission previously found the existence of a size effect and that the companies' risks are "impacted by [their] small size."[46]

Applicants also criticize ORA's reliance on the FCC's represcription order to support rejecting a size premium. Applicants criticize ORA's selective reading of that decision where it finds that the record in that case did not justify an across-the-board size premium for hundreds of rate of return carriers but ignoring the FCC's overall result of an 11% rate of return that tapers over a six

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43 Applicants-1 at 53, 57.

44 Applicants-1 at 24, 73. Applicants-2 at 23-26.

45 Applicants-1 at 58-59.

46 Applicants-2 at 34, *citing* D.97-04-033 at 20.

year period to 9.75%.[47] Applicants state that the size effect for the Small LECs in California can be easily observed, and the FCC's conclusion regarding the size effect should have no impact on the Commission's consideration of the issue for the Applicants. Applicants seek to distinguish their case from the FCC's findings in three ways. First, Applicants claim the applicants are amongst the smallest of companies that do manifest a size effect.[48] Second, Applicants claim the record demonstrates they face regulatory risks that outweigh the regulatory advantages of their rate-of-return status. Third, Applicants claim that the record contains expert testimony tailored to them and supports the adoption of a size premium, or at least some recognition of the unique risks they face.

Applicants argue that if an explicit size premium is not adopted, the Commission should add other premia to the analysis to account for enhanced regulatory risks and the lack of liquidity facing the Applicants.

Applicants believe at least 2% and as much as 4% could be added to calculation to account for regulatory risk as an alternative.[49] Applicants cite to the phase-down of interstate and intrastate access charges as an example of new risks on rural telephone company operations.[50] Applicants also point to D.07-12-020 (Final Opinion Modifying Intrastate Access Charges), D.09-01-019

[47] Applicants also criticize ORA's reliance on the FCC's Staff Report as hearsay, despite that it is the type of document that the Commission can and does regularly cite and take official notice. *See, e.g.*, D.14-01-036, Decision Adopting Revisions to Modernize and Expand the California Lifeline Program, *passim*, adopted January 16, 2014. *See also*, Applicants Request for Official Notice Pursuant to Rule 13.9 in A.15-09-005, filed June 24, 2016; Cal. Ev. Code §§ 450-460.

[48] Applicants-2 at 23.

[49] Reporters Transcript at p. 124. *See also*, ORA-1 at 35.

[50] Reporters Transcript at 322-328.

(Decision Approving Arbitrated Interconnection Agreement between wireless providers and 11 rural LECs), D.14-12-084 (CHCF-A Phase 1 Decision) as regulatory developments that support the Commission's adoption of a size premium in this case.

Applicants also state that a 20% to 25% multiplier could be applied to the overall equity risk to account for the liquidity and marketability challenges they face as small regulated utilities.

Finally, Applicants point to the specific topography and operational challenges they face as a reason for a higher cost of equity.[51] Applicants concede that these risk factors are not tracked by typical valuation manuals or calculation methodologies, but their presence demonstrate that the Applicants' proposal is conservative and should be adopted by the Commission.

Applicants criticize ORA's selection of a 5.88% equity premium for relying solely upon the FCC's Staff Report that is based on a period of time from 1928 to 2012. Applicants propose that their suggested range of 5.05% to 7.00% is superior as it is based on two sources and is internally consistent with the time period used to determine their "risk-free" rate.[52]

Applicants also criticize ORA for not addressing the industry premium concept – the concept that companies in specific industries will perform differently than the overall marketplace. Applicants proposed an adjusted premium of 1.06 to account for industry-specific risks in a way that they claim comports with legal guidance from the United States Supreme Court.[53]

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[51] Reporters Transcript at 298.

[52] Applicants-2 at 14-15.

[53] Applicants-1 at p. 53, Applicants-2 at 8, 18-19.

3.5.2. ORA's Position

ORA proposes a 8.79% cost of equity for each company. ORA states that regulated utilities' adopted rates of return on equity have been declining for the last twenty years. ORA argues that as a lower risk-free rate is employed, which is what has occurred over the last twenty years, the cost of equity estimates should be lower. According to ORA, increasing the Applicants' equity returns relative to 1997 would produce excessive returns and violate Public Utilities Code § 275.6(c)(3) and by extension the holdings of *Bluefield*, *Hope*, and *Duquesne*. ORA cites to the 2013 FCC Staff Report updating the FCC's findings on the rate of return for small rural carriers to support its argument that carriers' rate of return on equity should decrease.[54] ORA notes that a 2016 FCC Order endorsed the 2013 FCC Staff Report and found an equity return rate in the range of 7.12% to 9.01% to be reasonable.[55]

ORA agrees with the Applicants on the use of the CAPM as the basis for return on equity calculations. While noting that prior Commission decisions do not require or prescribe a single method for determining a reasonable cost of equity, ORA proposed using two numbers, the forecasted risk-free rate of interest (2.91%), and the equity risk premium (5.88%), which is the amount of additional return required to produce a return on equity (8.79%) high enough to attract the necessary capital.[56] ORA notes that no prior Commission decisions for

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54 ORA-1 at p. 39, citing FCC Wireline Competition Bureau Staff Report "Prescribing the Authorized Rate of Return." (FCC Staff Report) DA 13-111, WC Docket No. 10-90, May 16, 2013.

55 In re Connect America Fund, ETC Annual Reports and Certifications, and Developing a Unified Intercarrier Compensation Regime, FCC Order 16-33 at ¶ 300, WC Docket No. 10-90, WC Docket No. 14-58, CC Docket No. 01-92 (March 30, 2016).

56 ORA-1 at 36.

telecommunications carriers have ever included the "four basic steps" advocated by the Applicants, and the Commission should reject Applicants proposal to use additional premium to the CAPM in this case.

ORA proposes a risk-free rate of 2.91%, the recent 3-year average of the U.S. Treasury rate. ORA states that the risk free rate has changed noticeably since 1997, because the yield on 20-year U.S. Treasury bonds has declined significantly. The average yield in 1997 was 6.68%, while the average yield in 2015 was 2.55%. ORA also provided data on the most recent ten year period, 2006-2015, where the average yield was 3.73%.[57] ORA states that the risk free rate is intended to be a forward-looking estimate, and that while rates are historically low and getting lower, it argues increases are unlikely, or if they do occur they would be small.[58]

ORA proposes an equity risk premium of 5.88% based on the FCC's calculation of the average market (equity) premium for the period 1928 to 2012. ORA believes 5.88% is reasonable as it falls within the range of historical analysis, is within the range of the average implied equity premium from the Commission's 1997 Small LEC GRC decisions, and is within the range calculated by Applicants.

ORA urges the Commission reject the addition of a size premium as the evidence is inconclusive that such an effect actually exists. ORA states that the "size effect" is the theory that smaller companies require larger returns to attract investors who may be wary of investing in small companies as a result of their

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57 ORA-1 at 36.

58 ORA-1 at 36.

greater risk. ORA cited a meta-study that found that since the early 1980s, in the U.S., smaller firms have not systematically outperformed larger ones. Thus, ORA argues, the theory that smaller firms are systematically riskier than larger firms is undercut and cannot be relied upon to justify an additional premium.[59] ORA notes that the FCC relied on this meta-study in rejecting a size premium at the federal level.[60] Further, ORA states that the Commission has never adopted a size premium and it would be bad precedent to start in this case where the evidence presented is at best inconclusive. ORA cites the 1997 cases where the Commission declined to include the 30% size premium requested by the Applicants when it established a 10% rate of return for those carriers.[61] ORA acknowledges the 1997 Commission decisions did concur that the Applicants' risk is impacted by their small size, however, ORA points out that the Commission statement is ambiguous and could equally be read to say the Commission found the impact of the small size may be a positive one and reduce their business risk.[62] ORA also points out that state and federal subsidies are the kinds of specific advantages small carriers have that are not considered in size premium theory.[63] ORA explains that the size premium theory put forward by Applicants fails to isolate and weigh the specific advantages and disadvantages

59 ORA-4.

60 In re Connect America Fund, ETC Annual Reports and Certifications, and Developing a Unified Intercarrier Compensation Regime, FCC Order 16-33 at ¶ 323.

61 *See, e.g.*, D.97-04-032, D.97-04-033, D.97-04-034, D.97-04-035.

62 ORA-1 at pp. 43-44 ("it is quite possible that the relatively smaller size of the ILECs would afford them an opportunity to more nimbly adjust strategy and budgets in response to competitive forces, changing customer demands, and technological innovations, thereby lowering risk.") *See also*, Reporters Transcript at 356-357.

63 ORA-1 at 43.

of a rate of return carrier. ORA states that broadband services using the Applicants' networks provides additional revenue that further mitigates any perceived small size risk. ORA cites Commission Decision 14-12-084 that finds that revenues generated from broadband customers are not considered in calculating the intrastate revenue requirement of the carriers, the CHCF-A support is to be used to "build 'one network' that is capable of supporting both voice and broadband."[64] ORA states that risks faced by the Applicants is not new or "special." ORA points out that the risks identified by the Applicants are the same risks faced by these carriers in previous GRCs (increased health care premiums, forest fires, fixed wireless competition, rate case unexpectedly prolonged) and already accounted for in the returns adopted by the Commission in previous decisions. Further, ORA points out that the Commission can and has recently acted on an application for financial relief should such a risk occur.[65]

ORA argues against adding any additional premium to the CAPM as any alleged "risks" have not prevented the Small LECs, on average, from earning nearly their authorized rates of return and return on equity over the last five years. ORA states that the Small LECs have earned an average rate of return of 9.449% over the last five years,[66] which is close to the authorized rate of return of 10%, and results in an average return on equity of 11.973%.[67] ORA argues that the Applicants have failed to quantifiably show how any of the alleged

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64 D.14-12-084 at 13, Finding of Fact 18 at 89.

65 *See*, D.16-02-022 (approving interim rates for Kerman Telephone while its rate case was pending).

66 ORA-1 at 41.

67 ORA-1 at 42.

regulatory risks are not already adequately addressed through other regulatory means, and as such adding additional premia to the CAPM formula is not necessary or justifiable.

3.5.3. Discussion of a Reasonable Cost of Equity for Each Company

Parties agree on CAPM as the basis for return on equity calculations and we agree that the CAPM provides the best model to determine a reasonable cost of equity for each company. Parties differ on the number of inputs and amounts for those inputs. After due consideration, evaluation, and weighing of Applicants' and ORA's analyses we find that a 10.80% cost of equity is reasonable for each company.

We agree with ORA that Applicants have failed to show that more than two components are justified in this case to calculate a reasonable cost of equity. The Commission has traditionally used two inputs to the CAPM, the equity risk premium and the risk-free rate, to calculate the cost of equity for a regulated utility. We have not been convinced that we should deviate from this method in this case.

3.5.3.1. Equity Risk Premium

The equity risk premium is the amount of additional return above the risk-free rate that is required to produce a return on equity high enough to attract the necessary capital for the operation. Applicants provide us with a range of 5.05% to 7.00% for the equity risk premium based on the Ibbotson and Duff & Phelps average data for the periods 1963-2014 and 1926-2014, respectively. ORA relies on the FCC's 2013 Staff Report that was adopted by the FCC in 2016 to propose an equity risk premium of 5.88%. As ORA's proposed figure is within the range of possible figures proposed by Applicants there is no need to pull apart and analyze the different sources and time periods presented in the record. The 5.88% equity risk premium figure is supported by the evidence, we will adopt it here.

3.5.3.2. Risk-Free Rate

The risk-free rate is the return investors can get on their investment with reasonable certainty there will be no default. Parties agree that the yield on the 20-year U.S. Treasury Bond is typically used as the risk-free rate for CAPM analysis. Parties differ over what time period should be used to average rates of the 20-year U.S. Treasury Bond. Applicants propose a 5.07% rate based on the 88-year average between 1926 and 2014 or a 6.61% rate based on the 51-year average between 1963 and 2014. ORA proposes a 2.91% rate based on the most recent 3-year average of U.S. Treasury Bond rates. We agree with ORA that current rates are at historically low levels and that using an 88-year or even a 51-year rate would not be an accurate reflection of financing currently available to carriers. However, a 3-year period also does not accurately reflect the 5-10 year period for which the results of this proceeding are expected to be used or the need for long-term investments required in a high fixed cost business. ORA also provides a 3.73% rate as the average yield from 2006 to 2015, while Applicants provide the average risk-free rate for the last 20 years, 1995-2014, was 4.92%.[68] That 20-year period provides the best reflection of current and forward-looking rate for U.S. Treasury Bonds and we adopt that figure for the risk-free rate for the cost of equity calculation.

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[68] Applicants-1 at 54.

3.5.3.3. Additional Inputs to the Cost of Equity Have Not Been Justified.

We are not persuaded the evidence submitted supports a market risk premium specifically based on small firm effects. Applicants cite to some financial literature to support its claim that relatively small and privately-held companies have a higher cost of capital than relatively large companies.[69] However, even if the literature supports the premise that size effects to exist in the smallest firms,[70] the analysis fails to isolate and weigh the specific advantages and disadvantages of the Small LECs rate-of-return regulatory classification, and thus does not necessarily apply to the Small LECs in this application. The specific risks Applicants identify are appropriately addressed through regulatory mechanisms outside this proceeding. In evaluating the issues raised in Applicants' testimony we find those issues to be stated in a general or hypothetical way.[71] Applicants did not apply those general or hypothetical examples to their specific circumstances and situations, and thus we cannot determine if the general assertions apply to them. Further, the record does not demonstrate in a quantifiable way how a Small LEC that is regulated as a rate-of-return carrier compares to the typical small or "microcap" firm that operates in the U.S. economy as a whole.[72] Accordingly, Applicants have failed to carry their burden to show that applicants' risks are impacted by their small size that would justify a specific size premium in this case. We are not persuaded by the

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69 *See*, Applicants-2 at 24-30.

70 Applicants-2 at 24-26.

71 *See, e.g.*, Applicants-2 at 30, Applicants-1 at 24, Reporters Transcript at 43.

72 Applicants-2 at 23-24.

evidence presented that the Commission can weigh whether, and to what extent each company is impacted by a small firm effect.

In addition, the Commission is required to provide subsidies "sufficient to meet the revenue requirements" for each Small LEC.[73] However, we are also not convinced by ORA's argument that state subsidies mitigate any perceived risk due to the carriers' small size. We do agree though, that the state subsidy programs do provide a means for the Commission to quickly address any of the possibilities presented by the Applicants. Thus, we can rely upon the state programs to ensure any possible risk can be quickly addressed, and believe this provides a sounder regulatory structure balancing utility incentives and customer costs than we could achieve through the provision of an adjustment for firm-size effects to the cost of capital for the Small LECs.

We are also not persuaded by Applicants testimony that " industry-specific," "regulatory risk," or "liquidity risk" premiums should be added to the CAPM calculation for equity returns. Applicants have not shown where the Commission has ever added any of those premiums to its cost of equity calculation, and we decline to do so here. Further, Applicants have failed to convince us that adding additional premia to the CAPM formula is necessary or justifiable in this case.

Applicants have not met their burden to show that additional equity returns are needed because they are small, rural telephone companies. Over the

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[73] Pub. Util. Code § 275.6. We note that the CHCF-A is an after-the-fact type of calculation – we calculate the revenue requirement first and then the CHCF-A provides subsidies to meet that revenue requirement if it is not already being met through rates. The calculated revenue requirement includes the cost of capital. Thus, while it does not eliminate all business risk to the Small LECs, the presence of the CHCF-A subsidies mitigates the business risk these companies face.

last five years the Small LECs have earned an average return on equity of 11.973%.[74] Such returns are commensurate with returns on investment in other enterprises having corresponding risks,[75] and applicants have not offered persuasive evidence to support their theory that the investment returns for the Small LECs are not commensurate with other enterprises having corresponding risks. Applicants offer no basis for comparing their selected proxy group to their particular circumstances, making any conclusion from the analysis done on the proxy group speculative. Thus, while the proxy group selected by Applicants may have an average beta of 1.06, Applicants failed to show how the risks faced by the proxy group correspond to the Applicants, why only five companies were selected from the industry code for the proxy group,[76] or how the returns on investment for the Applicants correspond to the proxy group.[77] Accordingly, Applicants failed to carry their burden to justify the addition of an industry-specific premium to the cost of equity calculation.

Applicants claim that if an explicit size premium is not adopted, the Commission should add at least 2% for "regulatory risk"[78] and a 20% to 25% multiplier for "liquidity risk."[79] Applicants have not offered persuasive evidence explaining how any of the alleged regulatory risks are not already

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[74] ORA-1 at 41.

[75] *See,* Applicants-1 at Exhibit MJB-2, Exhibit MJB-13.

[76] *Cf.*, Applicants-1 at Exhibit MJB-2 (the overall industry beta is significantly lower than the beta derived from the five companies selected by Applicants).

[77] *See*, ORA-1 at 41.

[78] Reporters Transcript at 124.

[79] Applicants-1 at 34.

adequately addressed through other regulatory means. Accordingly, after due consideration, we are able to conclude that the Commission's cost of capital analysis has considered and accounts for the regulatory risk that these companies have compared to other enterprises having corresponding risks, and that no increase to the cost of equity is necessary in this case.[80]

The evidence presented by the Applicants does not persuade us that an increase to the cost of equity is necessary because of liquidity risks. Applicants themselves did not increase their calculation of its cost of equity by including any additional amount for liquidity risk,[81] and we decline to speculate by including one here. Applicants' testimony provides a brief summary of 2009 IRS document titled "Discount for Lack of Marketability: Job Aid for IRS Valuation Professionals,"[82] but Applicants do not provide any testimony specifically about the valuation or liquidity of the companies that are the subject of this application or how the general conclusion of the IRS document could be specifically applied in this case. Accordingly, the recommendation for a 20% to 25% multiplier for liquidity risk is not persuasive and we do not include such a multiplier in the cost of equity calculation.

3.5.4. Should the Commission Calculate a Hypothetical Capital Structure or Use Each Company's Actual Capital Structure

3.5.4.1. Applicants' Position

Applicants and ORA agree that for the three companies that currently have no debt the Commission should impute a hypothetical capital structure

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80 *See*, Hope, 320 U.S. at 603.

81 Applicants-1 at 32.

82 Applicants-1 at 34-35.

though they disagree as to what that hypothetical capital structure should be. Applicants prefer to also use a hypothetical capital structure for the remaining seven companies. Applicants proposed a 70% equity to 30% debt hypothetical capital structure be used for all ten companies.

Applicants state that while it is possible to use the actual capital structure in determining the weighted average cost of capital, adopting a hypothetical structure is preferred because: it provides a better match to industry-wide capital structures; it simplifies regulatory regimes that affect telecommunications companies; and it assures the buildup of equity to adequately address regulatory and financial risk.[83] Applicants claim that debt is less available and that the Small LECs are moving toward a higher proportion of equity financing, and that a hypothetical capital structure is more in line with this movement.[84] Applicants also point other Commission Decisions in other industries[85] and to the 1997 Commission GRC decisions that adopted a hypothetical capital structure for the Small LECs, fining reasonable a capital structure with equity between 60% and 80%.

Applicants criticize ORA's proposal to use the actual five year average capital structure of each company as a hypothetical capital structure is more forward-looking. Applicants also criticize ORA's methodology in excluding the 100% equity companies in calculating the five-year capital structure average. Applicants explain that excluding those companies skews the results toward higher debt ratios and ignores the trend of the companies moving toward more

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83 Applicants-1 at 16.

84 Applicants-1 at 4, 5, 6, 54-55.

85 *See, e.g.*, D.02-11-027, D.04-03-034.

equity, and that if they are included, the five-year average capital structure is 69.76% equity to 30.24% debt, very close to the 70/30 hypothetical structure recommended by Applicants.[86]

Company	Equity	Debt
Calaveras	55.82%	44.18%
Cal-Ore	100.00%	0.00%
Ducor	59.24%	40.76%
Foresthill	42.36%	57.64%
Kerman	50.24%	49.76%
Ponderosa	61.90%	38.10%
Pinnacles	100.00%	0.00%
Sierra	65.76%	34.24%
Siskiyou	100.00%	0.00%
Volcano	62.27%	37.73%
Average	**69.76%**	**30.24%**

Applicants also claim that low cost debt is unavailable to the Small LECs,[87] and that ORA ignores actual market conditions in its proposal. Applicants also criticize ORA's claim that using a hypothetical capital structure will result in windfall profits and point out that the Commission has long recognized that there will be deviations between a capital structure adopted for ratemaking purposes and a company's actual capital structure.[88]

3.5.4.2. ORA's Position

ORA prefers using the actual five-year average capital structure for each of the seven companies that have debt in its capital structure. ORA claims that its method is lower in cost and based on sound assumptions and data as well as

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86 Applicants-2 at 61.

87 *See, e.g.*, Applicants-1 at p. 49, Applicants-2 at pp. 47, 49, ORA-7, and Applicants-18.

88 *See, e.g.*, D.97-04-034 at p. 12, D.97-04-035 at 12.

forward-looking and results in greater protection against windfall returns to shareholders at the expense of ratepayers. ORA's proposed five-year average equity results in equity percentages ranging from 42.36% to 65.76%.[89] For the three 100% equity companies ORA proposes an average of the other seven companies, or a hypothetical 56.80% equity to 42.20% debt capital structure.[90] ORA states that if the Commission adopts hypothetical capital structures that are much higher than the actual capital structures, carriers will realize higher equity returns than authorized.[91]

ORA characterizes Applicants' proposal as picking the mid-point between 60% and 80% from a 1997 decision. ORA criticizes that mid-point selection as the opposite of forward-looking stating the Commission should examine the recent past and identify recent averages and trends. ORA also points out that Applicants' witness did not inquire about the Small LECs actual capital structures or forward-looking estimates of their actual capital structures.[92]

3.5.4.3. Discussion of Whether to Calculate a Hypothetical Capital Structure or Use Each Company's Actual Capital Structure

Parties agree that for the three companies that currently have no debt the Commission should impute a hypothetical capital structure though they disagree as to what that hypothetical capital structure should be. Applicants prefer to also use a hypothetical capital structure for the remaining seven companies, while ORA prefers using the actual five-year average capital structure for each of those

89 ORA-1 at 14.

90 ORA-1 at 14.

91 ORA-1 at 16-18.

92 Reporter's Transcript at 157.

companies. We find that the use of a hypothetical capital structure is the most reasonable method to calculate a cost of capital in this case.

The Commission has long recognized that there will be deviations between a capital structure adopted for ratemaking purposes and a company's actual capital structure. So even if ORA's proposal was adopted, the individual companies' capital structures will continue to change over the next five years and may never match the capital structure adopted in this proceeding. Further, Applicants are correct that actual capital structure decisions are not made because of the capital structure adopted in regulatory decisions. Debt must be repaid which limits the amount of debt capital, and greater debt ratios reduce the earnings attributable to equity, thus reducing profit. Given the expectation that actual capital structures will change over time, we do not find persuasive the arguments that the use of a five-year average capital structure is better for ratepayers when compared to a hypothetical capital structure

Applicants 70% equity capital structure is higher than ORA's proposed range of 42.36% to 65.76%. Three companies have capital structures that deviate significantly below the 60% to 80% common equity range that we have and continue to find reasonable for small telephone companies, and three companies deviate significantly above that range. Given the distribution of capital structures adopted by the companies and that those capital structures will continue to change over the years, we do not find it reasonable to adopt a regulatory capital structure that is fixed based on their most recent five-year average capital structure. We do find persuasive that we continue to hold that a reasonable capital structure for a small telephone company is between 60% and 80% equity, and will use a hypothetical capital structure based on this finding in the calculation of the cost of capital for the companies in this case.

3.6. The Ratio Between Debt and Equity in a Hypothetical Capital Structure

3.6.1. Applicants' Position

Applicants state that the 1997 capital structure analysis continues to be reasonable. Applicants urge the Commission that a hypothetical capital structure is consistent with Commission precedent and that a 70% equity and 30% debt is appropriate in this case.[93]

3.6.2. ORA's Position

ORA argues against using a hypothetical capital structure, but if one is adopted ORA urges the Commission to adopt the five-year average for the Applicants that have debt, which is 56.8% equity and 43.2% debt.

3.6.3. A Reasonable Balance of Capital Sources for Ratemaking Purposes

The Commission has found and continues to find a 60% to 80% common equity range is reasonable for small telephone companies. Applicants propose a ratio between debt and equity that is within the range the Commission has found reasonable. ORA's proposed ratio between debt and equity is outside that reasonable range. The five-year average capital structure of all ten Applicants is 69.76% equity to 30.24% debt. Accordingly, we adopt the 70% equity to 30% debt ratio between debt and equity in this proceeding as a reasonable hypothetical capital structure to use in the calculation of the cost of capital for the Applicants.

[93] Applicants-1 at 76.

3.7. Determining the Individual Costs of Debt for Each Company

Applicants and ORA agree that the actual debt costs for those carriers that have debt should be used to calculate the carriers' rates of return.[94]

3.7.1. Applicants' Position

Applicants advocate for the using the actual, weighted, embedded cost of debt at the time of a company's rate case. Applicants argue that waiting until the rate case to determining the cost of debt will produce a more accurate figure and shield the Applicants from anticipated rises in costs of debt. Applicants also state that it is easy to compute the cost of debt at the time the rate case is filed.

For companies that do not currently have any debt, Applicants urge the Commission to adopt a hypothetical debt rate of 5.5%.[95] Applicants argue that this 5.5% rate is above the median of 5.2% of the Small LECs, but is approximately the interest rate that Sierra Telephone currently pays and less than the average for the AAA corporate monthly rate from January 1997 to June 2015 (5.6%).[96] Applicants state that this 5.5% figure would be an appropriate forward-looking estimate for all of the companies if the Commission declines to use the actual, embedded, weighted cost of debt at the time of a carrier's rate case as it takes into account the anticipated rise in interest rates and the regulatory and competitive risks they have raised.[97]

Applicants criticize ORA's proposal to use the actual 2014 embedded, weighted cost of debt for each company as there is no need to estimate future

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94 Applicants-2 at 3, ORA-1 at 21.

95 Applicants-1 at 76.

96 Applicants-1 at 76.

97 Applicants-2 at 4.

debt costs when it can be easily calculated at the time of each carrier's rate case. Further, Applicants criticize ORA for citing to current treasury and Federal Financing Bank rates as it ignores Applicants' testimony that such government subsidized loans are not readily available to the Applicants.[98] Applicants also criticize ORA's proposal to use the 4.53% weighted average cost of debt for the seven carriers with debt for those three carriers without debt. Applicants claim that they have shown that they anticipate interest rates will increase from the artificially depressed Treasury and Federal Financing Bank rates and that those rates weren't available to them in part because of the competitive and regulatory risks faced by the Applicants.[99]

3.7.2. ORA's Position

ORA points out that without a forecasted number for debt cost, the Commission will not be able to calculate the cost of capital for each carrier, and this proceeding will have failed. ORA states that the Commission has long held that the latest available interest forecast should be used to determine the embedded debt cost.[100] The 2014 actual cost of existing is the most currently available information in the record for this proceeding.[101] ORA submitted the following table showing the current debt cost of each of the Applicants with debt:[102]

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98 Applicants-2 at p. 46; *see also*, Applicants-18.

99 Applicants-2 at p. 76, Applicants-2 at 4, 54.

100 ORA-1 at 22.

101 ORA-1 at 22-23.

102 ORA-1 at 23.

Actual Cost of Existing Debt
Average Cost of Debt

Company	2014
Calaveras	4.50%
Ducor	5.10%
Foresthill	4.77%
Kerman	3.66%
Ponderosa	2.93%
Sierra	5.53%
Volcano	5.20%
Average	**4.53%**

ORA argues that the average of those seven companies with debt should be used for those without debt as that average fairly establishes a forward-looking debt rate for those companies. ORA states that this is a conservative recommendation as the current Treasury and Federal Financing Bank rates are lower than the actual weighted average debt costs of all the Applicants with outstanding debt and that ORA's evidence shows that none of the Applicants have been denied a loan from the Rural Utilities Service of the U.S. Department of Agriculture (RUS) since 2010 and the RUS has made loans to the Applicants in the past and it had $690 million available to loan in 2015.[103]

3.7.3. Discussion of the Individual Costs of Debt for Each Company

We agree with ORA that if we do not forecast a number for debt cost in this proceeding we cannot calculate the cost of capital for each carrier. Accordingly we will use the latest available interest forecast to determine the embedded debt cost for each of the Applicants that have debt. That amount is 4.50% for Calaveras, 5.10% for Ducor, 4.77% for Foresthill, 3.66% for Kerman, 2.93% for Ponderosa, 5.53% for Sierra, and 5.20% for Volcano.

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[103] ORA-1 at 25, *see also*, ORA-1 Attachment 6.

For the three Applicants that did not have debt when this proceeding was filed, we will use a 5.2% debt rate. We do not find completely persuasive ORA's testimony that government subsidized loans are readily available to the Applicants. To the extent such low rate loans are available, it is a significant undertaking to obtain such loans.[104] Further, as we are attributing a capital structure with 30% debt to those three companies, it is unlikely they would be able to obtain such low rates for the entirety of the millions of dollars of loans.[105] ORA admits that the current Treasury and Federal Financing Bank rates are the floor of its estimate of debt costs,[106] and accordingly, the actual debt costs are likely to be higher than those rates. We are also not convinced by Applicants testimony that the rate Sierra Telephone currently pays, the highest rate currently paid by the seven Small LECs, approximates the rate that might be expected in the future for any of these carriers. We do find that the current median of 5.2% of the Small LECs better approximates the rate that might be expected in the future for any of these carriers.[107] After consideration, evaluation, and weighting of Applicants' and ORA's weighted cost of debt analysis we find that a reasonable weighted cost of debt for the three companies that do not currently have debt (Cal-Ore, Pinnacles, and Siskiyou) is 5.2%.

The resulting weighted cost of debt for each company is as follows.

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104 *See*, Applicants-1 at 49, Applicants-18.

105 *See*, Applicants-1 at 49. Reporters Transcript at 67.

106 ORA-1 at 28.

107 Applicants-1 at 76.

Actual Cost of Existing Debt
Average Cost of Debt

Company	2014
Calaveras	4.50%
Ducor	5.10%
Foresthill	4.77%
Kerman	3.66%
Ponderosa	2.93%
Sierra	5.53%
Volcano	5.20%
Cal-Ore	5.20%
Pinnacles	5.20%
Siskiyou	5.20%

3.8. Should a Single, Overall Weighted Cost of Capital for All CHCF-A Recipient Companies Be Adopted in This Proceeding?

Applicants and ORA agree that the Commission should not adopt a single, overall weighted cost of capital for all the Applicants in this proceeding. We agree and will not adopt a single figure for all ten companies.

3.9. Should Any Cost of Capital Determinations Made in this Proceeding Supersede or Otherwise Replace Any Determinations Made for Kerman Telephone Company in A.11-12-011?

Applicants and ORA agree that Kerman's cost of capital should be determined in this proceeding. Decision (D.)16-06-053 declined to adopt a new cost of capital for Kerman in its general rate case and instructed Kerman to submit a Tier III advice letter following the results of this proceeding.[108] Nothing further is required in this proceeding.

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108 *See also*, D.16-09-047 (Siskiyou GRC (A.15-12-001) adopting settlement), D.16-09-049 (Volcano GRC (A.15-12-002) adopting settlement).

3.10. Safety Considerations Raised by This Proceeding.

Applicants and ORA agree that safety issues such as 911 access, network infrastructure redundancy, and service restoration objectives are important safety considerations that should be addressed through infrastructure improvements. Applicants argue that the total sum of ORA's recommendations would result in insufficient return on investment and deter future investment, and that a reduction in investment could impact safety and reliability of a company's network. ORA disagrees with Applicants' implications and believes sufficient financial incentives will continue to exist to invest in the needed infrastructure to ensure safety and reliability.

Neither party offers evidence of specific safety considerations that will be impacted by this decision. We are satisfied that the cost of capital determinations approved in this decision will help meet the Commission's minimum safety goals and expectations for the Small LECs, and as a public utilities that are required to "… furnish and maintain such adequate, efficient, just and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities … as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public," pursuant to Pub. Util. Code § 451.

4. Categorization and Need for Hearing

In Resolution ALJ 176-3365, dated October 22, 2015, the Commission preliminarily categorized this Application as ratesetting, and preliminarily determined that hearings were necessary. ORA filed a protest, and this proceeding was scheduled for evidentiary hearings. Evidentiary hearings were held before the ALJ in San Francisco on April 7 and 8, 2016

5. Comments on Proposed Decision

The proposed decision of ALJ Haga in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on ________________. Reply Comments were filed on _________________.

6. Assignment of Proceeding

Michael J. Florio is the assigned Commissioner and Robert W. Haga is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. Applicants are public utilities subject to the jurisdiction of this Commission.

2. The cost of capital determinations made in this proceeding will be implemented in each carriers next (or most recent for Kerman, Siskiyou, and Volcano) general rate case.

3. The cost of capital issue for all ten Applicants will be decided in this proceeding.

4. The CAPM provides the best model to determine a reasonable cost of equity for each company.

5. We are not persuaded by the evidence presented that the Commission can weigh whether, and to what extent each company is impacted by a small firm effect.

6. Over the last five years the Small LECs have earned an average return on equity of 11.973%.

7. Applicants have not offered persuasive evidence that the investment returns for the Small LECs are not commensurate with other enterprises having corresponding risks.

8. ORA's proposed equity risk premium figure of 5.88% is within the range of equity risk premiums proposed by Applicants.

9. A 20-year period provides the best reflection of current and forward-looking rate for U.S. Treasury Bonds and we adopt that figure for the risk-free rate for the cost of equity calculation.

10. The average risk-free rate for the last 20 years, 1995-2014, was 4.92%.

11. A 10.80% cost of equity is reasonable for each company.

12. We have not been persuaded that "industry-specific," "regulatory risk," or "liquidity risk" premiums should be added to the CAPM calculation for equity returns.

13. Over the last five years the Small LECs have earned an average return on equity of 11.973%.

14. The average returns of the Small LECs are commensurate with returns on investment in other enterprises having corresponding risks.

15. We have not been persuaded that any of the alleged regulatory risks are not already adequately addressed through other regulatory means.

16. We have not been persuaded that a 20% to 25% multiplier for liquidity risk is necessary and we do not include such a multiplier in the cost of equity calculation.

17. The five-year average capital structure of the ten Applicants is 69.76% equity to 30.24% debt.

18. The actual five-year average capital structure of the ten Applicants is very close to the 70/30 hypothetical structure recommended by Applicants.

19. A reasonable capital structure for a small telephone company is between 60% and 80% equity.

20. The use of a hypothetical capital structure is preferred given the expectation that actual capital structures will change over time.

21. A 70% equity to 30% debt ratio between debt and equity is a reasonable hypothetical capital structure to use in the calculation of the cost of capital for the Applicants.

22. The Commission will use the latest available interest forecast to determine the embedded debt cost for each of the Applicants that have debt.

23. The actual weighted cost of debt for Calaveras is 4.50%.

24. The actual weighted cost of debt for Ducor is 5.10%.

25. The actual weighted cost of debt for Foresthill is 4.77%.

26. The actual weighted cost of debt for Kerman is 3.66%.

27. The actual weighted cost of debt for Ponderosa is 2.93%.

28. The actual weighted cost of debt for Sierra is 5.53%.

29. The actual weighted cost of debt for Volcano is 5.20%.

30. For the three Applicants that did not have debt when this proceeding was filed, Cal-Ore, Pinnacles, and Siskiyou, we adopt the median debt rate of 5.2%.

31. It is not necessary to adopt a single cost of capital figure for all ten Small LECs.

32. The cost of capital determinations approved in this decision will help meet the Commission's minimum safety goals and expectations for the Small LECs.

Conclusions of Law

1. The legal standard for setting the fair cost of capital has been established by the United States Supreme Court in the *Bluefield*, *Hope*, and *Duquesne* cases.

2. This decision is consistent with the requirements of Pub. Util. Code § 275.6.

3. Once the cost of capital is determined for each of the Small LECs, it can be applied to the rate base calculated in each of their GRCs.

4. The record is sufficient for the Commission to calculate an individualized weighted average cost of capital for each of the Applicants.

5. Following the conclusion of the instant rate case cycle, *i.e.*, beginning with any GRCs filed in 2021, cost of capital determinations may be considered in individual rate cases, or, alternatively, in another generic cost of capital proceeding.

6. The Commission has traditionally used two inputs to the CAPM, the equity risk premium and the risk-free rate, to calculate the cost of equity for a regulated utility.

7. Applicants' returns on investment are commensurate with returns on investment in other enterprises having corresponding risks.

8. Applicants failed to carry their burden to justify the addition of an industry-specific premium to the cost of equity calculation.

9. The Commission's cost of capital analysis has considered and accounts for the regulatory risk that these companies have compared to other enterprises having corresponding risks, and that no increase to the cost of equity is necessary in this case.

10. The 5.88% equity risk premium figure is supported by the evidence.

11. It is not necessary to adopt a single, overall weighted cost of capital for all ten California High Cost Fund-A recipient companies.

12. D.16-06-053 declined to adopt a new cost of capital for Kerman Telephone Company in its GRC and instructed Kerman to submit a Tier III advice letter following the results of this proceeding updating its cost of capital amount and resulting revenue requirement.

13. D.16-09-047 adopted an interim cost of capital for The Siskiyou Telephone Company in its general rate case and instructed Siskiyou to submit a Tier 2 advice letter following the results of this proceeding updating its cost of capital amount and resulting revenue requirement.

14. D.16-09-049 adopted an interim cost of capital for Volcano Telephone Company in its general rate case and instructed Volcano to submit a Tier 2 advice letter following the results of this proceeding updating its cost of capital amount and resulting revenue requirement.

O R D E R

IT IS ORDERED that:

1. The Small Local Exchange Carriers' application for a determination of their cost of capital for ratemaking purposes is granted as set forth below:
   a) Calaveras Telephone Company's cost of capital is 8.91% for any pending and future general rate cases filed before the year 2021.
   b) Cal-Ore Telephone Company's cost of capital is 9.12% for any pending and future general rate cases filed before the year 2021.
   c) Ducor Telephone Company's cost of capital is 9.09% for any pending and future general rate cases filed before the year 2021.
   d) Foresthill Telephone Company's cost of capital is 8.99% for any pending and future general rate cases filed before the year 2021.
   e) Kerman Telephone Company's cost of capital is 8.66% for any pending and future general rate cases filed before the year 2021.
   f) Pinnacles Telephone Company's cost of capital is 9.12% for any pending and future general rate cases filed before the year 2021.

g) The Ponderosa Telephone Company's cost of capital is 8.44% for any pending and future general rate cases filed before the year 2021.

h) Sierra Telephone Company Inc.'s cost of capital is 9.22% for any pending and future general rate cases filed before the year 2021.

i) The Siskiyou Telephone Company's cost of capital is 9.12% for any pending and future general rate cases filed before the year 2021.

j) Volcano Telephone Company's cost of capital is 9.12% for any pending and future general rate cases filed before the year 2021.

2. Kerman Telephone Company, The Siskiyou Telephone Company, Volcano Telephone Company shall apply their respective cost of capital and resulting revenue requirement as directed in their recently concluded general rate cases.

3. All rulings of the assigned Commissioner and Administrative Law Judge are affirmed.

4. Application 15-09-005 is closed.

This order is effective today.

Dated ____________________________, at San Francisco, California.