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**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**Communications Division  
Licensing, Tariffs, Rural Carriers and Cost Support Branch**

**RESOLUTION T- 17108  
November 1, 2007**

**R E S O L U T I O N**

**Resolution T- 17108. Volcano Telephone Company. (U-1019-C). General Rate Case Filing In Compliance With G. O. 96-A, Paragraph VI; And To Grandfather Private Line services in Cal P.U.C. Schedule No. G-1.**

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.

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**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.

The California Public Utilities Commission (Commission), in D.01-05-031, set in motion the waterfall provision in 2002 for the then six small ILECs that did not file a GRC by end of 2001. In response to that decision, Volcano filed a GRC on December 20, 2001 for test year 2003.

## **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 ( $r^2$ ) 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  $r^2$  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  $r^2$  ranging between "0" and "1" indicate the strength of the relation. Typically, an  $r^2$  of less than 0.50 indicates a weak relation, whereas an  $r^2$  of 0.80 or more points to a strong explanatory relation. Using its methodology, Volcano estimated a 34% growth in billing units, with an  $r^2$  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)<sup>1</sup> 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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<sup>1</sup> <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)<sup>2</sup> 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;

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<sup>2</sup> 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.<sup>3</sup> To determine the three year average, CD used the

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<sup>3</sup> 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<sup>4</sup> 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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<sup>4</sup> 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:

<u>Year</u>	<u>Labor</u>	<u>Non-labor</u>
2004	3.5%	5.8%
2005	3.5%	5.5%
2006	3.75%	5.5%
2007	3.2%	1.7%
2008	1.5%	1.6%

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<sup>5</sup>, 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

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<sup>5</sup> 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”<sup>6</sup> 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)<sup>8</sup> 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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<sup>6</sup> 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.

<sup>7</sup> 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.

<sup>8</sup> 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;

- 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.
14. Volcano is authorized an amount of \$1,985,385 in CHCF-A support for 2008.

Resolution T- 17108  
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:

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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**

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

Resolution T- 17108  
Volcano AL 335/ma1

**APPENDIX B**  
**VOLCANO TELEPHONE COMPANY**  
**RESULTS OF OPERATIONS TEST YEAR 2008 AT PRESENT RATE**  
**IN INTERSTATE AND INTRASTATE**

	VOLCANO			CD		
	TOTAL	INTERSTATE	INTRASTATE	TOTAL	INTERSTATE	INTRASTATE
	COMPANY (A)	(B)	(C)	COMPANY (D)	(E)	(F)
<b>OPERATING REVENUES</b>						
1 Local Network Services	3,287,398		3,287,398	3,306,422		3,306,422
2 Local Service - CHCF - A	2,298,644		2,298,644	2,298,644		2,298,644
3 Interstate USF	2,920,787		2,920,787	2,920,787		2,920,787
4 Network Access Services:						
5 Intrastate	1,949,502		1,949,502	1,950,209		1,950,209
6 Interstate	4,368,695	4,368,695	-	4,368,695	4,368,695	-
7 Miscellaneous	364,500	110,800	253,700	364,500	110,800	253,700
8 Less: Uncollectible Revenue	(17,300)		(17,300)	(8,300)		(8,300)
<b>9 Total Oper. Revenue</b>	<b>15,172,226</b>	<b>4,479,495</b>	<b>10,692,731</b>	<b>15,200,957</b>	<b>4,479,495</b>	<b>10,721,462</b>
<b>OPERATING EXPENSES</b>						
10 Plant Specific	2,337,100	663,566	1,673,534	2,321,917	659,255	1,662,662
11 Plant Non-Specific (less depr.)	1,767,300	481,548	1,285,752	1,215,946	331,317	884,629
12 Customer Operations	735,700	189,331	546,369	764,063	196,630	567,433
13 Corporate Operations	2,239,000	633,852	1,605,148	1,976,299	559,482	1,416,817
14 <b>Subtotal</b>	<b>7,079,100</b>	<b>1,968,297</b>	<b>5,110,803</b>	<b>6,278,225</b>	<b>1,746,685</b>	<b>4,531,540</b>
15 Depreciation & Amortization	4,128,533	1,199,603	2,928,930	3,839,160	1,115,522	2,723,638
16 Other Taxes	223,000	60,530	162,470	223,000	60,530	162,470
17 State Income Taxes	288,847	99,635	189,212	387,764	126,658	261,106
18 Federal Income Taxes	1,012,740	349,336	663,404	1,359,561	444,083	915,478
<b>19 Total Oper. Expense</b>	<b>12,732,220</b>	<b>3,677,401</b>	<b>9,054,819</b>	<b>12,087,710</b>	<b>3,493,477</b>	<b>8,594,233</b>
<b>20 Net Revenues</b>	<b>2,440,006</b>	<b>802,094</b>	<b>1,637,912</b>	<b>3,113,247</b>	<b>986,018</b>	<b>2,127,229</b>
<b>AVERAGE RATE BASE</b>						
21 Telephone Plant-in-Service	75,238,972	20,568,981	54,669,991	69,504,346	19,001,237	50,503,109
22 Tel. Plant Under Construct.	2,200,000	601,440	1,598,560	2,131,968	582,841	1,549,127
23 Material & Supplies	499,500	125,252	374,248	396,431	99,407	297,024
24 Working Cash	802,000	487,400	314,600	706,588	429,605	276,983
25 Less: Deprec. Res.	(48,201,221)	(13,511,863)	(34,689,358)	(45,621,459)	(12,788,699)	(32,832,760)
26 Def. Taxes	(1,996,550)	(548,173)	(1,448,377)	(1,590,958)	(436,814)	(1,154,144)
27 Customer Deposit	(14,363)	(3,927)	(10,436)	(14,036)	(3,838)	(10,198)
<b>28 Total Rate Base</b>	<b>28,528,338</b>	<b>7,719,110</b>	<b>20,809,228</b>	<b>25,512,880</b>	<b>6,883,741</b>	<b>18,629,139</b>
<b>29 Rate of Return</b>	<b>8.55%</b>	<b>10.39%</b>	<b>7.87%</b>	<b>12.20%</b>	<b>14.32%</b>	<b>11.42%</b>

**APPENDIX C  
VOLCANO TELEPHONE COMPANY  
INTRASTATE RESULTS OF OPERATIONS  
FOR 2008 TEST YEAR AT ADOPTED RATES**

	VOLCANO PROPOSED	CD PROPOSED	AMOUNT (C)=(A)-(B)	UTILITY EXCEED STAFF PERCENTAGE DIFFERENCE (D)	ADOPTED (Prior to Misc. Revenue Req. Adj. for Depreciation) (E)
	(A)	(B)		(D)	(E)
<b>OPERATING REVENUES:</b>					
1 Local Network Services	3,338,220	3,375,474	(37,254)	-1.10%	3,375,474
2 Local Service - CHCF - A	2,984,138	2,364,982	619,156	26.18%	2,364,982
3 Interstate USF	2,920,787	2,344,711	576,076	24.57%	2,344,711
4 Network Access Services:			-		
5 Intrastate	1,949,502	1,950,209	(707)	-0.04%	1,950,209
6 Interstate	-	-	-		-
7 Miscellaneous	253,700	253,700	-	0.00%	253,700
8 Less: Uncollectible Revenue	(17,300)	(8,400)	(8,900)	105.95%	(8,400)
9 <b>Total Oper. Revenue</b>	<u>11,429,047</u>	<u>10,280,676</u>	<u>1,148,371</u>	<u>11.17%</u>	<u>10,280,676</u>
<b>OPERATING EXPENSES:</b>					
10 Plant Specific	1,673,534	1,662,662	10,872	0.65%	1,662,662
11 Plant Non-Specific (less depr.)	1,285,752	884,629	401,123	45.34%	884,629
12 Customer Operations	546,369	567,433	(21,064)	-3.71%	567,433
13 Corporate Operations	1,605,148	1,416,817	188,331	13.29%	1,416,817
14 <b>Subtotal</b>	<u>5,110,803</u>	<u>4,531,541</u>	<u>579,262</u>	<u>12.78%</u>	<u>4,531,541</u>
15 Depreciation & Amortization	2,928,930	2,723,638	205,292	7.54%	2,723,638
16 Other Taxes	162,470	162,470	-	0.00%	162,470
17 State Income Taxes	254,302	222,141	32,161	14.48%	222,141
18 Federal Income Taxes	891,622	778,859	112,763	14.48%	778,859
19 <b>Total Oper. Expense</b>	<u>9,348,127</u>	<u>8,418,649</u>	<u>929,478</u>	<u>11.04%</u>	<u>8,418,649</u>
20 <b>Net Revenues</b>	<u>2,080,920</u>	<u>1,862,027</u>	<u>218,893</u>	<u>11.76%</u>	<u>1,862,027</u>
<b>AVERAGE RATE BASE</b>					
21 Telephone Plant-in-Service	54,669,991	50,503,109	4,166,882	8.25%	50,503,109
22 Tel. Plant Under Construction	1,598,560	1,549,127	49,433	3.19%	1,549,127
23 Material & Supplies	374,248	297,024	77,224	26.00%	297,024
24 Working Cash	314,600	273,621	40,979	14.98%	273,621
25 Less: Deprec. Res.	(34,689,358)	(32,832,760)	(1,856,598)	5.65%	(32,832,760)
26 Def. Taxes	(1,448,377)	(1,154,144)	(294,233)	25.49%	(1,154,144)
27 Customer Deposit	(10,436)	(10,198)	(238)	2.33%	(10,198)
28 <b>Total Rate Base</b>	<u>20,809,228</u>	<u>18,625,778</u>	<u>2,183,450</u>	<u>11.72%</u>	<u>18,625,779</u>
29 <b>Rate of Return</b>	<u>10.00%</u>	<u>10.00%</u>			<u>10.00%</u>

**APPENDIX D  
 VOLCANO TELEPHONE COMPANY  
 NET-TO-GROSS MULTIPLIER**

1	Gross revenue		1.00000
2	Uncollectible		0.00000
3	Net Revenues		1.00000
4	State Income Tax (Tax Rate times Ln.3)	8.84%	0.08840
5	Federal Taxable Income (Ln.3 Less Ln.4)		0.91160
6	Federal Income Tax (Tax Rate time Ln. 5)	34.00%	0.30994
7	Net Income (Ln.5 Less Ln.6)		0.60166
8	<b>Net-To-Gross Multiplier</b> (Ln.1 Divided by Ln.7)		<b>1.66207</b>

**Intrastate Revenue Requirement**

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

**~~CHCF-A SUPPORT~~**

14	2008 CHCF-A SUPPORT AT PRESENT RATES		2,298,644
15	<b>2008 CHCF-A SUPPORT ADJUSTED</b> (Ln.14 + Ln.13)		<b>1,859,334</b>
16	<b>IMPACT OF DIFFERENCE BETWEEN PROPOSED &amp; PRESENT RATES, USF PAYMENT UPDATE &amp; CORRESPONDING TAX EFFECT</b>		505,648
17	<b>2008 CHCF-A SUPPORT BEFORE MISCELLANEOUS</b> (Ln.15 + Ln.16) <b>INTRASTATE REVENUE REQUIREMENT ADJUSTMENT</b>		<b><u>2,364,982</u></b>
18	<b>MISCELLANEOUS INTRASTATE REVENUE REQUIREMENT ADJ.</b>		(379,597)
19	<b>TOTAL ADOPTED 2008 CHCF-A SUPPORT</b> (Ln. 17 + Ln. 18)		<b><u>1,985,385</u></b>