<table>
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<th>Docket:</th>
<th>A.15-12-002</th>
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<td>L. Randolph</td>
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<td>C. Chitadje</td>
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<td></td>
<td>R. Keowen</td>
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<td></td>
<td>Z. Wong</td>
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<td>P. Hoglund</td>
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ORA’s Report and Recommendations on the Application of Volcano Telephone Company to Review Intrastate Rates and Charges, Establish a New Intrastate Revenue Requirement and Rate Design, and Modify Selected Rates (Test Year 2017)

PUBLIC VERSION

San Francisco, California
April 25, 2016
MEMORANDUM

This report was prepared by staff of the Communications & Water Policy Branch of the Office of Ratepayer Advocates (“ORA”) under the general supervision of Program Manager, Chris Ungson, and Program & Project Supervisor, Richard Rauschmeier. ORA is represented in this proceeding by legal counsels, Travis Foss and Christa Salo.

The table below identifies the names of ORA witnesses and the sections of this report for which they are responsible. A statement of qualifications for each ORA witness is presented in Attachment A to this report.

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<th>SECTION OF REPORT</th>
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In preparing this report, ORA prioritized analyses and recommendations based upon resources available. Therefore, the absence from this report of analysis or recommendation on any particular item contained within Application (“A.”) A.15-12-002 should not be considered as ORA’s agreement with any underlying request or policy position related to that item.
EXECUTIVE SUMMARY

In response to General Rate Case (“GRC”) application cycle for the Small LECs listed in Group A in the California Public Utilities Commission (“Commission”) Decision (“D.”) 15-06-048, Volcano Telephone Company (“Volcano”) filed Application (“A.”) 15-12-002 on December 1, 2015. In its application, Volcano estimated intrastate revenue requirements of $11,647,597 for test year (“TY”) 2017. Contained in its estimated 2017 revenue requirements, Volcano proposed an increase of its California High Cost Fund –A (“CHCF-A”) subsidy to $6,960,938 from its current amount of $3,469,943.77. 1

After examining the books and records of Volcano and testing for reasonableness and prudency, ORA estimates Volcano intrastate revenue requirements of $10,920,481 and CHCF-A draw of $5,983,207 for TY 2017. These amounts are subject to change since they do not reflect the impact of the Rate of Return that will be used to determine Volcano’s 2017 Revenue Requirement since that is currently being determined in A.15-09-005. In order to provide a more direct comparison of the differences between Volcano’s proposals and ORA’s recommendations that will be reconciled in the instant proceeding, ORA maintained the Rate of Return (14.51%) that Volcano utilized in its workpapers to calculated the 2017 Revenue Requirement. ORA understands the Commission will incorporate the Rate of Return determined in A.15-09-005 before authorizing Volcano’s intrastate revenue requirement and CHCF-A for TY 2017. The following is a summary of ORA’s foremost findings and conclusions.

Comparable Rates for Basic Services

1The CHCF-A was established in 1987 for the purpose of minimizing any basic telephone service rate disparity between rural and metropolitan areas. http://www.ora.ca.gov/chcfa.aspx
While ORA generally accepts Volcano’s proposed demand forecasting methodology for TY 2017, ORA does not accept Volcano’s rate design proposal, which is likely to result in a decrease in both residential and business customer monthly bills. Volcano’s proposed rates for basic residential and business services are unreasonable when compared to rates for similar services in urban areas. Rates for Volcano customers should be increased to a level that is, at a minimum, on par with, but not in excess of 150% of the comparable urban rate. ORA’s rate design increases the all-inclusive residential and business rates by $1.17 and $1.72 per month for TY 2017, respectively. As discussed in Chapter 1, ORA’s recommendation for increases in residential and business rates is estimated to yield approximately $276,000 in additional 2017 revenue.

Corporate Expense Caps

ORA generally accepts Volcano’s methodology to forecast TY 2017 expenses. However, as discussed in Chapter 2 of this report, the Federal Communications Commission (“FCC”) corporate expense caps should be applied without modifications as adopted in D.14-12-084. ORA’s recommendation to apply the FCC’s corporate expense caps without modification would reduce estimated intrastate revenue requirements in 2017 by $0.

Allocation of Cost Proportional to Affiliates’ Benefits

Volcano is one of seven subsidiaries of Volcano Communications Company. Volcano provides services to its affiliates using a methodology that is unreasonable. As a result, ORA developed and used allocation methods for expenses and capital costs (plant) to capture benefits accruing to Volcano’s affiliates. ORA’s proposed methodology to allocate cost proportional to Volcano’s affiliate benefits is discussed in Chapter 2 and Chapter 3 for expenses and plant respectively.
Based upon Volcano’s affiliate relationships and to ensure consistent requirements with regards to affiliate relationships, the Commission should also require that within 60 days after a decision in the instant proceeding is finalized, Volcano and its affiliates shall accomplish the following:

- Be held in separate legal entities.
- Maintain separate books for all transactions.
- Maintain separate bank accounts for all transactions.
- Have no joint advertising or marketing.
- Have no overlapping of employees or responsibilities.
- Have no joint events, sponsorships, fundraisers, or charitable donations.
- Not transfer any physical assets without first obtaining the necessary approvals from the Commission.
- Conduct financial transactions with each other at “arms-length”.
- Ensure that affiliate transactions are conducted at rates and upon terms no less advantageous than those otherwise available to Volcano from unaffiliated third parties for similar transactions.

**Plant, Depreciation and Ratebase**

ORA reviewed Volcano’s requested network improvement projects and found them consistent with its Five Year plan to upgrade its network to meet California and FCC broadband aspirations. Several of the upgrade projects require new conduit be placed in ground. This greatly increases the project costs compared to those projects where fiber can be placed in existing conduit. Where new conduit must be installed the project costs are on average about 50% above the average 2015 CASF Infrastructure project costs. Where there is existing conduit the average costs are just under the average 2015 CASF Infrastructure
project costs. ORA accepts Volcano’s network improvement projects estimate.
ORA made modest adjustments to the Buildings, Furniture, and General Purpose Computers accounts. ORA’s plant recommendation is about 2.1% lower than Volcano’s request. Changes in Depreciation are the result of ORA’s different plant additions estimates. ORA’s estimates for ratebase are different as the result of different plant additions, different depreciation results, and a different Working Cash estimate. ORA’s estimate for ratebase is about 2.76% lower than Volcano’s request.

**Rate of Return**

As discussed above, the rate of return is currently being determined in the Cost of Capital proceeding, A. 15-09-005.
CHAPTER 1: REVENUES AND RATE DESIGN

A. INTRODUCTION

The design of rates and the forecasting of revenues that is anticipated to result from a particular rate design are important steps in creating the opportunity for a utility to cover expenses and earn a reasonable investor return. The combination of forecasted allowable expenses and reasonable investor return form a utility’s revenue requirements. To meet its revenue requirements, Volcano receives both federal and state subsidies which helps keep customer rates comparable with those of California’s urban customers.²

Total Company Revenues

Historically, “comparable” has meant that target rates for residential customers are no more than 150% of basic service rates for AT&T California’s (AT&T) urban customers to be eligible for funding from the California High Cost Fund-A (CHCF-A).³ ⁴ However, D.08-09-042 enabled AT&T to change basic rates via a Tier 1 advice letter and to vary rates geographically. In 2009, the small local exchange carriers (Small LECs), including Volcano, jointly filed Application (A.) 09-01-002 to clarify or modify the “150% formula.”⁵ The applicants’ argued that AT&T’s new pricing flexibility made it impossible to maintain the 150% relationship with AT&T’s rates and that “As the AT&T’s basic rate changes, the

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² Public Utilities Code Section 275.6 (c)(3) states “In administering the CHCF-A program the commission shall do all of the following:” …“Ensure that rates charged to customers of small independent telephone corporations are just and reasonable and are reasonably comparable to rates charged to customers of urban telephone corporations.”

³ AT&T California is a dba of Pacific Bell Telephone Company.

⁴ The “150% formula” was originally established in D.91-09-042.

⁵ D.10-02-016 at p.2.
Small LECs’ rates set in general rate case (GRC) proceedings will no longer maintain the 150% relationship to the AT&T’s basic rate without a separate adjustment. The proceeding concluded with Decision (D.) 10-02-016 which denied the applicants request to eliminate the 150% formula, affirmed the 150% formula as a requirement to qualify for CHCF-A funding, ordered a rulemaking to address all relevant issues with the CHCF-A, and set interim rates at $pending the results of the CHCF-A rulemaking proceeding. Volcano’s basic single-line residential rates are currently set at $.

Pursuant to D.10-12-016, the Commission opened a rulemaking to address all relevant issues with the CHCF-A program. D.14-12-084 concluded Phase 1 of the CHCF-A rulemaking proceeding. D.14-12-084 ordered that rates cannot exceed the target level of 150% and that rates must be established between $30-$37 inclusive of all taxes and surcharges, based on the 150% guideline.

In application A.15-12-002, Volcano proposes changes to its residential and business rate design. Volcano proposes to increase basic residential rates from the current $to $ in the Kirkwood Meadows, Pioneer, and Volcano exchange areas, and from the current $to $ in the West Point exchange area. Volcano also proposed elimination of the Extended Area Service Charge from the West Point exchange area. The proposed increases eliminate the Access Recovery Charge (ARC) resulting in a uniform all-inclusive charge of $ for basic residential service. For business customers, Volcano proposes to increase

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6 D.08-09-042 enabled AT&T to change basic rates via a Tier 1 advice letter and to vary rates geographically.  
7 D. 10-02-016 at p.6  
8 D.14-12-84, Ordering Paragraph 24 and Ordering Paragraph 11, respectively.  
9 All-inclusive means inclusive off all taxes and surcharges.
single-line business rates to $\text{[Redacted]}$ and eliminate ARC in all exchange areas, and to eliminate EAS change in the West Point exchange area.

Volcano proposes total intrastate revenues of $\text{[Redacted]}$ for Test Year 2017. This amount represents a $\text{[Redacted]}$ compared to 2010 to 2014 average intrastate revenues.\(^{10}\)

**B. SUMMARY OF RECOMMENDATIONS**

In developing the following recommendations, ORA reviewed the application along with supporting testimonies and workpapers, relevant prior decisions, and Volcano’s responses to ORA’s data requests. The results of this review support the following recommendations.

ORA recommends intrastate revenues for Test-Year 2017 of $\text{[Redacted]}$. This is $\text{[Redacted]}$ less than Volcano’s proposed revenues. The recommendation is based on ORA review and cumulative recommended adjustments to revenues, expenses, taxes and return on rate base.

Volcano’s request to increase single-line residential local exchange telephone service rates from $\text{[Redacted]}$ to $\text{[Redacted]}$ yields an all-inclusive rate of $\text{[Redacted]}$ and is not reasonable. Volcano’s proposal would actually result in an all-inclusive rate reduction for local residential customers while ratepayers statewide would be required to contribute more to the CHCF-A in order to fund Volcano’s increasing revenue requirements. Volcano’s residential rate proposal in conjunction with its proposed CHCF-A subsidies would result in local rates in a “high-cost” area being just $\text{[Redacted]}$% of the urban customer rate, far from the 150% maximum threshold established by numerous Commission decisions. To keep local customer rates...
more reasonably comparable to urban rates and avoid unnecessary burdens on all
ratepayers contributing to CHCF-A, a rate of $\text{[redacted]}$ for single-line residential
customers in test year 2017 should be adopted.

Similarly, Volcano’s request to “increase” business rates from $\text{[redacted]}$ to
$\text{[redacted]}$ is not reasonable because it too would actually reduce the current all-
inclusive rate local business customers would pay while ratepayers statewide
would be required to make up the difference. To maintain rate comparability with
urban customers and avoid undue CHCF-A burden, the monthly rate for single-
line business service should be set at $\text{[redacted]}$ beginning in Test Year 2017, which
should increase annually with inflation, beginning in 2018.

C. DISCUSSION

(a) Volcano’s Proposed Residential Rate Design Results in an All-
Inclusive Rate Reduction for Customers.

Pursuant to D.14-12-084, rates must be set between $30 and $37, (inclusive
of all taxes and surcharges), based on the 150% urban rates benchmark. In the
current proceeding, Volcano has proposed to establish local customer rates at the
very bottom of the allowable range. In testimony, Volcano cites various statistics
in attempt to show the local community is generally disadvantaged and thus
unable to afford anything higher than the new rates that Volcano proposes in its
application. However, Volcano’s new proposed rates result in customers paying
less than what they are already paying currently. The table below compares
Volcano’s current and proposed rates:

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D.14-12-084, Ordering Paragraph 11.
Table 1-A: Comparison of Volcano’s Current and Proposed Rate Design.

As can be seen in the table above, if Volcano’s rate design proposal is adopted residential customers and business customers will pay $____ and $____ than they are currently paying each month. This is because Volcano’s proposed increases in basic rates are offset by the elimination of ARC charges. Further, this shows that Volcano’s customers can and do afford higher rates than the new rates proposed by Volcano, which directly contradicts Volcano’s primary justification for the rate design it proposes in this proceeding.

As required by General Order (GO) 96-B, Volcano sent its customers a “Notice of Application to Establish New Regulated Revenue Requirement and Adjust Rates.” In the notice, Volcano states rates will increase and that “Volcano believes that these proposed adjustments are necessary to cover increased costs necessitated by increases in expenses and by rapid technological changes in the telecommunications industry requiring significant plant modernization efforts in Volcano’s service territory.” If Volcano has already informed its customers of rate increases due to higher costs, then Volcano’s

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12 Volcano’s Response to MDR D(1).
13 Volcano’s Response to MDR D(1).
argument that its customers cannot afford anything more than an overall decrease in monthly bills further strains credibility.

In addition to ensuring the affordable provision of local telephone service, the Commission is also responsible for ensuring that CHCF-A subsidies are not excessive. The recent CHCF-A Rulemaking decision states, “Separately, we acknowledge that, as the name “California High Cost Fund suggests, there is a higher cost to provide commensurate service to rural versus urban customers, some of which must be borne by those customers themselves.” Therefore, it is not at all reasonable for Volcano to propose changes to their rate design that result in an all-inclusive monthly rate % for local customers while requesting that their CHCF-A subsidy collected from all ratepayers statewide %. To be more consistent with past Commission decisions and the Public Utilites Code regarding the CHCF-A and to better parallel Volcano’s actual and estimated increased operating costs the Commsission should reject Volcano’s proposed rate design.

(b) Rate Comparisons Show Volcano’s Proposal is Unreasonable

D.14-12-084 established a rate range between $30 and $37 inclusive of all taxes and surcharges, based on the 150% standard. AT&T was authorized pricing flexibility in basic residential rates in 2008. AT&T’s pricing remained flexible until 2015, when restrictions were once again placed on AT&T’s pricing. AT&T’s basic residential rates are currently $25, exclusive of taxes and surcharges, which means that Volcano’s basic residential rates could increase

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14 D.14-12-084 at p. 69.
15 D.14-12-084, Ordering Paragraph
16 D.15-10-027.
17 Price based on advertised price from AT&T’s website found at (continued on next page)
from their proposed rate of $\text{XXX}$ to $\text{XXX}$ before running afoul of the 150% standard for comparable affordability. Although ORA is not recommending an increase of this magnitude in the instant proceeding, if such rate comparability was achieved (with corresponding modifications to business rates) the CHCF-A subsidy could be reduced by approximately $\text{XXX}$ annually.

Uniform Regulatory Framework (URF) Carrier data on pricing from AT&T and others also provides guidance on comparable rates. Below is an excerpt from the URF Carrier Basic Service Rates on file with the Commission:

**Table 1-B: URF Carrier Residential Basic Service Rates.**

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Rates as of 1/1/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td>$25.00</td>
</tr>
<tr>
<td>Verizon</td>
<td>$22.00</td>
</tr>
<tr>
<td>Frontier</td>
<td>$20.00</td>
</tr>
<tr>
<td>Consolidated</td>
<td>$21.99</td>
</tr>
</tbody>
</table>

The average rate of the above carriers is $22.25, exclusive of taxes and surcharges. Applying the 150% standard to the most recent average of the four URF Carriers results in a basic residential rate of $33.38, which is nearly 4% more than the $\text{XXX}$ rate that ORA recommends for basic residential service in Volcano’s Test Year 2017.

Volcano provided a pricing comparison for AT&T and Comcast, but Volcano did not perform any type of analysis showing how their proposed Test

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(continued from previous page)

$25 \times 150\% = 37.50$. See Attachment 1-1 for calculation of taxes and surcharges.

“URF Carrier Basic Service by Year” found on the Commission website at: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Telecommunications_and_Broadband/URFCarrierBasicServiceRatesbyYear2015.pdf
Year rates were at or below the 150% level of urban rates, only that their proposed rates were within the range prescribed by the D.14-12-084. The rate comparisons and analysis above show that Volcano’s request to set rates at the very bottom of the allowable range is not reasonable because it would be significantly less than comparable urban rates.

(c) All-Inclusive Rates Should Gradually Increase to $37

Although Volcano’s monthly residential basic rates could justifiably be set at $[redacted] immediately based on upon both the 150% standard and the allowable range established in D.14-12-084, a more prudent and reasonable approach would phase in this increase over the years covered in the current GRC cycle. Volcano’s basic residential rates are currently $[redacted] and a % increase. To avoid the impacts of a sudden and significant increase, local residential rates should increase gradually by an annual percentage until the total (inclusive of taxes and surcharges) reaches the all-inclusive rate of $37 per month.

To avoid a decrease in the all-inclusive rate which is currently $[redacted] for residential customers, basic residential rates would need to be at least $[redacted] per month. Table 1-C below shows the calculations.

Table 1-C: Basic Rate if Volcano’s Current Inclusive Rate is Maintained.

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Volcano’s response to Data Request RK2-001, Question 2.
ORA proposes using $\text{[redacted]}, plus an annual percentage increase for Test Year 2017 residential rates.

The conclusion of Phase II of the CHCF-A rulemaking implemented a rate case plan for CHCF-A recipients. The rate case plan calls for CHCF-A recipients, including Volcano, to file a General Rate Case (GRC) application every 5-years or receive reductions in authorized CHCF-A subsidies. Volcano’s next GRC application should occur in 2020 with a 2022 Test-Year. Therefore, five years are available in the current GRC cycle (2017-2021) to gradually effectuate the necessary increase in local rates.

To increase rates from $\text{[redacted]} over a 5-year period requires rates to increase \( \text{[redacted]}\% \) annually. The proposed rate schedule in Table 1-D below uses a base rate of $\text{[redacted]}, which represents no change to the current all inclusive rates to customers, then moderately increases the rate by \( \text{[redacted]}\% \) in Test Year 2017, and continues to increase annually until rates reach $\text{[redacted]} in 2021. Table 1-D below shows ORA’s proposed annual rate increases:

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$\text{[redacted]}%$ increase</td>
</tr>
<tr>
<td>2018</td>
<td>$\text{[redacted]}%$ increase</td>
</tr>
<tr>
<td>2019</td>
<td>$\text{[redacted]}%$ increase</td>
</tr>
<tr>
<td>2020</td>
<td>$\text{[redacted]}%$ increase</td>
</tr>
<tr>
<td>2021</td>
<td>$\text{[redacted]}%$ increase</td>
</tr>
</tbody>
</table>

\( \text{D.15-06-048.} \)
Table 1-D: Proposed Increases to Monthly Residential Rates.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>3</td>
<td>6%</td>
</tr>
<tr>
<td>4</td>
<td>8%</td>
</tr>
</tbody>
</table>

Table 1-D demonstrates how Volcano’s residential rate could be increased over a 4-year period to reach an inclusive $ rate. This recommendation also results in when compared to Volcano’s rate design proposal.

(d) Monthly Business Rates should Increase with Inflation.

Similar to Volcano’s residential rates, Volcano’s proposed rate for business customers represents a rate reduction when considering all taxes and surcharges. Volcano’s proposed decrease in business customer rates is at odds with Volcano’s assertions of increasing costs and requests for increased CHCF-A subsidies. Therefore, Volcano’s business customers should continue paying at the level they are currently paying, inclusive of taxes and sucharges, which results in business customer rates of $. The rates should increase annually, as ORA has proposed for residential customers. For consistency in rate increases, business rates should use the same escalation factor as that used for residential rates. Table 1-E below, shows ORA’s recommended increases for business customer rates:
Table 1-E: Proposed Business Rate Increases

ORA’s proposal for basic service for business customers results in additional revenue of $ for Test Year 2017 when compared to Volcano’s rate design proposal.

(e) Revenue Forecasting Methodology and Adjustments

Total revenues include both interstate and intrastate revenues. In this proceeding, Volcano requests total revenues of $ in Test-Year 2017. Out of total revenues, Volcano shows intrastate revenues of $.

Intrastate revenues are the sum of local revenues, intrastate switched access revenues, intrastate special access revenues, federal high cost loop support (HLCS), miscellaneous revenues, and California High Cost Fund A (CHCF-A) support. Volcano varies its forecasting methodologies for each revenue source. Generally speaking, ORA does not object to Volcano’s forecasting methodologies. Below is Volcano’s historical intrastate revenue averages compared to Volcano’s proposed intrastate revenue amounts:
Each of the revenue sources identified in the table above is forecasted slightly differently. Volcano primarily projects local revenues by using a 3-year average growth rate and multiplying the growth rate by projected average demand for transition years 2015 and 2016 to arrive at Test Year 2017 demand units, which are then multiplied by the proposed rate to arrive at total projected local revenues. Intrastate switched access revenues are calculated in the same manner as local revenues less a phase down amount. Intrastate special access revenues are calculated using a three year growth rate which is multiplied by the special access rate. Federal HCLS is calculated based on a method prescribed by the FCC in 47 C.F.R. § 54 Subpart M. Miscellaneous revenues consist of exchange revenues and access revenues, which are forecasted using a 3-year average demand multiplied by the rate for each service. CHCF-A revenues are calculated as a “plug” between other revenue sources and the estimated revenue requirement. Uncollectibles reduce Volcano’s revenues. Volcano forecasts uncollectible revenues by annualizing 7 months of 2015 data.

ORA reviewed the forecasting methodologies utilized by Volcano in arriving at Test Year 2017 revenues, and does not object to the methodologies. ORA applied several different forecasting methods to assess the reasonableness of Volcano’s methods, which yielded similar or immaterial differences. ORA
proposed an adjustment to the rate design, which results in slight differences in total projected local revenues; however, ORA does not propose to modify Volcano’s forecasting methodology.

D. CONCLUSION

Generally, ORA does not contest Volcano’s revenue forecasting methodology. However, pertaining to rate design, residential rates should be set at $ in Test Year 2017 and increased annually by % in order to achieve an all-inclusive rate of $ by the time Volcano’s next GRC application establishes new rates. Similarly, business rates should be set at $ and increased annually at the same rate as residential customers. ORA’s recommendation would help to ensure that the CHCF-A subsidy is not excessive and that Volcano’s “rates are reasonably comparable to rates charged to urban customers” as required in Public Utilities Code Section 275.6.
CHAPTER 2: OPERATING EXPENSES

A. INTRODUCTION

Volcano forecasted total company operating expenses and property taxes for the 2017 Test Year (TY) at $7,630,244. The operating expenses for TY 2017 comprise of estimated expenditures in the following account categories: Plant Specific $1,439,042; Plant Non-Specific (less Depreciation) $1,087,122; Customer Operations $476,655; Corporate Operations $1,519,134; Depreciation and Amortization $2,894,077; and Other Taxes $214,214.

Volcano’s methodology to forecast TY 2017 expenses was as follows: “The 2016 and 2017 expenses forecasts are derived from the 2015 annualized expenses, using a three year average annual percentage growth factor based on 2013 through 2015 for each account sub-group. The average annual percentage growth factor is applied to the 2015 forecasted expenses to determine the 2016 expense forecast, and the same factor is applied to the 2016 forecast to determine the 2017 expense forecast.” Since only seven months (January through July) of actual 2015 expenses were available at the time of the filing, Volcano calculated the estimated 2015 expenses by dividing the expenses by seven to arrive at an average monthly expense and multiplied this figure by twelve months to estimate a full year of expenses. Volcano made several deviations from the above

22 A.15-12-002, Opening Testimony of Chad Duval on Behalf of Volcano Telephone Company (Public), page 9
23 Testimony of Chad Duval, Exhibit Rate Case Model, Worksheet “Separate Results of Operations Forecast with Proposed Changes Test Year 2017”
24 Chad Duval’s testimony dated December 1, 2015 (Answer to Q21)
methodology. The first adjustment was inclusion of an additional one-time
expense of $166,714 to 2015 expenses to account for payment of an annual
employee bonus. This adjustment added to the annualized 2015 expenses to
calculate the 2016 forecast. The second adjustment is the addition of rate case
expenses to the Corporate Operations Expense account in TY 2017 to recognize
the cost of this proceeding.\textsuperscript{25}

According to Volcano, it did not apply the Federal Communications
Commission’s (FCC) Corporate Operations Expense Limitation.\textsuperscript{26} One of
Volcano’s arguments is that the FCC Corporate Cap formula is incorrect.\textsuperscript{27}
California Public Utilities Commission (Commission) issued Decision D.14-12-
084 on December 19, 2014, adopting the FCC’s Corporate Expense Cap as “a
rational mechanism for calculating and determining a reasonable level of corporate
despite expenses” for those Small Incumbent Local Exchange Carriers that receive funds
from the California High Cost Fund-A (CHCF-A).\textsuperscript{28}

\textsuperscript{25} Chad Duval’s testimony dated December 1, 2015 (Answer to Q.22)
\textsuperscript{26} Chad Duval’s testimony dated December 1, 2015 (Answer to Q.24)
\textsuperscript{27} Dale Lehman’s testimony dated December 1, 2015
\textsuperscript{28} Commission Decision (D.) 14-12-084, pages 28-29.
B. SUMMARY OF RECOMMENDATIONS

For 2017 Test Year, ORA recommends a $546,961 reduction to Volcano’s forecasted total intrastate operating expenses for ratemaking purposes.

<table>
<thead>
<tr>
<th>Description</th>
<th>Adjustment</th>
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</thead>
<tbody>
<tr>
<td>FCC Corporate Expense Caps</td>
<td></td>
</tr>
<tr>
<td>Plant Specific Expenses</td>
<td></td>
</tr>
<tr>
<td>Non Plant Specific Expense</td>
<td></td>
</tr>
<tr>
<td>Customer Service Expenses</td>
<td></td>
</tr>
<tr>
<td><strong>Total Intrastate Expense Reduction</strong></td>
<td><strong>$546,961</strong></td>
</tr>
</tbody>
</table>

C. DISCUSSION

1) Federal Communications Commission (FCC)

   Corporate Expense Cap
   
   In D.14-12-084, the Commission determined that, “Adopting and applying the FCC Corporate Expense Caps will cap the amount of corporate expenditures that can be recovered from the CHCF-A program, and create incentives to align expenditures with the cap to reduce rate case litigation costs.” However, the Commission also provided that, “If a Small Incumbent Local Exchange Carrier’s actual corporate expense amounts exceed the Federal Communications Commission’s corporate expense caps, that carrier has the opportunity in the

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29 D. 14-12-084, page 29
General Rate Case application to rebut the presumption of unreasonableness to seek additional support from the California High Cost Fund-A Program.\(^{30}\)

The FCC Corporate Expense Cap adopted by D.14-12-084 refers to capping the corporate operations expenses under the FCC’s high cost support mechanism rules. Title 47, Code of Federal Regulations (CFR) Section 54.1308(a) (4) (ii) (A)-(C) addresses limiting corporate operating expense for purposes of High Cost Loop Support.\(^{31}\) As recent as October 19, 2015, the FCC released Public Notice FCC 15-133 reminding carriers that receive support from the Universal Service Fund to “use such support only for its intended purposes of maintaining and extending communications service to rural, high-cost areas of the nation.”\(^{32}\) In this document, the FCC was targeting, in particular, costs related to carrier’s corporate operations expenses and noted in a non-exhaustive list, expenditures that it considers are not necessary to the provision of supported services and therefore may not be recovered through universal service support” \(^{33}\)

The list itemizes expenditures, such as personal travel, entertainment, membership fees and dues in clubs and organizations, sponsorships as types of expenditures that may not be recovered through universal service support.

**a. Volcano’s Rebuttal to the Presumption of Unreasonableness**

Volcano’s 2017 expense forecast is derived from the 2015 annualized expenses. For Test Year 2017, Volcano proposes $2,238,993 in Total Company

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\(^{30}\) D.14-12-084, Ordering Paragraph No. 3.

\(^{31}\) Title 47, Code of Federal Regulations (CFR) Section 54.1308 (a)(4)(ii) (A)-(C)

\(^{32}\) FCC Public Notice FCC 15-133.

\(^{33}\) FCC Public Notice FCC 15-133
Corporate Operations expense. Similar to other expenses, this number is derived from applying its percentage growth factor to its 2015 annualized corporate expenses. However, Volcano also included an additional $166,667 as rate case expenses to its forecasted 2017 corporate expenses of $2,072,326.

One of the arguments that Volcano uses to rebut the presumption of unreasonableness and justify not using the FCC corporate cap (FCC Cap) in its Application is that the FCC Cap is flawed. Volcano’s witness, Dr. Dale E. Lehman (Lehman), filed testimony challenging the applicability of the FCC Cap to Volcano’s corporate operations expenses. Instead of addressing why it would be reasonable and necessary for Volcano’s corporate operations expenses to exceed the FCC Cap, Lehman’s rebuttal focuses on the shortcomings of the FCC Cap in general. Despite the Commission’s adoption of the FCC Cap in D.14-12-084 and subsequent rulings that the FCC Cap cannot be challenged in its entirety but rather rebutted “to account for unique situations,” Lehman relies almost exclusively on the assertion that because the FCC Cap is flawed, it could not be applied to Volcano.

Volcano’s argument for why it should be permitted to exceed the FCC Cap would have greater merit if the company demonstrated that its actual and forecasted corporate expenses represented reasonable and prudent expenses for ratemaking purposes. For example, Volcano could have utilized a Zero Based Budgeting method, which is a technique for building a budget from zero. It is a repeatable process to build a sustainable culture of cost management. Each function is analyzed for its needs and costs as necessary in compliance with Public Utilities Code and Regulations. Using the Zero Based Budgeting method, all of
Volcano’s subaccounts would need to be addressed and justified as to the reasonableness and necessity of the costs intended to maintain and extend communications services.

In ORA Data Request CZW 004 (Expenses), ORA referred Volcano to the FCC Public Notice 15-133 and asked Volcano to respond if it had the type of expenditures the FCC noted “may not be recovered through universal service support.” Volcano’s response disclosed that it has the following type of expenditures: Entertainment, Food/Alcohol, Political Contributions, Charitable Contributions, Scholarships, Membership Fees and Sponsorships. This response shows that Volcano has not evaluated its corporate expenses to exclude costs not intended to maintain and extend communication services.

Although Volcano was given the opportunity “to rebut the presumption of unreasonableness to seek additional support from the California High Cost Fund-A Program”, Volcano failed to do so. Rather, Volcano has used its annualized 2015 corporate expenses (higher than the amount it determined after applying the FCC Cap formula) to forecast its 2017 corporate expenses. Because Volcano failed to demonstrate the reasonableness of using its 2015 annualized corporate expenses, Volcano should have used the 2015 corporate expense amount determined after applying the FCC Corporate Cap formula before projecting 2017 corporate expenses based on its methodology described above.

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35 Attachment 2-1 Volcano’s “Responses to ORA Data Request No. ORA-A.15-12-002 CZW 004 (Expenses)”, Page 8-9.

36 D. 14-12-084, Ordering paragraph 3, page 101
ORA recommends that Volcano use the FCC Cap as adopted in D.14-12-084 to cap its 2015 corporate expenditures before projecting 2017 corporate expenses.

### b. Volcano’s Calculation of FCC Corporate Cap

Corporate Expenses are eligible for recovery through the FCC High Cost Loop Support program. However, in compliance with Code of Federal Regulations (CFR), “Total Corporate Operations Expense for purposes of calculating high-cost loop support payments beginning January 1, 2012 shall be limited to the lesser of §54.1308(a)(4)(i) or (ii).” The formula to calculate Volcano’s FCC Corporate Cap is found in section (B), which states:

“For study areas with more than 6,000 but fewer than 17,887 total working loops, the monthly amount per working loop shall be:

$3.007 + (117,990/the number of total working loops)”

The FCC further states that, “Beginning January 1, 2013, the monthly per-loop amount computed…shall be adjusted each year to reflect the annual percentage change in the United States Department of Commerce’s Gross Domestic Product-Chained Price Index (GDP-CPI)."
Volcano provided Corporate Cap calculations in Duval’s exhibit, Rate Case Model. However, Volcano did not calculate it 2017 Corporate Expense Cap. To determine Volcano’s 2015 FCC Corporate Cap, Duval applied a GDP-CPI of 1.101998. Using this GDP-CPI Volcano’s 2015 Corporate Cap was $1,734,010.

ORA disagrees with the GDP-CPI Volcano used when calculating its 2015 Corporate Cap. ORA also calculated Volcano’s 2015 Corporate Cap Limitation using the NECA forecasted GDP-CPI for 2015 of 1.054650. This resulted in a corporate expenses cap for Volcano in 2015 of $1,734,010.

Because Volcano failed to meet its burden to exceed the corporate cap, Volcano should not have used its annualized 2015 corporate cap expenses to forecast its 2017 corporate expenses. ORA adjusted Volcano’s 2015 corporate expenses using the FCC Cap but did not change Volcano’s methodology to forecast its 2017 data. After making this adjustment to its 2015 corporate expenses, Volcano’s forecasted methodology disclosed that its 2017 corporate expenses was projected to be $1,734,010.

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40 Chad Duval, Exhibit “Rate Case Model – Confidential”

Table 2-2: Corporate Expense Cap

<table>
<thead>
<tr>
<th></th>
<th>ORA</th>
<th>Volcano</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Corporate Cap</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>2017 Test Year</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Corporate Cap</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Using the FCC Cap formula with GDP-CPI of 1.104998 for 2017, Volcano’s corporate cap expenses limitation would have been $0. Because Volcano’s projected corporate expenses (after applying the FCC Cap to its 2015 corporate expenses) for Test Year 2017 using its growth methodology resulted in a lower amount than the corporate cap limitation, ORA used actual projected costs.

Volcano’s Test Year 2017 Total Company Corporate Operations should be decreased by $0, which translates to a reduction of $0 in intrastate expenses (or intrastate portion of Corporate Operations expenses).

c. Rate Case Expense

After forecasting and escalating 2016 expenses to 2017, Volcano added $166,667 of expenses in Test Year 2017 administrative and general expense account. Mr. Duval explained in his testimony the estimated rate case expenses ($0) involve costs associated with attorney fees and consultant fees and include preparation of the application, work papers, analysis of rate of return, analysis of corporate operations expense, preparation of testimony. “The total estimated cost of the rate case process…and amortized over a three year period, beginning in the 2017 test year. As a
result of this amortization, $166,667 of rate case expense was included in the General and
Administrative Expense Account (Account 6720) for the test year.  

Volcano contends “Rate case expenses incurred in connection with Volcano’s instant rate case should either be excluded from the corporate cap, or these expenses should be treated as a reasonable adjustment to the corporate cap methodology.” Duval states that the FCC Cap “does not include or envision costs associated with rate cases. Very few companies go through the rate case process on an annual or regular basis, so the FCC’s analysis does not include the type or level of costs that Volcano will incur in this proceeding.” Duval further states, “As a result, the rate case expenses should be considered outside the Corporate Operations Expense Limitation…These are costs that are separate from the normal corporate operations expenses, and are ongoing in nature, so they need to be accounted for separately and recovered as part of the revenue requirement established in this proceeding.”

D.14-12-084 adopting the FCC’s Corporate Operations Cap does not apply to selective corporate expenses. Since rate case expenses are corporate expenses the corporate cap should apply. Volcano’s recorded rate case expenses in general ledger account 6720 is a corporate expense account. The FCC has prescribed in Title 47, CFR, Chapter 1, Subchapter B, Part 32, and Uniform System of Accounts (USOA) for Telecommunications Companies. Subpart E provides guidance on the reporting of

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42 Chad Duval Testimony, page 18 (Answer to Q. 27)
43 Dale Lehman Testimony, page 7 (Answer to Q. 10)
44 Chad Duval Testimony, page 17-18 (Answer to Q. 26)
45 Chad Duval Testimony, page 18 (Answer to Q. 26)
46 Title 47, CFR, Chapter 1, Subchapter B, Part 32, Uniform System of Accounts for Telecommunications Companies.
expense accounts. Subpart E, §32.6720 General and Administrative provides instructions and examples on the type of expenses captured in this account and its subaccounts. The general and administrative account (G&A) shall include these types of costs:

1. Providing accounting and financial services. Accounting service include…regulatory accounting (revenue requirements, separations…)
2. Maintaining relations with government, regulators…including preparing and presenting information for regulatory purposes, including tariff and service cost filings…
3. Providing legal services: includes conducting and coordinating litigation, providing guidance on regulatory matters. Also included are the costs of outside counsel, depositions, transcripts and witnesses.

Volcano’s request to treat rate case expenses outside of the USOA requirements and therefore, outside of FCC Cap is without merit. As discussed earlier in 1 (a), Volcano’s argument for why it should be permitted to exceed the FCC’s corporate expense cap would have greater merit if it demonstrated that its actual and forecasted corporate expenses represented reasonable and prudent expenses for ratemaking purposes. Volcano could have utilized a Zero Based Budgeting method, which is a technique for building a budget from zero. It is a repeatable process to build a sustainable culture of cost management. Each function is analyzed for its needs and costs as necessary in compliance with Public Utilities Code and Regulations. Using the Zero

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47 CFR, Chapter 1, Subchapter B, Part 32, Subpart E
48 47 CFR Subpart E, §32.6720, General and administrative
49 47 CFR Subpart E, §32.6720, General and administrative
Based Budgeting method, Volcano would need to address and justify each of the general ledger’s subaccounts as to the reasonableness and necessity of the costs intended to maintain and extend communications services.

d. Employee Bonuses

One of the adjustments Volcano made to its 2015 expenses was an additional one-time expense of $166,714 for payment of an annual employee bonus. Duval states in his testimony on page 15, “addition of a known and measurable, one-time expense of $166,714 in the fourth quarter of 2015 that is not included in the simple annualization…This is the payment of an annual employee bonus plan that comprises approximately 6% of employee salaries and wages.”

ORA requested additional information including the purpose, policy, calculations, and criteria, on employee bonuses. In Volcano’s response to ORA’s data request, Volcano states, “Distribution of an annual bonus is at the discretion of the President of the Company. If bonuses are to be awarded, the President makes the determination based on an employee’s individual performance review and recommendations from the Director of Human Resources…The bonus is calculated as a percentage of an employee’s wages. The percentage varies by employee as determined by the President of the Company.”

Volcano receives a subsidy from the California High Cost Fund-A Program (CHCF-A) to provide services to its customers. Volcano’s 2016 CHCF-A support is $3,469,944 and the Test Year 2017 CHCF-A request is $6,960,938. This translates in Volcano suggesting it needs additional support to provide services to customers.

31 Chad Duval’s Testimony, Page 13, Answer to Q. 22.
50 Chad Duval’s Testimony, Page 15, lines 22-27
51 Attachment 2-2 Volcano’s “Responses to ORA Data Request No. ORA-A.15-12-002 CZW-003 (Expenses)” Q. 2(b)
Regarding the addition of an employee bonus, Volcano contends “Bonuses are used to incentivize employees to perform at certain levels and to retain valuable employees.” The CHCF-A, funded by ratepayers, should not bear additional expenses such as employee bonuses determined at the discretion of Volcano, without demonstrating that the current compensation to its employees is not competitive and demonstrating that it is reasonable to compensate employees with additional bonuses when Volcano appears to have difficulty providing services to customers with its current CHCF-A support of $3,488,629. Volcano’s shareholders should absorb such additional expenses.

Therefore, for ratemaking purposes, ORA will exclude the one-time additional employee bonus in the amount of $166,714 from 2015 historical expense before forecasting Test Year 2017 expenses. The impact of this adjustment results in reductions to the following categories of 2015 intrastate expenses: Table 2-3: Employee Bonuses - 2015 Impact.

<table>
<thead>
<tr>
<th>Description</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Specific</td>
<td>$00000</td>
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<tr>
<td>Plant Non Specific</td>
<td>$00000</td>
</tr>
<tr>
<td>Customer Operations</td>
<td>$00000</td>
</tr>
<tr>
<td><strong>Total Employee Bonuses Reduction</strong></td>
<td>$00000</td>
</tr>
</tbody>
</table>

2. Cost Allocations to Affiliates

Volcano is a wholly-owned subsidiary of Volcano Communications Company. John Lundgren stated in his testimony that, “Volcano Communications Company is the holding company for seven immediate subsidiaries, one of which is Volcano. The other six subsidiaries of Volcano Communications Company are: Volcano Vision, Inc.,
Sunrise Square Corporation, Volcano Cellular, Inc., Volcano Telecom, Inc., Volcano Internet Provider, and Volcano Long Distance.\textsuperscript{53}

In Data Request ORA CZW-004 (Expenses), ORA requested Volcano to provide documentation and details on methodology used to allocate shared costs to its affiliates.\textsuperscript{54}

In its response, Volcano stated it provides services to its affiliates by adhering to 47 CFR Part 64.901 – Allocation of Costs.\textsuperscript{55} Volcano provided a document labeled “VT ORA CZW-004 Q2 (b) (3) Affiliate Transactions, Confidential” containing information “for the services provided to affiliates, the frequency of charges, and the methodology used for allocating cost to affiliates.” \textsuperscript{56}

Volcano used several methods, depending on the type of expenditures, to allocate to affiliates a share of expenses. The methods differed by the basis used to determine the affiliates proportionate share of expenditures. Volcano’s employees are joint employees of the affiliates.

\textbf{a. Plant – Specific Accounts: Land and Building Expense – Other}

\textbf{(1) Volcano’s Office Building}

Volcano’s office building is located at 20000 State Highway 88 in Pine Grove, California. The total square footage of the building is

\textsuperscript{53} Opening Testimony of John Lundgren on behalf of Volcano Telephone Company December 1, 2015, page 2, (Answer to Q. 8.)

\textsuperscript{54} Attachment 2-3 ORA Data Request No. ORA-A.15-12-002 CZW – 004 (Expenses), Question 2

\textsuperscript{55} Attachment 2-4 Volcano’s “Responses to ORA Data Request No. ORA-A.15-12-002 CZW-004 (Expenses)” Question 2

\textsuperscript{56} Attachment 2-5 Volcano’s responses to ORA Data Request No. ORA-A.15-12-002 CZW-004 (Expenses)
The land and building expenses included maintenance, utilities, salaries and benefits. These expenditures were allocated to the above affiliates based on their square footage usage in the office building. Volcano used the above percentages it derived based on the square footage to allocate these costs to the above affiliates. However, Volcano charged the repairs and maintenance expenses only to these three affiliates and none to the other six affiliates.

ORA disagrees with Volcano’s methodology as it does not fully capture its affiliates’ share of the office building’s repairs and maintenance costs. Volcano does not account for the joint employees’ space usage when working on affiliates’ business matters. Since Volcano’s affiliates benefit from the services provided by Volcano, it is necessary to calculate an amount of Volcano’s expenses that should be allocated to the affiliates.

Common costs should be allocated among the affiliates in a fair and equitable way so that the ratepayers of the utility do not subsidize any parent or other affiliate of the utility. In order to assign indirect costs, ORA used a three-factor methodology to allocate common costs to the affiliates. The three factors ORA used for its methodology were assets, number of customers and payroll expenses. As shown in Table 2-4 below, the methodology resulted in allocation percentages as follows: Volcano Telephone % and Affiliates %.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Volcano Telephone</th>
<th>Affiliates Combined</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Table 2-4 Cost Allocation Percentages
ORA took Volcano’s annualized 2015 total repairs and maintenance expenses of $\text{\textdollar}00000000. Since Volcano had calculated the office building accounts for 29.53% of repairs and maintenance expenses, the office building’s share of these expenses is $\text{\textdollar}000000000000$.

ORA calculated the affiliates’ share using the 3% factor against the total repairs and expenses. As a result, the affiliates’ share was $\text{\textdollar}00000000$ of $\text{\textdollar}00000000$; however, the affiliates had already been charged an amount from Volcano’s methodology. ORA will reduce the $\text{\textdollar}00000000$ above by $\text{\textdollar}00000000$ that Volcano had received from the affiliates. After accounting for the affiliates’ payments and therefore, reducing the allocation to the affiliates, the adjustment was reduced to $\text{\textdollar}00000000$. ORA made an adjustment by excluding this amount from Volcano’s 2015 expenditures prior to forecasting for 2017. The impact of this adjustment to intrastate expenses is a reduction of $\text{\textdollar}00000000$. 

33
(2) Technology Center

Volcano also owns a building located in Pine Grove and its purpose is for employees’ meeting and training. This building is also referred to as the Technology Center. Volcano did not allocate expenses, such as maintenance expenses, utilities, repairs, etc., to the affiliates to account for their share of the benefits. Since the joint employees work for Volcano and the affiliates, the affiliates should also bear their fair share of expenses for the benefits it received.

To calculate the proper allocation, ORA first used the asset cost of this building to Volcano’s total of building assets to determine estimated repairs and maintenance expenses for this building. Based on the calculation, ___% was derived representing the Technology Center’s share of total repairs and maintenance expenses. The percentage was applied to the same total repairs and maintenance expenses base $_____ as used for the office building calculation above. As a result, the Technology Center’s share is $_____. ORA applied ___% (the factor developed for affiliates), as discussed above, to the $_____. Therefore, the affiliates’ share of the repairs and maintenance for the Technology Center is $_____. The intrastate portion of this expense is $_____.

(b) Plant-Specific Accounts - General Purpose Computer Expense – Other

Volcano addressed the allocation of its General Purpose Computer Expense – Other to its affiliates in a document titled, “ORA CZW-004 Q2 (c) Group 2 & 3. Affiliate Transactions, Confidential.” This document shows Volcano’s allocation method for Computer usage to Volcano and its affiliates. 

Attachment 2-6 Volcano’s response to ORA Data Request No. ORA-A.15-12-002 CZW-004 (continued on next page)
costs of VT’s general purpose computer.”

Volcano’s methodology to allocate General Purpose Computer Expenses was based on the total number of individual transactions counted from the General Ledger. Volcano identified each affiliate’s number of individual transactions. Using a particular affiliate’s number of transactions counted to the total transactions counted, Volcano derived the particular affiliate’s percentage, and used that percentage applied to the total computer usage expenditures to arrive at that affiliate’s share of these expenses.

ORA disagrees with Volcano’s methodology and questions how this methodology fully captures the affiliates’ share of costs associated with their benefits. For example, using Volcano’s methodology, one transaction in the amount of $10,000 has the same weight as a $5 affiliate transaction. Volcano’s cost allocation method based on counting the number of transactions processed in the general ledger is inadequate. Volcano did not offer any explanation or rationale to support this method and did not address if any other methods had been considered.

ORA instead uses a three-factor methodology, as discussed earlier in 2.a. (1) above, to account for affiliates’ share of computer usage expenditures. ORA will use Volcano’s 2015 total computer usage annualized expenses as the base for the allocation. The affiliates’ share of Volcano’s computer usage expenses is but after applying affiliates payments, the adjustments will be lowered to . ORA will reduce Non-Corporate Expenses by representing the affiliates’ share of computer usage costs that benefited their operations. The reduction to intrastate expenses will be .

(continued from previous page)
(Expenses) dated February 16, 2016

Attachment 2-7 Volcano’s response to ORA Data Request No. ORA-A.15-12-002 CZW-004 (Expenses) dated February 16, 2016
c. Customer Service

1. Marketing

ORA selected transactions from Volcano’s accounting records for further examination and analysis. The transactions under marketing were in the account titled Product Adv.–Other and appears to be for product advertising. Many of the invoices were split three ways equally between Volcano and its affiliates. These advertising expenditures included internet advertising on [redacted] per month, advertising in local publications on weekly basis, designing, creating and purchasing T-shirts with company logo, marketing support services. ORA noted in some of the invoices examined, the expenditures did not appear to be properly allocated to affiliates. These expenditures included monthly payments to a radio station for sponsorship spots at particular times of the day and payments for monthly marketing support services. Therefore, ORA recalculated the allocations to Volcano’s affiliates and adjusted marketing expenses by $[redacted] (2015 annualized Product Ad expense from $[redacted]), as the expenditures are not beneficial to ratepayers. This translates to a reduction of $[redacted] to intrastate expenses.

2. Customer Service

ORA examined transactions in the general ledger accounts Cust Bill-Bill/Coll Other and Cust Bill-Bill/Coll-Postage. ORA examined invoices in this account and found Volcano spent an average $[redacted] per month paying a vendor Bill Trust for providing billing services and postage costs. Volcano paid, accounted and reported 100% of the expenditures without allocating any cost to its affiliates. ORA’s close examination disclosed that Volcano’s affiliates benefited from these expenditures, for example, with the inclusion of promotional inserts in the bills.

Volcano used a methodology of splitting customer service invoices by allocating 1/3 of expenditures to Volcano and 2/3 to two of the affiliates. ORA will use the same method and exclude 2/3 of the expenditures representing affiliates’ share, $[redacted]
Therefore, ORA removed $\text{[redacted]}$ from Customer Service accounts as Volcano’s ratepayers should not subsidize the affiliates’ operations. This translates to a reduction of $\text{[redacted]}$ to intrastate expenses.

D. CONCLUSION

As discussed above, Volcano should have applied the FCC Corporate Cap to its 2015 annualized corporate expenses before forecasting its 2017 corporate expenses using its methodology and should not be allowed to add rate case expenses outside the corporate cap. Applying the FCC Corporate Cap formula to Volcano’s 2015 annualized corporate expenses using NECA GDP-CPI resulted in a forecasted corporate expense of $\text{[redacted]}$ for 2017. ORA recommends this amount be adopted as Volcano’s 2017 corporate expenses.

Additionally, the employee bonus expense proposed by Volcano to be added to forecasted expenses has not been demonstrated as necessary for the provision of communications services and should be removed for ratemaking purposes. Volcano’s allocation of common costs to its affiliates does not appear to be reasonable and should be reallocated using ORA’s recommended methodology.
CHAPTER 3: PLANT

A. INTRODUCTION

This chapter addresses the reasonableness and prudence of Volcano’s proposed Plant in Service for Test Year 2017. A major component of Volcano’s proposed Plant in Service is the Five Year Plan in which Volcano proposes continuation of Fiber to the Home (FTTH) deployment in the Volcano Service area. The total estimated construction costs for these broadband network infrastructure projects in the Test Year 2017 considered in this rate case is $[Censored]. Total requested capital spending is $[Censored]. The additional capital spending, beyond network infrastructure is comprised primarily of expenditures for general purpose computers, vehicles, building remodel and tools.

Volcano provided documentation of the associated Ratebase consisting of Plant in Service minus the Accumulated Depreciation Reserves that correlate with these and other previously completed capital projects that Volcano estimates will be in service for Test Year 2017.\(^{59}\) Volcano’s total estimated average balance for Plant in Service for Test Year 2017 is $[Censored]; with a corresponding average balance for Accumulated Depreciation Reserves of $[Censored]. The intrastate portions of these balances for Test Year 2017 are $[Censored] and $[Censored], respectively. Subtracting the 2017 average Accumulated Depreciation Reserve balance from the average Plant in Service Balance and adding the other

\(^{59}\) Attachment 3-1, Volcano Workpaper “Rate Case Model – Confidential.xls”

\(^{60}\) Attachment 3-1, Volcano Workpaper “Rate Case Model – Confidential.xls”
components of intrastate Ratebase results in Volcano’s proposed Test Year Ratebase of $\text{[redacted]}$. ORA’s recommendations related to Depreciation and Ratesbase are addressed in the following chapters.

Volcano’s level of forecasted spending on Plant Additions in 2017 is based on planned network improvement projects and considers average historical levels of spending. The requested additions of $\text{[redacted]}$ are slightly below the 2010-2014 recorded average of $\text{[redacted]}$. Forecasted spending in 2015 is above the average for 2010 through 2014 as a result of increased expenditures resulting from replacing facilities damaged by the Butte Fire. Spending planned for 2016 is above the 2010 through 2014 average spending as a result of delayed 2015 projects being scheduled for 2016. As a result of 2015 and 2016 forecasted spending deviating from historical levels of spending, ORA primarily bases its estimates for 2017 on the average 2010 through 2014 levels of spending. In its last rate case, filed via Advice Letters Nos. 335, 335A, 335B and 335C, and adopted by Commission Resolution T-17108 on November 1, 2007, the Commission adopted Communication Divisions’ recommendation that plant additions be based on a five-year average of additions. 

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61 Attachment 3-1, Volcano’s Workpaper “Rate Case Model – Confidential.xls”

62 Attachment 3-2, Resolution T-17108, pg 7, and Finding of Fact 13, pg. 19
B. SUMMARY OF RECOMMENDATIONS

ORA reviewed the proposed plant additions and supporting documentation and recommends adjusted plant additions of $0,000,000 for Test Year 2017. The difference is the result of ORA allocating portions of the non-network plant additions to Volcano’s affiliates.

ORA recommends Volcano’s requested Plant Additions for 2017 of $0,000,000 be adjusted to $0,000,000. ORA finds this amount reasonable because:

- ORA’s recommended amount is comparable to the recent 5-year recorded (2010-2014) average.

- Adequately supports Volcano’s plans for network improvements as described in its five-year plan. These improvement projects, as stated in Volcano’s Master Data Response, are “necessary to increase network redundancy, improve service quality and meet customer demand.”

- Incorporates ORA’s adjustments to reflect modest allocations to Volcano’s affiliates for General Computers, Furniture, and Building accounts.

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63 Attachment 3-3
64 Attachment 3-4, Volcano Master Data Response VT ORA MDR F(3) (Broadband Facilities).xls
C. DISCUSSION

Volcano’s network improvement projects will extend the reach of broadband facilities and provide increased network redundancy. Other capital spending will replace aging vehicles, replace aging computers, and complete office renovations for a new Customer Service office.

The Commission is directed in Pub. Util. Code §275.6 (c)(6) to “Include all reasonable investments necessary to provide for the delivery of high-quality voice communication services and the deployment of broadband capable facilities in the rate base of small independent telephone corporations.” Volcano’s planned network improvement projects continue the incremental steps taken to improve network reliability and bring broadband to Volcano’s customers.
The FCC has stated its intention to adopt increased broadband standard speeds of 25 MB down and 3 MB up.\(^6\) This pending new standard provides the company a continuing impetus to upgrade its facilities to provide customers service that meets these standards. Currently the FCC’s Connect America Fund Program for Rural areas has a standard of 10 Mbps download / 3 Mbps upload.\(^6\) The California Advanced Services Fund (CASF) utilizes minimum speeds of 6 Mbps download / 1.5 upload to determine areas served by high-speed broadband.\(^6\) Volcano’s planned fiber based broadband infrastructure will provide service that meets or exceeds the current CASF standards and will also carry telephone service.

Volcano’s last GRC was resolved in the 2007 Commission Resolution T-17108. Commission Resolution T-17108 adopted plant additions for 2008 based on a number of adjustments to Volcano’s request recommended by ORA and also found using a five-year average of plant additions reasonable.\(^6\) Volcano’s 2017 requested amount, $\$\$\$, is approximately the average of Volcano’s plant additions for the period 2010 through 2014. Plant additions in 2015 and 2016 are forecasted above historical levels as the result of the Butte Fire repairs and shifting some 2015 projects to 2016. In developing its estimates for


\(^6\) D.12-02-015

\(^6\) [Attachment 3-2, Commission Resolution T-17108, November 1, 2007, Finding of Fact 13, pg 19](attachment:3-2)
2017, ORA considers the recorded five-year average for 2010-2014, and the specific planned projects presented.

In 2017 Volcano plans network upgrade projects, primarily in the Pine Grove and Pioneer Exchanges. These projects will bring fiber to the home for over customers. The network plant additions Volcano proposes are the same as the construction plan provided in its annual Form 481 materials, submitted to the FCC and the Commission on July 1, 2015. Volcano provided ORA with additional project descriptions in response to ORA’s data request. Further discussion of these projects is in the Underground section of this chapter.

Vehicles

Volcano proposes to spend on vehicles in 2017 which is down from $ for vehicles in 2016 and $ for vehicles and equipment in 2015. Recent history suggests that vehicle purchases may vary significantly from year to year based on the types of vehicles and the number purchased. ORA requested a description of Volcano’s vehicle replacement policy. Volcano’s response stated that “…vehicle is replaced include its age and condition, the costs to maintain or repair the vehicle, and whether the vehicle can still be used for its intended functions.” No specific criteria for mileage and age was indicated. In Decision 06-01-025 the Commission adopted the California Department of

See Attachment B to Opening Testimony of John Lundgren On Behalf of Volcano Telephone Company.
Attachment 3-5, Volcano response VT-ORA PHH-001, PHH-001 (Plant) Confidential.xls
General Services (DGS) 2003 guidelines for vehicle replacement. ORA reviewed more recent DGS guidelines in reviewing Volcano’s request. The DGS replacement schedule uses 120,000 miles for sedans, station wagons, vans, light duty trucks and 150,000 miles for 4-wheel drive and heavy duty trucks. The DGS guidelines also provide for vehicle replacement when cost-effective to do so regardless of age or mileage. With these guidelines in mind ORA considers Volcano’s 2017 request to replace ☐ trucks, one ☐ years old, the other ☐ years old, in 2017 reasonable.

Volcano has over ☐ vehicles in its fleet. The number of vehicles in the fleet appears large given the size of the company. Documents provided to ORA indicate that about ☐ of these vehicles are water trucks, dump trucks, or bucket trucks, ☐ (average age of ☐ years) are pool vehicles, and ☐ (average age of ☐ years) are used exclusively by senior employees. The remaining vehicles (sedans, vans, SUVs, and trucks) are used regularly by construction employees, install technicians, and maintenance employees. Volcano’s remote location, dispersed service areas, and the need to be able to respond quickly to outages with the necessary employees and equipment may explain the large number of vehicles Volcano maintains in its fleet.

(Continued from previous page)

72 Attachment 3-6, Volcano’s Response to ORA Data Request PHH-001, Q1
72 See Decision 06-01-025, pg. 46
74 Attachment 3-8, Volcano data request responses to VT ORA PHH-003, Q9, Q10 Plant.pdf and VT-ORA PHH-002 Q1. 2014 CPR, Confidential.pdf
Vehicle purchases as forecasted will average around $000,000 per year for 2012 – 2016. This includes Volcano’s proposed replacement of trucks and a retro fit of a for a total of $0000. In 2015 Volcano replaced vehicles, retro fit , and added used vehicles to its fleet to allow for “loaner” vehicles when other vehicles are being serviced. The proposed 2017 spending of $ reflects the cost of just two planned vehicle purchases. Volcano provided quotes for similar vehicles it has recently acquired as the basis of its cost estimate. Given the size of their fleet of vehicles this number of replacement vehicles does not seem unreasonable. ORA’s recommends Volcano’s estimate of $000,000 be adopted.

Tools & Other Work Equipment

Volcano proposed Test Year 2017 Tools & Other Work Equipment spending of $000,000. The estimate is for a single new boring machine that would replace a 10-year old boring machine at the end of its useful life. The account estimate is also below the 2010 – 2014 five-year recorded average of spending for this account. ORA believes the replacement of the boring machine is reasonable as is the level of spending. ORA uses Volcano’s estimate of $000,000.

Buildings

Volcano proposed Test Year 2017 building improvements of $000,000 which is well below the five-year recorded average for this account. The 2017 amount is for the remodel of a commercial building on property adjacent to the

\[75\] Attachment 3-9, Volcano data responses VT ORA PHH-003 Q5 Plant and VT ORA PHH-003 Q5(a) Plant
current administration building. This is the second phase of Volcano’s consolidating locations project. This location will house the customer service department and provide better public access. Technical staff will utilize the old customer service department space. ORA used a building allocation factor of 0.00% derived from Volcano’s response to Q2 of ORA data request CZW-004 that reflects the portion of common areas allocated to Volcano Telephone and Volcano Internet. ORA’s estimate for the Building account in 2017 is $....

**Furniture**

Volcano proposed Test Year 2017 Furniture spending of $... The estimate is for a two new workstations to replace an existing 38 year old workstation. ORA believes the replacement of the older workstation is reasonable as is the identified cost. ORA uses the same cost allocation factor that it used for the Building account to adjust the Furniture account. ORA estimate for the Furniture account is $....

**Office Equipment**

Volcano proposed Test Year 2017 Office Equipment spending of $... The estimate is based on the costs of a new paper shredder and a new copier/printer. ORA believes these replacements of older office equipment is reasonable as is the identified cost. ORA estimate for the Office Equipment account is $....

**General Purpose Computers**

Volcano proposed Test Year 2017 General Purpose Computers spending of $... which is 18% above the 5-year 2010 – 2014 recorded average. This
amount is for the acquisition of personal computers, laptops, LAN switches, transceivers, and a new storage server. The recorded amounts for this account show big swings in expense from year to year. Volcano states that laptops and desktop computers are replaced at the end of their manufacturer’s (three year) and an additional purchased (two year) extended warranty period at the end of years. Volcano’s -year replacement cycle falls at the end of generally accepted ranges. Commonly discussed replacement cycles for laptops and desktop computers range from 24 months to five years. This account also includes software, servers, network switches, backbone components, and storage servers. ORA makes an allocation adjustment based on the Computer Equipment Allocation workpaper provided to ORA. ORA’s estimate for 2017 is $.

Central Office Switching – Digital

Volcano proposed Test Year 2017 Central Office Switching - Digital spending of $ which is well below the recent 5-year recorded average. This account captures some of the Central Office components associated with the network improvement projects grouped in the Underground account discussed later in this chapter. The forecasted amount is for improvement projects in the Pine Grove and Pioneer exchanges. The break out of the cost elements assigned to

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76 Attachment 3-10, Volcano data request response to ORA PHH-003, Q4
78 Attachment 3-11, Volcano workpaper titled “The Volcano Telephone Company, Computer Equipment Allocation, 12/31/2014”.
Central Office Circuit Equipment

Volcano proposed Test Year 2017 Central Office Circuit Equipment spending of $0,000,000 which is well below the 5-year recorded average. This suggests that planned projects are continuing at a manageable pace. The break out of the cost elements assigned to this account were provided in a data request response. The network improvements are integral to meeting the FCC’s forthcoming 25 MB up / 3 MB down standard. Volcano is not experiencing customer growth that would normally drive additional capital spending to meet a growing customer base. ORA is satisfied with the additional information provided by Volcano and uses Volcano’s estimate of $0,000 for 2017.

Underground Cable

Volcano proposed Test Year 2017 Underground Cable spending of $0,000,000 which is approximately the 5-year recorded average and represents the spending for planned network improvement projects. This number of planned projects is lower than the number of projects planned for 2016. The break out of the cost elements assigned to this account by project were provided in a data request response. These are the projects that will bring fiber to over

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79 Attachment 3-5, VT ORA PHH-001 (Plant) Confidential
80 Attachment 3-5, VT ORA PHH-001 (Plant) Confidential
81 Attachment 3-5, VT ORA PHH-001 (Plant) Confidential
customers in the Climax Service Area, the Kit Lane Service Area, and the Pioneer Exchange. Of the projects are FTTH projects. 0000 of these projects require new trenching and new conduit. The other will use existing conduit. Using existing conduit is less costly. These network improvements are integral to meeting current high-speed broadband standards and future requirements. The projects will also improve network reliability.

The average cost per household of these projects is about 25% higher than the average approved 2015 CASF project but well within the range of approved project costs. The average cost per household of Volcano’s proposed FTTH projects is below the average cost of the 2015 pending CASF projects.

The remaining nine projects will install distribution fiber to the connection point. Of these projects, three will require new trenches and conduit and the remaining six will utilize existing conduit. Digging new trenches and installing new conduit is almost times the cost of using existing conduit. Adding in the cost of these distribution project costs more than doubles the total average costs per household to levels almost three times the adopted 2015 CASF project average but still comparable to the higher cost projects that were approved.

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82 Attachment 3-12, ORA workpaper CASF Summary.xls and http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Communications_-_Telecommunications_and_Broadband/Reports_and_Presentations/CASF%202015%20Annual%20Report(1).pdf

83 Attachment 3-12, ORA workpaper CASF Summary.xls and http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Communications_-_Telecommunications_and_Broadband/Reports_and_Presentations/CASF%202015%20Annual%20Report(1).pdf
The projects typically involve utilizing existing conduit to place distribution fiber. Some of the projects require more costly new trench or bore to install the distribution fiber. Taken all together the projects represent over __ feet of new fiber. In addition to its own construction crews, which perform most of the work, Volcano regularly uses two preferred local contractors as the need arises.\textsuperscript{84} ORA is satisfied with the additional information provided by Volcano and the reasonableness of the project costs when compared to approved CASF project costs and uses Volcano’s estimate of $____,000,000 for 2017.

\textbf{D. CONCLUSION}

ORA has focused its analysis on confirming the reasonableness of Volcano’s planned network improvement projects and capital spending. Volcano’s overall plant additions are in line with recorded levels of spending and continue Volcano’s incremental approach to improving its network to better serve its customers. ORA recommends the Commission adopt its recommended plant additions of $____,000,000, as opposed to Volcanos’ requested $____,000,000, for Test Year 2017. The difference is the result of ORA’s allocation of costs in the Buildings, Furniture, and General Purpose Computers accounts.

\textsuperscript{84} Attachment 3-9, VT ORA PHH-003 (Plant) Confidential, Q1
CHAPTER 4: DEPRECIATION

A. INTRODUCTION

The Commission’s rate case plan adopted in Decision 15-06-048 does not require that a depreciation study be prepared or depreciation rates modified, and Volcano has elected not to modify its current depreciation rates or average service lives in the current GRC. The depreciation rates used are the last adopted and match those shown in Volcano’s most recent FCC Form 481 filing. Forecasted depreciation accrual for 2017 is ($0,000,000). ORA recommends its estimate for 2017 resulting from its different plant additions for 2017.

<table>
<thead>
<tr>
<th>TABLE 4-1</th>
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Depreciation Accrual

Comparison of Volcano Request & ORA Recommendation

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<thead>
<tr>
<th></th>
<th>2017</th>
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<tbody>
<tr>
<td>Volcano</td>
<td></td>
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<tr>
<td>ORA</td>
<td></td>
</tr>
</tbody>
</table>
B. SUMMARY OF RECOMMENDATIONS

ORA recommends 2017 depreciation accrual of $0,000. This amount is the result of ORA’s different plant additions estimate.

C. DISCUSSION

The depreciation rates used by Volcano are those previously adopted and consistent with what Volcano used in its most recent FCC Form 481 filing provided to the Commission on July 1, 2015.

Depreciation expense is calculated on a mass asset basis as prescribed by the FCC. This method uses a simple average plant balance multiplied by the depreciation rate by account. Annually, some accounts may become over depreciated and adjustments are made to prevent the account from becoming over depreciated. Volcano provided additional explanation of the over depreciation and adjustments in its data request response VT ORA PHH-003 (Plant), Q6 and in VT ORA-003 Q7 (Plant), Confidential.

The over depreciation adjustments are shown in Volcano’s workpapers for the affected accounts in 2015 – 2017. Adjustments were made to depreciation expense in 2017 for Motor Vehicles, Furniture, Company Communication Equipment, and Central Office Equipment – Radio accounts.
Given the network migration away from copper to fiber, Volcano should update its depreciation rates in its next GRC. Changing operational needs may affect the depreciable life of the copper assets. Also, changing computer technology warrants an update to the depreciation rates used for computer assets as well.

**D. CONCLUSION**

ORA recommends adopting its estimated depreciation accrual of $\text{[redacted]}$ for 2017. The difference from Volcano’s accrual amount is the result of ORA’s lower plant additions recommendation. Volcano should perform a new depreciation study in conjunction with its next GRC filing as its current rates have been in place since 2008 and the depreciation rates will be over 10-years-old when Volcano’s next GRC is filed.
CHAPTER 5: RATEBASE

A. INTRODUCTION

Ratebase is calculated by adding the account balances for Total Plant In Service to Materials and Supplies, Working Cash, and Other Regulatory Assets and then subtracting Accumulated Depreciation, Deferred Income Taxes, and Customer Deposits. This calculation for 2017 is shown in rows 159 through 169 in the SRO 15-17 tab of Volcano’s Rate Case Model – Confidential spreadsheet. ORA’s Working Cash calculation differs from Volcano’s as a result of ORA’s different expense recommendations.

Additionally, the Materials and Supplies component of Working Cash is calculated by multiplying the average Plant in Service by a factor that is the ratio of Materials and Supplies to Total Plant in Service. Volcano used recorded 2014 to calculate the ratio used to calculate the estimate of Materials and Supplies for 2017. Instead of using a single year to determine a ratio to calculate a Materials and Supplies estimate for 2017, ORA used the recorded average of ratios calculated for 2010 through 2014. This results in ORA’s lower ratio of 2.38% as compared to Volcano’s ratio of 0.00%.

Volcano’s and ORA’s estimated 2017 ratebase estimates are shown in Table 5-1 below.
TABLE 5-1

<table>
<thead>
<tr>
<th>Ratebase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparison of Volcano Request &amp; ORA Recommendation</strong></td>
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<table>
<thead>
<tr>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volcano</td>
</tr>
</tbody>
</table>

B. SUMMARY OF RECOMMENDATIONS

ORA accepts Volcano’s method of calculating ratebase. ORA has reviewed the calculation and estimates incorporated for 2016 that are incorporated into the 2017 estimates and finds them consistent with the descriptions provided in the Opening Testimony of Mr. Duval. ORA’s different estimates for Plant additions, different expense estimates, and different Materials and Supplies estimates result in ORA’s different estimate of ratebase.

C. DISCUSSION

ORA reviewed the calculations and workpapers for 2010 through 2016 and the assumptions underlying the 2017 calculation of ratebase. The methodology for calculating the Working Cash component is unchanged from that previously found to be reasonable by the Commission. ORA’s Working Cash estimate is different as a result of different estimated expenses and a different calculated Materials and Supplies estimate resulting from ORA’s lower ratio of 2.38%.

The calculated ratebase has remained relatively constant since 2010 with moderate changes and an average of $00,000,000 over that time period. The Volcano estimate for 2017 is $00,000,000, about [%] higher than the average since
ORA’s estimate of $ is about % lower as a result of ORA’s plant adjustments, the use of a lower Materials and Supplies factor, and a different

The difference in the calculated working cash is the result of ORA’s use of different estimates for expenses and different estimates of Materials and Supplies.

Volcano uses a Materials and Supplies factor of % calculated from 2014 data to estimate Materials and Supplies for 2015 through 2017. The factor for 2014 was the highest for the period 2010 through 2014. ORA used a factor of % which results from taking the average of the factors calculated for each year 2010 through 2014. ORA finds this to be a more reasonable estimation method than that selected by Volcano.

**D. CONCLUSION**

ORA recommends 2017 Ratebase of $. ORA’s review confirms Volcano’s method for calculating Ratebase is reasonable. Differences in Ratebase are the result of ORA’s plant adjustments, a lower Materials and Supplies factor, and a lower Working Cash estimate.
QUALIFICATIONS AND PREPARED TESTIMONY
OF
CHARLOTTE CHITADJE

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Charlotte Chitadje and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utility Regulatory Analyst in the Communications Branch of the Office of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Science degree in Business Administration with a concentration in Accounting from San Francisco State University in 2004. I received my Professional License as a Certified Public Accountant in the State of California in 2009. I joined the Office of Ratepayer Advocates (ORA) –Communications and Water Policy Branch, in September 2014. Prior to joining ORA, I was a Public Utilities Financial Examiner IV in the Division of Water and Audits –Utility Audit, Finance and Compliance Branch at the Commission, where I worked from April 2012 to September 2014. Before coming to the Commission, I worked from 2004 to March 2012 as a Corporations Examiner in the Department of Corporations.

I attended the Michigan State University Institute of Public Utilities: Basics of Utility Regulation and Ratemaking Seminar in June 2014.

Q3. What is your responsibility in this proceeding?

A3. I am the project lead and the author of the Executive Summary.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.
Q1. Please state your name and business address.

A1. My name is Roy Keowen. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.

Q2. By whom are you employed and in what capacity?

A2. I am employed by the California Public Utilities Commission (CPUC) in its Office of Ratepayer Advocates (ORA) as a Financial Examiner II.

Q3. Briefly describe your pertinent educational background.

A3. I graduated from the California State University, Los Angeles with a degree in Business Administration, Option in Accounting.

Q4. Briefly describe your professional experience.

A4. Prior to joining the CPUC, I worked as a Tax Auditor at the Board of Equalization for 1 year. In my experience at the CPUC, I have worked on 3 general rate cases where I reviewed and prepared testimony for the balancing and memorandum accounts, one general rate case where I prepared testimony for operating expenses and one cost of capital proceeding.

Q5. What is your responsibility in this proceeding?

A5. I am responsible for providing testimony related to Revenues and Rate Design.

Q6. Does that conclude your testimony?

A6. Yes, at this time.
QUALIFICATIONS AND PREPARED TESTIMONY
OF
ZEE WONG

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission)

A1. My name is Zee Wong and my business address is 505 Van Ness Avenue, San Francisco, CA. I am a Public Utility Regulatory Analyst in the Communications Branch of the Office of Ratepayer Advocates.

Q2. Please summarize your educational background and professional experience.

A2. I received my Bachelor of Science degree in Business Administration with concentration in Accounting from the University of California, Berkeley. I received my Professional License as a Certified Public Accountant in the State of California in 2010. I joined the Office of Ratepayer Advocates (ORA)-Communications and Water Policy Branch, in October 2015. I am also currently working for Safety and Enforcement Division. Prior to joining ORA, I worked simultaneously in Communications Division and Energy Division, for the past five years as the Grants Administrator for their Federal grants.

My professional experience at the Commission has included in the early years, auditing and testifying on Class B, C and D water utility rate cases as a Financial Examiner to managing the Commission’s Electric and Gas Safety Branch as the Program Manager for five years until my retirement.

Q3. Describe your responsibility in this proceeding.

A3. I am responsible for Chapter 2 – Operating Expenses

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.
QUALIFICATIONS AND PREPARED TESTIMONY OF

PATRICK E. HOGLUND

Q.1. Please state your name and business address.

A.1. My name is Patrick E. Hoglund. My business address is 505 Van Ness Avenue, San Francisco, California.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission - ORA Communications and Water Policy Branch - as a Senior Utilities Engineer. My current assignment is within ORA – Communications and Water Policy Branch. I am assigned to various communications related matters.

Q.3. Please briefly describe your educational background and work experience.

A.3. I am a graduate of the University of California, Berkeley, with a Bachelor of Science Degree in Industrial Engineering and Operations Research. I am also a graduate of the University of Rochester, William E. Simon School of Business with a Master of Business Administration Degree with concentrations in Finance and Corporate Accounting. I am a licensed professional Industrial Engineer.
I have been employed by the California Public Utilities Commission since 2005. From July 1999 through August 2004, I was a Senior Rates Analyst at Pacific Gas and Electric Company, where I worked on a variety of revenue requirements issues related to natural gas. From 1990 through 1997, I was employed by the California Public Utilities Commission. During this time I worked on small water utility rate cases, large water utility rates cases, and also worked in the Telecommunications and Energy Branches of the former Commission Advisory and Compliance Division, as well as in the Division of Ratepayer Advocates.

I have completed regulatory training provided by NARUC in 2005 and a regulatory accounting seminar provided by Financial Accounting Institute in 2009. I have prepared testimony in numerous water rate case proceedings. Most recently in A.12-07-005, A.10-07-007, A.09-01-013, and A.09-07-001.

Q.4. What are your responsibilities in this proceeding?

A.4. I am responsible for the Plant, Depreciation, and Ratebase chapters.

Q.5. Does this conclude your prepared testimony?

A.5. Yes, it does.
## Attachment B [confidential]

SEPARATED RESULTS OF OPERATIONS
FOR
PROPOSED TEST YEAR 2016

<p>| | | | |</p>
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## Attachment 1-2

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<tr>
<td>Local Service Rate</td>
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<tr>
<td>Subscriber Line Charge</td>
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</tr>
<tr>
<td>ARC Charge</td>
<td>0.00 $</td>
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<tr>
<td>CHCF - A Surcharge</td>
<td>0.350%</td>
</tr>
<tr>
<td>ULTS Surcharge</td>
<td>5.500%</td>
</tr>
<tr>
<td>CASF Surcharge</td>
<td>0.464%</td>
</tr>
<tr>
<td>California Relay</td>
<td>0.500%</td>
</tr>
<tr>
<td>911 Tax</td>
<td>0.750%</td>
</tr>
<tr>
<td>Teleconnect Fund Surcharge</td>
<td>1.080%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8.644%</td>
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<th>Single Line Business</th>
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<tbody>
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<td>Local Service Rate</td>
<td>34.12</td>
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<td>ARC Charge</td>
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<tr>
<td>CHCF - A Surcharge</td>
<td>0.350%</td>
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<tr>
<td>ULTS Surcharge</td>
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<td>CASF Surcharge</td>
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<tr>
<td>911 Tax</td>
<td>0.750%</td>
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<tr>
<td>Teleconnect Fund Surcharge</td>
<td>1.080%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>43.57%</td>
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CONFIDENTIAL
CONFIDENTIAL
CONFIDENTIAL

By Advice Letter Nos. 335, 335A, 335B and 335C filed on November 20, 2006, January 24, 2007, June 6, 2007 and August 1, 2007, respectively.

Summary

This Resolution addresses the General Rate Case (GRC) request filed by Volcano Telephone Company (Volcano) through Advice Letters (ALs) 335, 335A, 335B and 335C filed on November 20, 2006, January 24, 2007, June 6, 2007 and August 1, 2007, respectively. In its filings, Volcano requests: a) changes to its tariff schedules to increase non-basic rates and charges (see Discussion); b) a California High Cost Fund-A (CHCF-A) support of $2,984,138 for test year 2008 and c) to grandfather its Private Line services and revise its tariff, CAL P.U.C. Schedule No. G-1.

This Resolution adopts Volcano intrastate total revenues of $10,280,676 and an overall Intrastate Rate of Return of 10.00%. Volcano is authorized to draw $1,985,385 in (CHCF-A) support for test year 2008 in order to have the opportunity to earn an overall Intrastate Rate of Return of 10.00% at adopted rates. Volcano’s CHCF-A draw for 2008 reflects an adjustment for the excess depreciation expense taken by Volcano in 2005. This adjustment, as further discussed in this resolution, takes into account the fact that Volcano did not install a new switch in 2005 as authorized in its 2002 GRC filing (Resolution T-16697).
This Resolution also authorizes Volcano to grandfather Private Line services and revise its tariff, Cal. P.U.C. Schedule No. G-1.

Appendix A compares Communication Division’s (CD) and Volcano’s test year 2008 Total Company Results of Operations at present rates. Appendix B compares CD’s and Volcano’s Interstate and Intrastate Results of Operations at present rates. Appendix C compares CD’s and Volcano’s Intrastate Results of Operations including CHCF-A adjustments at proposed rates and CD’s calculation of Net-to-Gross Multiplier is set forth in Appendix D.

**Background**

Volcano is a local exchange carrier providing telephone services in Pine Grove, Pioneer, Volcano, West Point, Kirkwood Meadows and adjacent territory in portions of Alpine, Amador, Calaveras, and El Dorado Counties. Volcano serves approximately 11,472 access-lines in its four telephone exchanges: Kirkwood Meadows, Pine Grove, Pioneer and West Point.

In its filing, Volcano requests: a) to increase its monthly rate for its inside wire maintenance plan from $0.75 to $2.00 for residence and business customers, increase its local directory assistance charge from $0.25 to $0.50 per billable call and increase its returned check charge from $10.00 to $20.00, b) a CHCF-A support of $2,984,138 for test year 2008 and c) to grandfather its Private Line services and revise its tariff CAL P.U.C. Schedule No. G-1.


**Notice/Protests**

Volcano states that copies of the ALs 335, 335A, 335B and 335C were mailed to competing and adjacent utilities and/or other utilities. Notice of AL 335, 335A, 335B and 335C was published in the Commission Daily Calendar of November 29, 2006, January 26, 2007, June 8, 2007 and August 3, 2007, respectively. No protests to Advice Letter Nos. 335, 335A, 335B and 335C have been received.

On February 1, 2007, Volcano notified its customers by a bill insert of rate increases to some services effective January 1, 2008. There were no comments received from customers.
CD Staff held a public meeting in Volcano, California on March 5, 2007, to explain Volcano’s filing to its customers and to give customers the opportunity to ask questions of Volcano’s management and CD staff. Volcano notified customers of the rate review request and public meeting by a bill insert. No customers attended the public meeting.

Discussion

Total Operating Revenues

Volcano’s estimate of total company operating revenues of $15,172,226 at present rates is $28,731, or 0.19% lower than CD’s estimate of $15,200,957. Differences between CD’s and Volcano’s estimates are described below.

In estimating total company revenues for test year 2008, Volcano used a regression analysis methodology in projecting its growth in billing units. (i.e., access lines). This statistical method is used to project the company’s billing unit growth whereby the Coefficient of Determination (r2) is a tool used to indicate how well a dependent variable, in this case billing units for test year 2008, can be predicted by another set of data (billing units for previous years). The r2 range is from 0 to 1, with 0 indicating there is no relation to 1 to show a perfect correlation (or relationship), i.e. all changes in the dependent variable can be explained by the changes in independent variable(s). Values of r2 ranging between “0” and “1” indicate the strength of the relation. Typically, an r2 of less than 0.50 indicates a weak relation, whereas an r2 of 0.80 or more points to a strong explanatory relation. Using its methodology, Volcano estimated a 34% growth in billing units, with an r2 of 0.017075 indicating a very weak relationship between the dependent and independent variables used in Volcano’s regression analysis.

Because of this weak correlation, CD does not believe that the billing units estimated by Volcano are accurate or reasonable. Instead, CD used the average monthly change in actual 2006 billing units to estimate Volcano’s projected revenues for the 2008 test year. As a result, CD estimates the average monthly growth rate to be 0.0775% or 0.93% when annualized. To verify the reasonableness of this method in estimating Volcano’s billing units’ growth, CD further analyzed California Department of Transportation’s (DOT) 1 2006 Economic Forecast for Amador County. CD found that the annual population growth from 2006 to 2010 averaged 1.5% per year. CD’s estimated growth rate of 0.93% is below this overall estimated population growth rate of Amador County. CD understands that DOT’s overall population growth estimate does not translate to a 100% landline

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1 http://www.dot.ca.gov/hq/tpp/offices/ote/forecast2006/Amador.pdf
subscription growth or billing growth. This is because customers can subscribe to other means of voice communication services such as Voice over Internet Protocol (VOIP)\(^2\) and wireless telephone. Therefore, CD believes that its estimated growth rate of 0.93% is reasonable.

Using the average monthly method, CD’s estimate of $3,306,422 for Local Network Services revenue is $19,024 higher than Volcano’s estimate of $3,287,398. This amount includes an increase of $707 in network intrastate access revenues, and a reduction of $9,000 in uncollectible revenues. The reduction in uncollectible revenues is due to the fact that Volcano based its estimates on audited 2005 data, while CD used the latest available actual data, i.e. end of year (EOY) 2006 data. CD also used EOY 2006 data to estimate test year 2008 results.

Volcano proposes to increase rates and charges for certain telephone services that would result in an annual net revenue increase in customer billings totaling $50,822. These rate and charge increases and tariff changes are as follows:

- Return Check Charge from $10.00 to $20.00 (100%),
- Inside Wire Maintenance monthly rate for residence and business from $0.75 to $2.00 (167%),
- Local Area Directory Assistance charge from $0.25 to $0.50 (100%),
- Reduce the monthly local area directory assistance call allowance from 5 to 3 for residential services with a maximum allowance of three numbers per call or a total of nine numbers per billing period and from 2 to 0 for business.

CD also recommends increasing Volcano’s rates for services priced below market rate and which CD believes should be priced at rates comparable to AT&T and Verizon’s:

- Residential Caller ID monthly rate from $5.50 to $6.17, and
- Residential Call Forwarding monthly rate from $3.00 to $3.23.

CD therefore, recommends the Commission adopt CD’s proposed rates and charges, and terms and conditions as stated below:

- Return Check Charge from $10.00 to $20.00;
- Local Area Directory Assistance charge from $0.25 to $0.50;

\(^2\) VoIP is a category of hardware and software that enables people to use the Internet as the transmission medium for telephone calls by sending voice data in packets using IP rather than by traditional circuit transmissions of the PSTN.
• Reduce the monthly local area directory assistance call allowance from 5 to 3 for residential services with a maximum allowance of three numbers per call or a total of nine numbers per billing period and from 2 to 0 for business;
• Residential and Business Inside Wire Maintenance monthly charge from $0.75 to $2.00;
• Residential Caller ID monthly rate from $5.50 to $6.17 and
• Residential Call Forwarding monthly rate from $3.00 to $3.23.

Additionally, Volcano currently offers flat rate service to both its residence and business customers. CD recommends that Volcano be required to develop a rate design proposal in its next GRC filing for mandatory business measured service (i.e., eliminate flat rate business service) and a less expensive measured rate service option for residence customers. CD also recommends that Volcano in its next GRC filing include a notice of proposal to implement mandatory business measured rate service and a measured rate option for residence customers in the customer notice associated with its next GRC.

On October 5, 2007, CD received from Volcano, the National Exchange Carrier Association’s (NECA) projected 2008 USF payments for Volcano. NECA’s estimated 2008 annual expense for Volcano is $2,344,711 or $576,076 lower than Volcano’s original USF estimate of $2,920,787. CD adjusted its intrastate results of operations to reflect this later USF payment update from NECA. (Appendix C)

A comparison of CD’s and Volcano’s proposed intrastate operating revenue at proposed rates shows Volcano’s estimate of $11,429,047 is $1,148,371 or 11.17% higher than CD’s estimate of $10,280,676. (Appendix C)

Operating Expenses

Volcano estimates its test year 2008 total company operating expenses to be $7,079,100 (excluding depreciation and taxes). Volcano arrived at this amount by annualizing seven months of expenses (not including depreciation) that it had incurred by the time of its filing on November 17, 2006, equaling $6,204,195 (excluding depreciation and taxes), and inflating this amount by 3.72% once for 2007 and once more for 2008.

CD used Volcano’s three year average expenses as a baseline rather than the 2006 annualized expenses. CD believes that using the three year average is more reasonable because it is less affected by anomalous spikes or dips in expenses that may have occurred in 2006. Volcano filed its annual report on March 23, 2007, detailing the company’s actual 2006 expenses.3

3 Form M Schedule I-1 (FCC ARMIS 43-02 Report Format) of Volcano’s Annual Reports for 2006
figures from the 2006 annual report instead of the annualized amounts in Volcano’s original filing.

CD calculated the three year average by converting 2004, 2005, and 2006 expenses into 2006 dollars using the recorded inflation factors and then averaging the three years. CD recommends one adjustment to Volcano’s 2006 operating expenses, a reduction of General & Administrative expenses by $189,908 for the reasons indicated below.

In a data request, Volcano provided documents detailing the amount of each employee’s wages charged to Volcano operating expenses versus charges to other affiliates in the Volcano Communications Group (VCG). CD determined that Volcano’s allocation of approximately 80% of executives’ salaries to the regulated telephone company, including over 91% for the President and over 98% for the Director of Administration/Human Resources/Corporate Security is unreasonable. Volcano represents about two thirds of VCG revenue and about half of VCG’s assets. CD believes that VCG’s executives’ cost allocation and VCG affiliates should be proportional rather than being allocated almost entirely to Volcano.

Based on the information provided by Volcano, CD recommends an adjustment of $189,908. After adjusting the three year estimate, CD staff segregated each expense account into labor (wages/benefits) and non-labor (rents/other) according to the ratios observed in Volcano’s annual report. CD then applied the recorded inflation factors for 2006 and 2007 (excluding depreciation and rents) to obtain the 2008 test year estimate.

Appendix A compares CD’s and Volcano’s computation of total company operating expenses at present rates. It shows Volcano’s estimate of $7,079,100 is $800,875 or approximately 12.76% higher than CD’s estimate of $6,278,225.

**Rate Base**

Rate Base is the investor-supplied plant facilities and other assets used in supplying utility service to the customer. This investment (rate) base is the amount to which the

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4 CD used the February 2007 Global Insight U.S. Economic Outlook estimates of Labor and Non-Labor Wage Escalation Factors for 2006-2009 as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor</th>
<th>Non-labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>3.5%</td>
<td>5.8%</td>
</tr>
<tr>
<td>2005</td>
<td>3.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2006</td>
<td>3.75%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2007</td>
<td>3.2%</td>
<td>1.7%</td>
</tr>
<tr>
<td>2008</td>
<td>1.5%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>
rate of return is applied (i.e., Rate Base x Rate of Return = Net Operating Income). Rate Base consists of Plant in Service, Telephone Plant under Construction, Materials and Supplies, Working Cash, Depreciation Reserve and Amortization, Deferred Taxes and Customer Deposits.

In estimating plant in service, Volcano applied the ten year average of actual data from 1996 through 2005. At the time of the original AL 335 filing, Volcano did not have actual 2006 data.

CD disagrees with Volcano’s methodology used in forecasting plant in service for test year 2008. CD believes that a five year average of actual data from 2002 through 2006 is a more reasonable method because technology today, compared to ten years ago, is changing rapidly. Also more importantly, Volcano in its 2002 GRC filing, applied a five year average in estimating its plant in service.

In forecasting plant in service for test year 2008, CD reviewed Volcano’s data from 2002 through 2006 including yearly plant additions and plant retirements. Through data requests, CD requested Volcano to provide justification and market analysis for the purchase of a residential condominium in 2005. Volcano responded and explained that there was no formal cost benefit analysis done for the purchase of the condominium. Volcano states the original intent of the purchase was to have an employee live in the Kirkwood area during the winter season because avalanches and other winter related incidents can sometimes hamper access to Volcano’s facilities. Volcano further states that the condominium is currently not being used and is only maintained for future employees.

CD determined it would be more beneficial to ratepayers if Volcano, when necessary, rent an apartment to house an employee during the winter season instead of maintaining a condominium for future employees. Therefore, CD recommends the Commission disallow $849,002 ($40,000 from 2002 and $809,002 from 2005) from Volcano’s plant in service for the purchase of the condominium before forecasting plant in service for the 2008 test year.

With respect to telephone plant, Volcano states that its central office switching equipment, a DMS-100\(^5\), located in the Pine Grove central office has been in service since 1981. Volcano further states that the DMS-100 has been continually upgraded to meet the needs of their customers and some of these upgrades have been substantial. In addition, Volcano states manufacturers are not willing to upgrade these “older” switches for new

\(^5\) The DMS 100 is an electronic switching system establishing a connection between two telephone lines, or two switching systems.
network requirements. Volcano informs CD that an upgrade to a new “softswitch” is necessary as the worldwide network is evolving from analog to digital circuits, through Signaling System 7 (SS7) to packet switching. Volcano also states that upgrading the switch allows the ability to interface its remote site concentrators with Internet Protocol (IP) interfaces. Volcano invested $1,212,754 to upgrade the DMS-100 to the CS2000 (CS2K) “softswitch” in 2007.

Volcano states that the upgrade to the (CS2K) “softswitch” requires reducing the distance to existing remotes from 12,000 ft. to 4,000 ft. to enhance the ability to provide services associated with the upgrade. By reducing the distance to existing remotes, additional fiber is necessary between remotes and residential/businesses to be able to feed additional circuit equipment. In its original filing, Volcano also states that the upgrade to the CS2K will allow the company to upgrade its remote switches over a reasonable time period. Volcano scheduled the replacement of 21 of 50 remotes over a three-year period starting with seven remotes in 2007, seven remotes in 2008 and six remotes in 2009 at $150,000 per remote. However, in an electronic mail dated May 23, 2007, Volcano proposes to change its remote replacement schedule to five remotes in 2007, nine remotes in 2008 and six remotes in 2009. Volcano states that this is necessary because of its plan to complete its cable television system upgrade. Volcano proposes investing $3,189,580 for test year 2008.

CD does not believe that Volcano’s network transport conversion from Time Division Multiplexing (TDM) circuit switching to IP transport packet switching just to keep up with the industry trend is necessary to provide reliable telephone service to its customers. First, CD staff requested Nortel (manufacturer), to clarify the necessity of the “softswitch” upgrade. Nortel informs CD that the DMS-100 is a reliable switch and “the DMS-100 is fully supported by Nortel”. Nortel states the CS2K “softswitch” is not essential in provisioning telephone service to its customers. Nortel further states that, “the DMS-100 handles all Time Division Multiplexing (TDM) traffic, the CS2K handles all VoIP traffic. This platform will allow Volcano to eventually migrate to IP Multimedia Subsystem (IMS) which will allow Volcano to integrate data, voice, video and wireless into one platform”.

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6 Softswitch is an electronic switching system designed to support next generation networks that rely on packet-based voice, data and video communications technologies that can interface with a variety of transport technologies including copper, wireless, and fiber.

7 SS7 is the protocol used in the public switched telephone system (the "intelligent network" or "advanced intelligent network") for setting up calls and providing services. SS7 is a separate signaling network that is used in Class 4 and Class 5 voice switches.

8 TDM is a technology that transmits multiple signals simultaneously over a single transmission path.
The industry is in a state of flux relating to adopting standards for this type of new equipment. CD believes that it is not prudent to invest in IP switching and transport until the IP industry is standardized so that there are fewer “new technology” risks. This in turn limits the risks to ratepayers. To confirm this, CD contacted other carriers and CD was informed that these carriers have only installed IP softswitches in a few central offices, mainly where they are experiencing new growth. CD was also informed that these carriers plan on keeping legacy TDM switching and transport for as long as it is useful.

In addition, Volcano indicated that its customer base is primarily interested in basic telephone service and has not expressed interest in advanced services. Consequently, it is unclear as to Volcano’s reasons for investing in facilities that provide advanced services or invest in facilities whose functionalities and capacities far exceed the need the Volcano customers asserted. CD believes that until such time where there is demonstrated future demand, it is premature for Volcano to put in IP equipment.

CD requested Volcano to provide a business plan which includes a cost benefit analysis of the present value of the options between: a) maintaining the existing DMS-100 with required maintenance versus b) the purchase of a new CS2K “softswitch” for telephone company-regulated telephone services. Volcano states that there was no business plan for the IP upgrade to the switch as it did not create a “new business” but is simply an upgrade to the existing DMS-100”.

Additionally, Commission Resolution T-16697, dated December 17, 2002 approved Volcano’s request to accelerate the depreciation of the then existing switch in anticipation of the installation of a new softswitch in 2005. However, Volcano did not install the softswitch in the timeframe anticipated by Resolution T-16697. Instead, Volcano delayed installation of the softswitch until 2007. Given that the new softswitch investment was approved for 2005 and Volcano chose to delay its installation until 2007, CD recommends that Volcano’s Total Company (i.e. prior to jurisdictional separations) depreciation expense for 2005 be adjusted by $535,096. This $535,096 adjustment is derived by calculating the present value of the difference between the accelerated depreciation Volcano was authorized to take in 2005 by Resolution T-16697 and the depreciation expense the company should have taken in 2005 for the softswitch not being installed in 2005.

Broadband deployment and accessibility is currently a priority to the State. With this understanding, CD staff confirmed that Volcano makes available DSL service to 99% of its customers through its affiliate, Volcano DSL. Out of this 99%, 70% have access to 6 megabits per second (Mbps) throughput. The average DSL connection in California is about 1.5 Mbps and studies show that anything in excess is only required to handle video.
At current prices, a majority of Volcano customers do not subscribe to basic DSL service. Volcano states that as of May 2007, 3,841 or approximately 34% of its 11,251 customers subscribe to DSL service. Out of these 3,841 customers, 1,755 or approximately 45% DSL customers subscribe to Volcano’s basic DSL service with a speed of 384 Kilobits per second.

CD therefore, recommends that the Commission: a) adjust Volcano’s Total Company depreciation expense on the non-softswitch investment for 2005 in the amount of $535,096, and b) exclude $1,750,000 from Volcano’s 2008 plant investment for the additional fiber between remotes and residential and business customer locations. Additionally, CD believes that based on a comparison with other small telephone company plant additions in California, and Volcano’s inability to fulfill its original proposal, Volcano’s proposed remote replacement schedule is too aggressive for a small company and recommends the Commission approve CD’s proposed remote replacement schedule of five remotes for 2007, five remotes for test year 2008 and five remotes for 2009.

Volcano also proposes to place several new inter-exchange fiber routes between Volcano and Calaveras. Volcano states that redundant routes are necessary as a back-up in cases of storms or fires. CD finds Volcano’s proposal reasonable and recommends the Commission accept Volcano’s proposed investment of $250,334 for test year 2008 for these redundant routes.

**Construction Work In Progress**

Volcano proposes that its 2008 “Construction Work in Progress” (CWIP) account equal $2,200,000. CD does not agree with Volcano’s proposal but acknowledges that the Commission has historically allowed the inclusion of CWIP in the rate base for general rate cases and for annual CHCF-A filings. Based on previously accepted general rate cases and CHCF-A filings, CD proposes a 2.8% of average plant balance or $2,131,968 as a reasonable estimate for CWIP (Appendix B).

**Materials and Supply**

Volcano’s estimated amount for materials and supply (M&S) is based on a percentage of average plant balance. This is a reasonable method since the inventory of parts and supplies usually increases at the same rate as the company’s plant. In its filing, Volcano uses 0.6% of its average plant balance in 2008 for its M&S. CD has reviewed Volcano’s previous materials and supplies accounts and believes 0.6% of average plant balance to be reasonable estimate for M&S in rate base for test year 2008. CD estimates Volcano’s M&S for test year 2008 at present rates to be $396,431 (Appendix B).
**Working Cash**

Volcano and CD used the Commission’s Standard Practice U-16 Simplified Method to develop its working cash estimate. CD’s total company working cash estimate for test year 2008 at present rates is $706,588 or $95,412 less than Volcano’s estimate of $802,000. This difference is due to the difference between CD and Volcano’s estimated expenses.

**Separations**

Volcano provides both intrastate and interstate telecommunications services, subject to the regulation of the CPUC and FCC, respectively. Because Volcano’s property serves both jurisdictions, the utility’s revenues, expenses, taxes, investments, and reserves are allocated between interstate and intrastate services.

Volcano used separation factors developed following FCC’s Part 36 to apportion its interstate and intrastate services. “Separations” is a process of apportioning a telephone company’s property costs, related reserves, operating expenses, taxes, and rate base between the intrastate and interstate jurisdictions. It is a method by which a telephone company can separately identify the amount of expenses and investments associated with the provisioning of a given service. These apportionments are made on the basis of relative usage and direct assignment whenever possible. The costs to be apportioned are identified in the FCC’s Part 36 Separations Manual, according to the classification of accounts as prescribed by the FCC’s Part 32, Uniform System of Accounts (USOA) for Telecommunications Companies.

CD reviewed Volcano’s separation factors and believes they are reasonable, and, accordingly, CD used Volcano’s separation factors to estimate Volcano’s total company and plant expenses which allowed CD to calculate Volcano’s Intrastate Results of Operations.

Appendix B compares Volcano’s and CD’s interstate and intrastate results of operations for test year 2008 at present rates.

**Private Line Services**

Private Line Service (PLS) is a service in which the customer leases a circuit, not interconnected to the public switched telephone network and is for the customer’s exclusive use. The private line may be used for transmission of voice, data, television etc.

Volcano states that the Federal Communications Commission changed the description of PLS to special access services. PLS is currently available to new customers under both, the PLS tariff, Schedule No. G-1 and, tariff Schedule No. B-2, Access Service, Rate (2).
However, if a customer subscribes to a circuit that goes beyond the exchange, this would only be available under tariff Schedule No. B-2, Access Service, Rate (2). By incorporating both PLS and special access services into one tariff, customers will not have to look at both tariffs before deciding on a service. Volcano proposes to grandfather PLS and revise its tariff schedule to reflect this change.

Volcano currently has nine subscribers to this service. Volcano proposes to grandfather the nine customers until the customer cancels or changes their existing PLS arrangement, or moves to a new address. New customers may subscribe to PLS through Access Service under tariff Schedule No. B-2.

CD recommends the Commission approve Volcano’s request to: a) grandfather PLS and b) update its tariff Schedule No. G-1 to reflect this change.

**Cost of Capital**

Volcano requests an overall intrastate rate of return of 10.00%. CD believes that the return on rate base for all rural ILECs should be the same since the systematic and non-diversifiable risks faced by all rural ILECs are similar.

The Commission authorized a 10.00% rate of return in the recent Foresthill general rate case (T-17048). Therefore, CD recommends that the Commission approve Volcano’s request for an overall rate of return of 10.00%.

**Taxes**

CD and Volcano both used a California Income Tax rate of 8.84% and a Federal Income Tax rate of 34.00%. The differences in the income tax estimates between Volcano and CD are due to the differences in each party’s calculations of intrastate net operating revenues and expenses.

CD’s estimate of state income tax expense at proposed rates of $222,141 is $32,161 lower than Volcano’s estimated state income tax expense of $254,302. CD’s estimate of federal income tax expense at proposed rates of $778,859 is $112,763 lower than Volcano’s estimated federal income tax expense of $891,622.

**Net-to-Gross Multiplier**

The Net-to-Gross Multiplier indicates the unit change in gross revenues required to produce a unit change in net revenues. It is a factor that accounts for the additional revenue required to pay taxes and achieve a given revenue requirement after taxes.
Appendix D shows CD’s computation of Volcano’s Net-to-Gross Multiplier. The Net-to-Gross Multiplier of 1.66207 means that a $1.66207 change in gross revenues before taxes would be required to produce $1.00 in net revenues after expenses and taxes.

The Net Revenues (adopted at a 10.00% Intrastate Rate of Return) of $1,862,914 is calculated by multiplying the Adopted Intrastate Rate Base of $18,629,139 times the Adopted Rate of Return of 10.00%. This Net Revenue figure of $1,862,914 minus Volcano’s actual 2007 Net Revenues of $2,127,229 equals the Change in Net Revenues of ($264,315).

The Change in Net Revenues of ($264,315) times the Net-To-Gross Multiplier of 1.66207 equals the Gross Revenue Change Requirement of ($439,310). However, adjustments are needed to reflect the difference between proposed and present rates, the revised NECA USF payment to Volcano, the excess depreciation taken by Volcano in 2005 and the corresponding income tax effects of $505,648 is needed due to our authorization of Volcano’s proposed rate restructuring and CD’s proposed rate design. This means that based on our adoption of CD’s intrastate results of operation, Volcano will need an additional $2,364,982 in Gross Revenues to realize a 10.00% Intrastate Rate of Return at adopted rates. This increase in Volcano’s Gross Revenues will come from $1,985,385 in CHCF-A support amount to Volcano for its 2008 test year.

**CHCF-A Support**

CD’s total company results of operations at present rates show that Volcano would register a $3,113,247 in Net Operating Revenues and a total company rate of return of a 12.20% (Appendix A) prior to any CHCF-A adjustment.

As described above in the Net-to-Gross Multiplier section of this resolution, Volcano will need $2,364,982 in CHCF-A support in order to realize a 10.00% Rate of Return for intrastate results of operation.

CD’s computation of Volcano’s CHCF-A requirement for test year 2008 is $2,364,982. This is based on CD’s calculation involving CD’s projections of Volcano’s revenues, expenses, and rate base and using an overall intrastate rate of return of 10.00% less an intrastate amount of $379,597 (i.e. $535,096 multiplied by the intrastate separations factor for depreciation expense) for CD’s recommended Miscellaneous Revenue Requirement Adjustment related to the intrastate depreciation adjustment for Volcano not having installed its softswitch in 2005.

**Comments**
In accordance with P.U. Code Section 311 (g), CD mailed copies of the original draft Resolution on September 4, 2007 to Volcano and other interested parties.

On September 18, 2007, Cooper, White & Cooper LLP, filed timely comments on behalf of Volcano. Volcano raises the following issues in the Draft Resolution (DR);

1. **State and federal income tax calculations:**

   Volcano points out that the DR did not adjust the total company fixed charges to reflect the DR’s proposed changes in its rate base calculation and then did not allocate any fixed charges to the interstate jurisdiction when calculating the state results of operations.

   CD concurs with Volcano’s statement and has corrected errors in the final version of the DR. CD recommends that the Commission adopt these changes.

2. **Increase for Inside Wire Maintenance (IWM):**

   Volcano points out that the DR recommends increasing IWM monthly rates by 300% for residential customers and 567% for business customers. Volcano proposes an increase in IWM rates by approximately 167% from $0.75 to $2.00 for residential and business customers. Volcano states that since it has few large business customers, the increase proposed by the DR will be difficult for small rural businesses and these customers may discontinue subscribing to IWM.

   CD believes that increasing IWM prices would encourage competition for a service which has been deregulated and in which Volcano faces little or no competition. Volcano’s rate has not changed since 1993.

   However, CD also recognizes that increasing prices by this amount might be a “rate shock” to Volcano’s customer. So, as an alternative to CD’s DR current recommendation, CD now recommends that Volcano be required to transition and increase IWM monthly rates’ over time beginning at $2.00 per month for residential and business customers for test year 2008 as proposed by Volcano. CD proposes that Volcano be required to include further rate adjustments in its next GRC filing to increase IWM monthly rates’. CD recommends the Commission adopt these changes.

3. **CD’s understated inflation factors:**

   Volcano argues that the DR inconsistently applies inflation factors in its analysis, which serves to understate test year expenses. The inflation factors relied on in the
DR for 2004 through 2006 have little variation, but are much higher than those used to estimate test year expenses. Volcano further states that the average of the DR’s inflation factors for 2004 through 2006 are 3.6% for wages and 5.6% for other, but it used inflation rates of 3.2% and 1.7% for wages and other, respectively for 2008 to estimate expenses in the test year.

CD’s disagrees with Volcano’s recommendation. CD obtained its inflation factors directly from the Global Insight U.S. Economic Outlook (Global Insight) estimates of Labor and Non-labor Wage Escalation Factors for 2006-2009 and used 3.5% for labor and 5.5% for non-labor.

The Commission has consistently used inflation factors from the Global Insight for GRCs involving all industries including water, energy and telecommunications since 1985 to project price increases. The Commission has adopted the use of this method in all of its GRCs.

The Global Insight is a forecasting, consulting and database provider for price and cost changes. It provides an independently derived number to project price increase.

4. CD’s failure to recognize reciprocal compensation expenses:

On February 15, 2007, in D.07-02-031, the Commission mandated payment of reciprocal compensation. Volcano states that the DR did not include new reciprocal expense even if it has a substantial amount of VNXX traffic. Volcano argues that if an adjustment is not included in the intrastate revenue requirement to account for this new expense, Volcano will not be given the opportunity to earn its intrastate authorized rate of return.

CD based Volcano’s test year operating test year expenses on actual expenses and CD derives future expenses from test year expenses. In other words, Volcano must incur the expense before it should appropriately be included in the test of future year expense.

However, in light of D.07-02-031, adopted on February 15, 2007, which resolves issues regarding intercarrier compensation for traffic transported over the networks of small Local Exchange Carriers, CD will adjust Volcano’s operating expenses for 2008 in its final version of the DR to reflect the projected VNXX expenses of $76,200 and will require Volcano in its 2009 CHCF-A annual review filing to specifically true-up the expense estimate with actual amounts. CD recommends the Commission adopt these changes.
5. **CD’s improper disallowance of switching investment:**

Volcano states that, Resolution T-16697 for its 2003 test year, dated December 17, 2002, approved Volcano’s request of an expedited write-off of its DMS-100 switch in anticipation of replacing the DMS-100 with a new softswitch. Volcano states that the DR improperly disallows the switching investment.

Commission Resolution T-16697, dated December 17, 2002 approved Volcano’s request to accelerate the depreciation of the then existing switch in anticipation of the installation of a new softswitch in 2005. However, Volcano did not install the softswitch in the timeframe anticipated by Resolution T-16697. Instead, Volcano delayed installation of the softswitch until 2007. Given that the new softswitch investment was approved for 2005 and Volcano chose to delay its installation until 2007, CD recommends that Volcano’s Total Company (i.e. prior to jurisdictional separations) depreciation expense for 2005 be adjusted by $535,096.

6. **CD’s improper disallowance of remote switching investment and related outside plant for 2007 and test year 2008:**

In addition to the softswitch, Volcano also states that the DR improperly disallows six new remotes deployed in 2007 and 17 new remotes scheduled to be deployed in 2008. Volcano argues that these remote investments are in conjunction with the switch upgrade.

CD does not believe that Volcano’s network transport conversion from Time Division Multiplexing (TDM) circuit switching to IP (Internet Protocol) transport packet switching just to keep up with industry trend is necessary to provide reliable telephone service to its customers. CD recommends the Commission disallow $1,750,000 from Volcano’s 2008 plant investment for the additional fiber between remotes and residential and business customer locations.

Based on a comparison with other small telephone company plant additions in California, Volcano’s inability to fulfill its original proposal CD believes that, Volcano’s remote replacement schedule is too aggressive. Therefore, CD recommends the Commission approve CD’s proposed remote replacement schedule of five remotes for 2007, five remotes for test year 2008 and five remotes for 2009.

**Findings**
1. Volcano Telephone Company (Volcano) filed its 2008 test year GRC by AL 335 on November 20, 2006, as supplemented by AL Nos. 335A, 335B and 335C on January 24, 2007, June 6, 2007 and August 1, 2007, respectively.

2. Volcano requests the following for test year 2008:

   - An Intrastate Rate of Return (ROR) of 10.00%;
   - To a) increase its monthly Inside Wire Maintenance plan rate for residence and business from $0.75 to $2.00 effective January 1, 2008 and revise its tariff Cal P.U.C. Schedule No. A-36, b) increase its local directory assistance charge from $0.25 to $0.50 effective January 1, 2008 and revise its tariff Cal P.U.C. Schedule No. B-4, and c) increase its returned check charge from $10.00 to $20.00 effective January 1, 2008 and revise Cal P.U.C. Rule No. 9;
   - Reduce the monthly local area directory assistance call allowance from 5 to 3 for residence services with a maximum allowance of three numbers per call or a total of nine numbers per billing period and from 2 to 0 for business services effective January 1, 2008;
   - A CHCF-A support of $2,984,138 for test year 2008 and
   - To grandfather its Private Line services effective January 1, 2008 and revise its tariff Cal P.U.C. Schedule No. G-1.

3. Communications Division (CD) recommends the Commission approve the following for Volcano for test year 2008:

   - An Intrastate Rate of Return (ROR) of 10%;
   - A California High Cost Fund-A (CHCF-A) support of $1,985,385;
   - Volcano’s request to: a) increase its monthly Inside Wire Maintenance plan rate for residence and business customers from $0.75 to $2.00 effective January 1, 2008, b) increase its local directory assistance charge from $0.25 to $0.50 effective January 1, 2008 and revise its tariff Cal P.U.C. Schedule No. B-4 as filed in AL 335 and c) increase its returned check charge from $10.00 to $20.00 effective January 1, 2008 and revise Cal P.U.C. Rule No.9 as filed in AL 335;
   - An a) increase in its residential Caller ID monthly rate from $5.50 to $6.17 effective January 1, 2008 and b) an increase in its residential Call Forwarding monthly rate from $3.00 to $3.23 effective January 1, 2008;
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Volcano AL 335/ma1

• Volcano should provide notice to all of its customers of the changes in rates and charges as follows within 30 days from the effective date of this Resolution:

  • Increase in its monthly Inside Wire Maintenance plan rate for residence and business customers from $0.75 to $2.00;
  • Increase in its residential Caller ID monthly rate from $5.50 to $6.17 and;
  • Increase in its residential Call Forwarding monthly rate from $3.00 to $3.23.

• Volcano should file an advice letter supplement, within 14 calendar days from the effective date of this resolution, to revise its tariff schedules to reflect the following changes in rates and charges to be effective on January 1, 2008 after review and approval by CD:

  • Increase in its monthly Inside Wire Maintenance plan rate for residence and business customers from $0.75 to $2.00;
  • Increase its residential Caller ID monthly rate from $5.50 to $6.17 and;
  • Increase in its residential Call Forwarding monthly rate from $3.00 to $3.23.

• Grandfather the nine customers currently subscribing to Private Line Service (PLS) until the customer cancels or changes their existing PLS arrangement, or moves to a new address and revise its tariff Cal P.U.C. Schedule No. G-1 as originally filed in AL 335 effective January 1, 2008 to reflect the change in Private Line Service.

• Volcano should reflect in its 2009 CHCF-A annual review filing only the actual VNXX expense incurred in 2008.

4. CD’s proposal that Volcano be required to develop a rate design proposal in its next GRC filing for mandatory business measured service (i.e., eliminate flat rate business service) and a less expensive measured rate service option for residence customers including, a notice of proposal to implement mandatory business measured rate service and a measured rate option for residence customers in the customer notice associated with the next GRC when customer notice of the next GRC is provided to customers is reasonable and should be adopted.

5. CD’s proposal that Volcano be required to include further rate adjustments in its next GRC filing to increase Inside Wire Maintenance monthly rates’ is reasonable and should be adopted.
6. CD’s tariff change recommendations for Volcano made in the Discussion section of this Resolution are reasonable and should be adopted.

7. CD’s recommendation that Volcano be allowed to recover the cost of the new “softswitch” plant upgrade is reasonable and should be adopted.

8. CD’s recommendation that Volcano not be allowed to recover costs associated with the additional fiber between remotes and residential business customer locations is reasonable and should be adopted.

9. CD’s proposed remote replacement of five remotes for 2007, five remotes for test year 2008 and five remotes for 2009 is reasonable and should be adopted.

10. Differences in the estimates between Volcano and CD are the result of the use of different assumptions and methodologies for estimating revenues, expenses, and rate base.

11. CD’s methodology of using ratemaking adjustments to each of the expense accounts and its use of the recorded inflation factors to adjust the labor and non-labor 2006 expenses for test year 2008 is reasonable and should be adopted.

12. CD’s methodology in estimating revenues is reasonable and CD’s recommended intrastate revenues for the test year 2008 as shown in Appendix C should be adopted.

13. CD’s methodology in estimating Volcano’s plant and other rate base items is reasonable and should be adopted.

14. CD’s recommended Miscellaneous Intrastate Revenue Requirement Adjustment of $379,597 related to the excess depreciation taken by Volcano in 2005 is reasonable and should be adopted.

15. CD’s recommended $1,985,385 CHCF-A support for Volcano for test year 2008 is reasonable and should be adopted.

**THEREFORE, IT IS ORDERED that:**

1. The intrastate revenues, expenses, and rate base amounts for test year 2008 identified in Appendix C, column (E) are adopted for Volcano Telephone Company (Volcano).
2. The overall intrastate rate of return of 10.00% is adopted for Volcano for test year 2008.

3. Communication Division’s (CD) proposed rate and charge increases, and terms and conditions stated below are authorized.

   • Return Check Charge from $10.00 to $20.00;
   • Local Area Directory Assistance charge from $0.25 to $0.50;
   • Reduce the monthly local area directory assistance call allowance from 5 to 3 for residence services with a maximum allowance of three numbers per call or a total of nine numbers per billing period and from 2 to 0 for business services
   • Residential and Business Inside Wire Maintenance monthly charge from $0.75 to $2.00;
   • Residential Caller ID monthly rate from $5.50 to $6.17 and
   • Residential Call Forwarding monthly rate from $3.00 to $3.23.

4. Volcano shall provide notice to all of its customers notifying them of the changes in rates and charges within 30 calendar days from the effective of this Resolution.

5. Volcano shall file an advice letter supplement, within 14 calendar days from the effective date of this Resolution to revise its tariff schedules to reflect the changes recommended by CD in the Discussion section of this Resolution. The filing shall have an effective date of January 1, 2008 after review and approval by CD.

6. Volcano’s request to grandfather Private Line Services as filed in AL 335 is authorized and Schedule Cal P.U.C No. G-1 is approved effective January 1, 2008.

7. Volcano shall reflect in its 2009 CHCF-A annual review filing a true-up of its actual versus the estimated VNXX expense used for test year 2008. In its 2009 CHCF-A filing, Volcano shall refer this resolution and ordering paragraph as the basis to the VNXX expense true-up.

8. Volcano shall include further rate adjustments in its next GRC filing to increase Inside Wire Maintenance monthly rates for both residence and business customers.

9. In its next General Rate Case filing, Volcano shall submit a rate design proposal for mandatory business measured rate service and a less expensive measured rate service option for residence customers. Additionally, Volcano shall include a notice of its proposal to implement mandatory business measured rate service and a measured rate option for residence customers in connection with its next GRC customer notice.
10. CD’s recommendation that Volcano be allowed to recover the cost of the new “softswitch” plant upgrade is adopted.

11. CD’s recommendation that Volcano not be allowed to recover costs associated with the additional fiber between remotes and residential business customer locations is adopted.

12. CD’s proposed remote replacement schedule of five remotes for 2007, five remotes for test year 2008 and five remotes for 2009 is adopted.

13. CD’s recommended intrastate Miscellaneous Revenue Requirement Adjustment of $379,597 that is related to the excess depreciation taken by Volcano for 2005 for Volcano not having installed its softswitch in 2005 is adopted.

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Volcano AL 335/ma1

This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on November 1, 2007. The following Commissioners approved it:

______________________________
PAUL CLANON
Executive Director

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners
APPENDIX A

VOLCANO TELEPHONE COMPANY
RESULTS OF OPERATIONS TEST YEAR 2008
TOTAL COMPANY AT PRESENT RATES.

<table>
<thead>
<tr>
<th>OPERATING REVENUES:</th>
<th>VOLCANO</th>
<th>CD</th>
<th>AMOUNT</th>
<th>DIFF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td></td>
</tr>
<tr>
<td>1 Local Network Services</td>
<td>3,287,398</td>
<td>3,306,422</td>
<td>(19,024)</td>
<td>-0.58%</td>
</tr>
<tr>
<td>2 Local Service - CHCF - A</td>
<td>2,298,644</td>
<td>2,298,644</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>3 Interstate USF</td>
<td>2,920,787</td>
<td>2,920,787</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>4 Network Access Services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Intrastate</td>
<td>1,949,502</td>
<td>1,950,209</td>
<td>(707)</td>
<td>-0.04%</td>
</tr>
<tr>
<td>6 Interstate</td>
<td>4,368,695</td>
<td>4,368,695</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>7 Miscellaneous</td>
<td>364,500</td>
<td>364,500</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>8 Less: Uncollectible Revenue</td>
<td>(17,300)</td>
<td>(8,300)</td>
<td>(9,000)</td>
<td>108.43%</td>
</tr>
<tr>
<td>9 Total Oper. Revenue</td>
<td>15,172,226</td>
<td>15,200,957</td>
<td>(28,731)</td>
<td>-0.19%</td>
</tr>
<tr>
<td>OPERATING EXPENSES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td></td>
</tr>
<tr>
<td>10 Plant Specific</td>
<td>2,337,100</td>
<td>2,321,917</td>
<td>15,183</td>
<td>0.65%</td>
</tr>
<tr>
<td>11 Plant Non-Specific (less depr.)</td>
<td>1,767,300</td>
<td>1,215,946</td>
<td>551,354</td>
<td>45.34%</td>
</tr>
<tr>
<td>12 Customer Operations</td>
<td>735,700</td>
<td>764,063</td>
<td>(28,363)</td>
<td>-3.71%</td>
</tr>
<tr>
<td>13 Corporate Operations</td>
<td>2,239,000</td>
<td>1,976,299</td>
<td>262,701</td>
<td>13.29%</td>
</tr>
<tr>
<td>14 Subtotal</td>
<td>7,079,100</td>
<td>6,278,225</td>
<td>800,875</td>
<td>12.76%</td>
</tr>
<tr>
<td>15 Depreciation &amp; Amortization</td>
<td>4,128,533</td>
<td>3,839,160</td>
<td>289,373</td>
<td>7.54%</td>
</tr>
<tr>
<td>16 Other Taxes</td>
<td>223,000</td>
<td>223,000</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>17 State Income Taxes</td>
<td>288,847</td>
<td>387,764</td>
<td>(98,917)</td>
<td>-25.51%</td>
</tr>
<tr>
<td>18 Federal Income Taxes</td>
<td>1,012,740</td>
<td>1,359,561</td>
<td>(346,821)</td>
<td>-25.51%</td>
</tr>
<tr>
<td>19 Total Oper. Expense</td>
<td>12,732,220</td>
<td>12,087,710</td>
<td>644,510</td>
<td>5.33%</td>
</tr>
<tr>
<td>20 Net Revenues</td>
<td>2,440,006</td>
<td>3,113,247</td>
<td>(673,241)</td>
<td>-21.63%</td>
</tr>
<tr>
<td>AVERAGE RATE BASE:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Telephone Plant-in-Service</td>
<td>75,238,972</td>
<td>69,504,346</td>
<td>5,734,626</td>
<td>8.25%</td>
</tr>
<tr>
<td>22 Tel. Plant Under Construct.</td>
<td>2,200,000</td>
<td>2,131,968</td>
<td>68,032</td>
<td>3.19%</td>
</tr>
<tr>
<td>23 Material &amp; Supplies</td>
<td>499,500</td>
<td>396,431</td>
<td>103,069</td>
<td>26.00%</td>
</tr>
<tr>
<td>24 Working Cash</td>
<td>802,000</td>
<td>706,588</td>
<td>95,412</td>
<td>13.50%</td>
</tr>
<tr>
<td>25 Less: Deprec. Res.</td>
<td>(48,201,221)</td>
<td>(45,621,459)</td>
<td>(2,579,762)</td>
<td>5.65%</td>
</tr>
<tr>
<td>26 Def. Taxes</td>
<td>(1,996,550)</td>
<td>(1,590,958)</td>
<td>(405,592)</td>
<td>25.49%</td>
</tr>
<tr>
<td>27 Customer Deposit</td>
<td>(14,363)</td>
<td>(14,036)</td>
<td>(327)</td>
<td>2.33%</td>
</tr>
<tr>
<td>28 Total Rate Base</td>
<td>28,528,338</td>
<td>25,512,880</td>
<td>3,015,458</td>
<td>11.82%</td>
</tr>
<tr>
<td>29 Rate of Return</td>
<td>8.55%</td>
<td>12.20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

VOLCANO TELEPHONE COMPANY
RESULTS OF OPERATIONS TEST YEAR 2008 AT PRESENT RATE INTERSTATE AND INTRASTATE

<table>
<thead>
<tr>
<th>OPERATING REVENUES</th>
<th>VOLCANO</th>
<th>CD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL COMPANY</td>
<td>INTERSTATE</td>
</tr>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
</tr>
<tr>
<td>2 Local Service - CHCF - A</td>
<td>2,298,644</td>
<td>2,298,644</td>
</tr>
<tr>
<td>3 Interstate USF</td>
<td>2,920,787</td>
<td>2,920,787</td>
</tr>
<tr>
<td>4 Network Access Services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Intrastate</td>
<td>1,949,502</td>
<td>1,949,502</td>
</tr>
<tr>
<td>6 Interstate</td>
<td>4,368,695</td>
<td>4,368,695</td>
</tr>
<tr>
<td>7 Miscellaneous</td>
<td>364,500</td>
<td>110,800</td>
</tr>
<tr>
<td>8 Less: Uncollectible Revenue</td>
<td>(17,300)</td>
<td>(17,300)</td>
</tr>
<tr>
<td>9 Total Oper. Revenue</td>
<td>15,172,226</td>
<td>4,479,495</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPERATING EXPENSES</th>
<th>VOLCANO</th>
<th>CD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL COMPANY</td>
<td>INTERSTATE</td>
</tr>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
</tr>
<tr>
<td>10 Plant Specific</td>
<td>2,337,100</td>
<td>663,566</td>
</tr>
<tr>
<td>11 Plant Non-Specific (less depr.)</td>
<td>1,767,300</td>
<td>481,548</td>
</tr>
<tr>
<td>12 Customer Operations</td>
<td>735,700</td>
<td>189,331</td>
</tr>
<tr>
<td>13 Corporate Operations</td>
<td>2,239,000</td>
<td>633,852</td>
</tr>
<tr>
<td>14 Subtotal</td>
<td>7,079,100</td>
<td>1,968,297</td>
</tr>
<tr>
<td>15 Depreciation &amp; Amortization</td>
<td>4,128,533</td>
<td>1,199,603</td>
</tr>
<tr>
<td>16 Other Taxes</td>
<td>223,000</td>
<td>60,530</td>
</tr>
<tr>
<td>17 State Income Taxes</td>
<td>288,847</td>
<td>99,635</td>
</tr>
<tr>
<td>18 Federal Income Taxes</td>
<td>1,012,740</td>
<td>349,336</td>
</tr>
<tr>
<td>19 Total Oper. Expense</td>
<td>12,732,220</td>
<td>3,677,401</td>
</tr>
<tr>
<td>20 Net Revenues</td>
<td>2,440,006</td>
<td>802,094</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AVERAGE RATE BASE</th>
<th>VOLCANO</th>
<th>CD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL COMPANY</td>
<td>INTERSTATE</td>
</tr>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
</tr>
<tr>
<td>21 Telephone Plant-in-Service</td>
<td>75,238,972</td>
<td>20,568,981</td>
</tr>
<tr>
<td>22 Tel. Plant Under Construct.</td>
<td>2,200,000</td>
<td>601,440</td>
</tr>
<tr>
<td>23 Material &amp; Supplies</td>
<td>499,500</td>
<td>125,252</td>
</tr>
<tr>
<td>24 Working Cash</td>
<td>802,000</td>
<td>487,400</td>
</tr>
<tr>
<td>26 Def. Taxes</td>
<td>(1,996,550)</td>
<td>(548,173)</td>
</tr>
<tr>
<td>27 Customer Deposit</td>
<td>(14,363)</td>
<td>(3,927)</td>
</tr>
<tr>
<td>28 Total Rate Base</td>
<td>28,528,338</td>
<td>7,719,110</td>
</tr>
<tr>
<td>29 Rate of Return</td>
<td>8.55%</td>
<td>10.39%</td>
</tr>
</tbody>
</table>
### Operating Revenues:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed CD</th>
<th>Proposed AMOUNT</th>
<th>Percentage Difference</th>
<th>Amount Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Local Network Services</td>
<td>3,338,220</td>
<td>3,375,474</td>
<td>-1.10%</td>
<td>3,375,474</td>
</tr>
<tr>
<td>2</td>
<td>Local Service - CHCF - A</td>
<td>2,984,138</td>
<td>2,364,982</td>
<td>26.18%</td>
<td>2,364,982</td>
</tr>
<tr>
<td>3</td>
<td>Interstate USF</td>
<td>2,920,787</td>
<td>2,344,711</td>
<td>24.57%</td>
<td>2,344,711</td>
</tr>
<tr>
<td>4</td>
<td>Network Access Services:</td>
<td>-</td>
<td>(707)</td>
<td>-0.04%</td>
<td>1,950,209</td>
</tr>
<tr>
<td>5</td>
<td>Miscellaneous</td>
<td>253,700</td>
<td>253,700</td>
<td>0.00%</td>
<td>253,700</td>
</tr>
</tbody>
</table>

#### Total Operating Revenue:

| Proposed CD | 11,429,047 | 10,280,676 | 1,148,371 | 11.17% | 10,280,676 |

### Operating Expenses:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed CD</th>
<th>Proposed AMOUNT</th>
<th>Percentage Difference</th>
<th>Amount Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Plant Specific</td>
<td>1,673,534</td>
<td>1,662,662</td>
<td>0.65%</td>
<td>1,662,662</td>
</tr>
<tr>
<td>11</td>
<td>Plant Non-Specific (less depr.)</td>
<td>1,285,752</td>
<td>884,629</td>
<td>45.34%</td>
<td>884,629</td>
</tr>
<tr>
<td>12</td>
<td>Customer Operations</td>
<td>546,369</td>
<td>567,433</td>
<td>-3.71%</td>
<td>567,433</td>
</tr>
<tr>
<td>13</td>
<td>Corporate Operations</td>
<td>1,605,148</td>
<td>1,416,817</td>
<td>13.29%</td>
<td>1,416,817</td>
</tr>
</tbody>
</table>

#### Subtotal:

| Proposed CD | 5,110,803 | 4,531,541 | 579,262 | 12.78% | 4,531,541 |

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed CD</th>
<th>Proposed AMOUNT</th>
<th>Percentage Difference</th>
<th>Amount Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Depreciation &amp; Amortization</td>
<td>2,928,930</td>
<td>2,723,638</td>
<td>7.54%</td>
<td>2,723,638</td>
</tr>
<tr>
<td>16</td>
<td>Other Taxes</td>
<td>162,470</td>
<td>162,470</td>
<td>0.00%</td>
<td>162,470</td>
</tr>
<tr>
<td>17</td>
<td>State Income Taxes</td>
<td>254,302</td>
<td>222,141</td>
<td>14.48%</td>
<td>222,141</td>
</tr>
<tr>
<td>18</td>
<td>Federal Income Taxes</td>
<td>891,622</td>
<td>778,859</td>
<td>14.48%</td>
<td>778,859</td>
</tr>
</tbody>
</table>

#### Total Operating Expense:

| Proposed CD | 9,348,127 | 8,418,649 | 929,478 | 11.04% | 8,418,649 |

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed CD</th>
<th>Proposed AMOUNT</th>
<th>Percentage Difference</th>
<th>Amount Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Net Revenues</td>
<td>2,080,920</td>
<td>1,862,027</td>
<td>11.76%</td>
<td>1,862,027</td>
</tr>
</tbody>
</table>

### Average Rate Base:

| Proposed CD | - | - | - | - | - |

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed CD</th>
<th>Proposed AMOUNT</th>
<th>Percentage Difference</th>
<th>Amount Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Telephone Plant-in-Service</td>
<td>54,669,991</td>
<td>50,503,109</td>
<td>8.25%</td>
<td>50,503,109</td>
</tr>
<tr>
<td>22</td>
<td>Tel. Plant Under Construction</td>
<td>1,598,560</td>
<td>1,549,127</td>
<td>3.19%</td>
<td>1,549,127</td>
</tr>
<tr>
<td>23</td>
<td>Material &amp; Supplies</td>
<td>374,248</td>
<td>297,024</td>
<td>26.00%</td>
<td>297,024</td>
</tr>
<tr>
<td>24</td>
<td>Working Cash</td>
<td>314,600</td>
<td>273,621</td>
<td>14.98%</td>
<td>273,621</td>
</tr>
<tr>
<td>25</td>
<td>Less: Deprec. Res.</td>
<td>(34,689,358)</td>
<td>(32,832,760)</td>
<td>5.65%</td>
<td>(32,832,760)</td>
</tr>
<tr>
<td>26</td>
<td>Def. Taxes</td>
<td>(1,448,377)</td>
<td>(1,154,144)</td>
<td>25.49%</td>
<td>(1,154,144)</td>
</tr>
<tr>
<td>27</td>
<td>Customer Deposit</td>
<td>(10,436)</td>
<td>(10,198)</td>
<td>2.33%</td>
<td>(10,198)</td>
</tr>
</tbody>
</table>

#### Total Rate Base:

| Proposed CD | 20,809,228 | 18,625,778 | 2,183,450 | 11.72% | 18,625,779 |

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed CD</th>
<th>Proposed AMOUNT</th>
<th>Percentage Difference</th>
<th>Amount Adopted</th>
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</thead>
<tbody>
<tr>
<td>29</td>
<td>Rate of Return</td>
<td>10.00%</td>
<td>10.00%</td>
<td>10.00%</td>
<td>10.00%</td>
</tr>
</tbody>
</table>
APPENDIX D
VOLCANO TELEPHONE COMPANY
NET-TO-GROSS MULTIPLIER

<table>
<thead>
<tr>
<th></th>
<th>Gross revenue</th>
<th>1.00000</th>
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<tbody>
<tr>
<td>2</td>
<td>Uncollectible</td>
<td>0.00000</td>
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<tr>
<td>3</td>
<td>Net Revenues</td>
<td>1.00000</td>
</tr>
<tr>
<td>4</td>
<td>State Income Tax (Tax Rate times Ln.3)</td>
<td>8.84%</td>
</tr>
<tr>
<td>5</td>
<td>Federal Taxable Income (Ln.3 Less Ln.4)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Federal Income Tax (Tax Rate time Ln. 5)</td>
<td>34.00%</td>
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<tr>
<td>7</td>
<td>Net Income (Ln.5 Less Ln.6)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><strong>Net-To-Gross Multiplier</strong> (Ln.1 Divided by Ln.7)</td>
<td></td>
</tr>
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Intrastate Revenue Requirement

<p>| | | |</p>
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<thead>
<tr>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>9</td>
<td>Adopted State Rate Base</td>
<td>18,629,139</td>
</tr>
<tr>
<td>10</td>
<td>Net Revenues adopted at 10.00% (Ln.9 Times 10%)</td>
<td>1,862,914</td>
</tr>
<tr>
<td>11</td>
<td>Net Revenue In Test Year 2008 at Present Rates</td>
<td>2,127,229</td>
</tr>
<tr>
<td>12</td>
<td>Change in Net Revenues (Ln.10 Less Ln.11)</td>
<td>(264,315)</td>
</tr>
<tr>
<td>13</td>
<td><strong>GROSS REVENUE CHANGE REQUIRED</strong> (Ln.12 time Ln.8)</td>
<td>(439,310)</td>
</tr>
</tbody>
</table>

CHCF-A SUPPORT

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>14</td>
<td>2008 CHCF-A SUPPORT AT PRESENT RATES</td>
</tr>
<tr>
<td>15</td>
<td><strong>2008 CHCF-A SUPPORT ADJUSTED</strong> (Ln.14 + Ln.13)</td>
</tr>
<tr>
<td>16</td>
<td>IMPACT OF DIFFERENCE BETWEEN PROPOSED &amp; PRESENT RATES, USF PAYMENT UPDATE &amp; CORRESPONDING TAX EFFECT</td>
</tr>
<tr>
<td>17</td>
<td><strong>2008 CHCF-A SUPPORT BEFORE MISCELLANEOUS</strong> (Ln.15 + Ln.16)</td>
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INTRASTATE REVENUE REQUIREMENT ADJUSTMENT

<p>| | |</p>
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<tbody>
<tr>
<td>18</td>
<td>MISCELLANEOUS INTRASTATE REVENUE REQUIREMENT ADJ.</td>
</tr>
<tr>
<td>19</td>
<td><strong>TOTAL ADOPTED 2008 CHCF-A SUPPORT</strong> (Ln. 17 + Ln. 18)</td>
</tr>
</tbody>
</table>
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