

LOST IN TRANSLATION:

**How Rate of Return Regulation Transformed the
Universal Service Fund for Consumers into
Corporate Welfare for the RLECs**

February 2004



ECONOMICS AND TECHNOLOGY, INC.

TWO CENTER PLAZA, SUITE 400 • BOSTON, MASSACHUSETTS 02108

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Preface

LOST IN TRANSLATION:

How Rate of Return Regulation Transformed the Universal Service Fund for Consumers into Corporate Welfare for the RLECs

The most recent projections for the FCC's "high cost" universal service funding ("USF") system reveal projected demand for 2004 of \$3.6-billion – almost \$2-billion more than the \$1.7-billion disbursed in 1999. The vast majority of the support (in excess of \$2.5-billion) will be paid to Rural incumbent LECs. The primary mission of USF is to ensure that the rates for basic telephone service in the rural regions of the U.S. will continue to be affordable by keeping them "reasonably comparable" to the rates prevailing in lower-cost areas of the country. While the intent is clearly to promote the welfare of telephone service *subscribers*, the program's funds are disbursed to the *carriers* providing service in the rural high-cost service territories.

Most of the Rural ILECs have been operating under traditional rate base, rate of return regulation for decades. It is generally accepted by economists and regulators that a firm regulated under an ROR framework faces incentives to increase and/or overstate its costs, and is discouraged from operating efficiently. Because the high-cost USF system is also based on these regulatory accounts, to the extent that the Rural ILECs are operating inefficiently and/or inflating their costs, the high-cost payments will be unnecessarily high.

It is in this context, Economics and Technology, Inc. was asked by Western Wireless to review the effects that rate of return regulation and the federal high cost fund mechanisms have had upon the Rural ILECs, and the implications of those findings for the size of the federal universal service High Cost Fund. ETI's study demonstrates that rate of return regulation has induced inefficiencies into the RLECs operations, and that the federal HCF mechanism has become a form of *corporate welfare* assuring the continuation of those inefficiencies. This report was prepared under the overall direction of Susan M. Gately, Senior Vice President, and Scott C. Lundquist, Vice President. Contributing to the report were Elizabeth P. Tuff and Colin B. Weir, respectively Senior Consultant and Analyst at ETI. The views expressed in this study are those of ETI, and do not necessarily reflect the views of Western Wireless.

February, 2004

Economics and Technology, Inc.
Boston, Massachusetts 02108 USA

Executive Summary

LOST IN TRANSLATION:

How Rate of Return Regulation Transformed the Universal Service Fund for Consumers into Corporate Welfare for the RLECs

The primary mission of the FCC’s “high cost” universal service funding (“USF”) system is to ensure that the rates for basic telephone service in the relatively high-cost, rural regions of the U.S. will continue to be affordable by keeping them “reasonably comparable” to the rates prevailing in lower-cost areas of the country. While the intent is clearly to promote the welfare of telephone service *subscribers*, the program's funds are disbursed to the *carriers* providing service in the rural high-cost service territories. In 2003, some \$3.3-billion in high-cost USF support was channeled to local exchange carriers (“LECs”), the vast majority of which was paid to Rural incumbent LECs (“ILECs”).

The Rural ILECs encompass approximately 1400 separate operating units, including several hundred small, privately held companies as well as the units owned by a few holding companies such as CenturyTel and TDS. Most of the Rural ILECs have been operating under traditional rate base, rate of return regulation (“RORR”) for decades. It is generally accepted by economists and regulators who have examined the issue that a firm regulated under an RORR framework faces incentives to increase and/or overstate its costs, and is discouraged from operating efficiently. Because the high-cost USF system is also based on the regulatory accounts of companies under RORR, to the extent that the Rural ILECs are operating inefficiently and/or inflating their costs, the high-cost payments will be unnecessarily high.

In that case, funds that are collected from other industry participants and paid into the high-cost USF system will become “lost in translation:” that is, instead of helping to keep rural telephone rates more affordable and thus benefitting rural consumers, those funds will become diverted to subsidizing the Rural ILECs and thereby institutionalizing their inefficiencies. This Report addresses that prospect, by examining the operating performance of the Rural ILECs and its linkages to both the RORR framework and the cost-based nature of the federal high-cost USF system.

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Our overall conclusion is that Rural ILEC inefficiencies are substantial and are draining away enormous amounts of the federal high-cost funds. Thus, the high-cost USF mechanism has devolved from a system designed to ensure affordable rates for consumers to something closer to corporate welfare for the Rural ILECs. Our principal findings in support of this conclusion are as follows:

- We have calculated conservative “best-in-class” benchmarks for Rural ILECs’ Corporate Operations expense, using year 2002 data from NECA that spans 90% of the loops supplied by Rural ILECs under rate-of-return regulation. We assumed that the “best-in-class” are the top-performing 25 percent within their size-based group. The total amount of claimed expense above the benchmark level provides a reasonable indication of the degree of inefficiency prevailing in the Rural ILECs’ corporate overheads. Out of a total Corporate Operations expense of \$1.655-billion, some \$545.0-million, or 32.9%, are expenses beyond the benchmark level estimated by the trend line. Thus about one-third of the Rural ILECs’ claimed Corporate Operations expenses are being incurred in an inefficient manner. Expressed another way, the Rural ILECs are reporting total corporate overhead expenses that are inflated by nearly fifty percent above the presumably efficient level of \$1.11-billion in aggregate.
- The FCC’s High Cost Loop (“HCL”) support mechanism attempts to limit the impact of inflated Corporate Operations expenses claimed by Rural ILECs, but the expense cap adopted by the FCC is not very effective. The FCC cap excludes only 23% of the corporate overhead costs that exceed the efficient level determined by our benchmarking. Consequently, the FCC cap allows the lion’s share, some 77%, of those inefficiently-incurred expenses to enter into the HCL support calculations. While we have not attempted to precisely quantify the impact of those inefficiencies on the HCL payments, it is clear that they will have a significant impact.
- An examination of more detailed operating data for 140 Rural ILECs operating in Ohio, Texas, and Wisconsin confirms that many Rural ILECs are claiming excessively high levels of corporate overheads that may be attributed to inefficiency, waste, or even outright fraud. A review of workforce data for the Texas carriers provides further corroboration by identifying certain Rural ILECs with unusually high numbers of management and executive personnel. A conservative analysis demonstrates that adjusting those corporate overheads to more efficient levels would put many Rural ILECs into an overearnings condition (e.g., in the 20% range for return on rate base). Absent more aggressive exercise of RORR regulation – which regulators have been unable or unwilling to pursue – these inefficiencies are flowing into the federal USF system and resulting in inflated support payments.
- The cost-based nature of the high-cost USF system creates strong disincentives that deter Rural ILECs from consolidating to obtain larger scale operations and thereby reduce their costs. Instead of encouraging efficient consolidations, the funding mechanism skews the disbursement of universal service support disproportionately to the smallest Rural ILECs. Considered in aggregate, Rural ILECs sized between zero and 50,000 lines receive over 75% of the HCL

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support payouts, while serving half of the loops. When Local Switching Support (“LSS”) funds are factored in, the average per-loop annual payment to the under 50,000 line carriers for LSS and HCL combined is \$240 – more than four times greater than the support being paid to carriers sized between 100,000 and 350,000 lines.

- The incentives to inefficiencies inherent within rate of return regulation are compounded by the unwillingness or inability of regulators to scrutinize the RLECs’ accounts to the degree necessary to prevent substantial errors or misstatements. A unique brand of rate of return regulation is being applied to RLECs – one with minimal financial reporting and almost no actual regulatory oversight. The lack of oversight encourages and rewards operational inefficiencies in the rural ILECs themselves, and is also an inefficient and ineffective regulatory device for regulators. Federal regulators do not regularly review RLEC earnings, and in those limited cases where it is possible to review RLEC earnings, those reported earnings raise questions of their own. RLEC earnings results reported to the FCC for 2002 range from -13.3% to +23.6%. State regulators, who in some cases have in excess of 25, 50, or more than 100 RLEC study areas within their jurisdictions, have little incentive, and frequently insufficient resources to maintain the necessary level of regulatory oversight.

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1 | INTRODUCTION

In all, there are about 1400 local telephone companies in the United States. About 92% of the nation's 160-million phone lines are served by the four regional Bell companies (RBOCs). The remaining 8% – roughly 12.8-million lines – are split up among some 1400 separate operating units. Many of these are owned by a few holding companies – Sprint, Frontier, Citizens, CenturyTel, and TDS – while the rest are independent, privately held companies.

Rural incumbent local exchange carriers (RLECs) confront operating conditions that result in cost levels that are generally well in excess of those being experienced by the Bells. There are three principal sources of this cost disparity: First, RLECs serve communities characterized by extremely low population density. The average distance between the RLEC's central office and its subscribers is typically much greater than for urban areas, and the number of customers available to share the costs of these long distribution cable runs is typically fairly small. Second, the individual operating companies themselves are relatively small, ranging from as little as a hundred lines to perhaps a hundred thousand lines, whereas individual Bell company operating units, such as SBC's Pacific Bell or Verizon's New York company may serve upwards of ten million subscribers. Because these small rural telcos have remained so small despite the significant consolidation that has occurred throughout the rest of the US telecommunications industry many of them do not have access to the enormous economies of scale that the RBOCs routinely enjoy, their per-customer cost is necessarily elevated.

While these sources of increased costs may be an inescapable consequence of the low density and small operating scale characteristics of many RLECs,¹ the third source of high RLEC cost can be traced directly and inexorably to fundamental defects in the manner in which these firms are regulated. Rather than encourage RLECs to pursue productivity growth and improved operating

1. The ability of many of the RLECs to operate at a very small scale that may be sub-optimal is, as discussed further in the report, one of the inefficient consequences of an RORR-based system.

efficiency, the processes of state and federal regulation work to *reward inefficient conduct* and in so doing deny rural telephone consumers many of the efficiency gains and service improvements that their urban counterparts have come to expect. The costs of these regulatory shortcomings are not confined to rural areas because, through the so-called “Universal Service” funding mechanism (USF), the effects of these inefficiencies are being systematically shifted to wireline and wireless telephone service consumers throughout the rest of the country. The Universal Service funding mechanism has evolved from a system designed to ensure affordable rates for consumers to something closer to corporate welfare for the RLECs.

Although the USF high cost funding mechanism channeled some \$3-billion in subsidy support to carriers in 2003, it is not our purpose here to question the concept of Universal Service *per se*. Universal connectivity to the nation’s telephone network benefits all subscribers, urban and rural. Without a national high-cost support mechanism, local phone service in certain rural areas might be unaffordable by many households. However, there is no valid public policy basis for a high-cost support mechanism that subsidizes and thereby encourages inefficiency.

Institutionalized inefficiency

Rural telcos are nominally regulated under a system known generally as “rate of return regulation” (RORR). Under RORR, the regulated firm is entitled to be reimbursed (through rates or support payments) for all ongoing operating costs together with the right to recovery of its investments in plant and equipment and a “reasonable return” thereon. Often referred to as “cost-plus” regulation, RORR has been said to reward inefficiency while penalizing firms for engaging in cost reduction efforts. Universal service funding for all ILECs had as its basis, the same embedded cost accounting used for RORR. As we discuss further on, it is possible that these system-induced inefficiencies have resulted in the USF-funding requirements being bloated by as much as \$1-Billion.

The fact that RORR, based upon “embedded” accounting costs as recorded on the utility’s books, results in inefficient operations has been well documented by economists of every stripe in regulatory proceedings involving virtually every regulated utility industry over the last twenty years.² The FCC itself has reached that conclusion when it acted to replace rate of return-based regulation with a price cap form of regulation, initially for AT&T,³ and about a year later for the

2. See, eg., Harvey Averch and Leland L. Johnson, *Behavior of the Firm Under Regulatory Constraint*, The American Economic Review, Vol. 52, No. 5, December 1962, 1052-1069; Harvey Leibenstein, *Allocative Efficiency vs. “X-Efficiency,”* The American Economic Review, Vol. 56, No. 3, June 1966, 392-415; and Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions, Volume II*, John Wiley and Sons, 1970, chapter 2.

3. *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, *Report and Order and Second Further Notice*, FCC 89-91, 4 FCC Rcd 2873 (1989).

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Tier 1 incumbent local exchange carriers (ILECs).⁴ When universal service high cost funding is also based on the regulatory accounts of companies under RORR, the inefficiencies in operations and investments born of these perverse regulatory incentives become the foundation for a bloated universal service fund.

In 1997, the Commission replaced the then-existing embedded cost basis for the Tier 1 ILEC Universal Service high cost funding mechanism with a new system tied to forward-looking costs.⁵ Among other things, the Commission recognized that a system that paid high-cost support based on embedded costs would interfere with the development of competition.⁶ However, as to the regulation of *Rural ILECs*, while acknowledging the problems inherent in rate of return regulation on numerous occasions, the FCC has repeatedly, in proceeding after proceeding, avoided confronting those problems. Rather, federal regulators have, through ever-growing Universal Service High Cost Fund (HCF) payments to the Rural ILECs, effectively *institutionalized* the inefficiencies inherent in rate of return regulation.

The incentives to inefficiencies inherent within rate of return regulation are compounded by the unwillingness or inability of regulators to scrutinize the RLECs' accounts to the degree necessary to prevent substantial errors or misstatements. When the Bell companies were subject to RORR, they were required to provide federal and state regulators with highly detailed financial reports and accounting data. Applications for rate increases were typically subject to intense regulatory scrutiny, and certain expenses and investment costs might be "disallowed" if their appropriateness or reasonableness could be not adequately justified. Ironically, while most RLECs continue to be subject to RORR, they are generally *not* subject to anywhere near the same level of financial reporting requirements as had applied to the large ILECs in the past. In the interstate jurisdiction, only the largest of the Rural ILECs are even required to file data directly with the FCC – of the approximately 1,400 RORR RLECs operating across the country, only 47 of them file FCC Form 492 rate of return reports with the Commission.⁷ The remaining 97% of the RORR Rural ILECs file their interstate "cost" data with their own industry association – the National Exchange Carrier Association (NECA) – a body managed entirely by and on behalf of the Rural ILECs. NECA compiles the cost data and files with the Commission, but does not provide the necessary revenue

4. *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, *Second Report and Order*, FCC 90-314, 5 FCC Rcd 6786 (1990).

5. *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, *Report and Order*, FCC 97-157, 12 FCC Rcd 8776 ("*Universal Service Report and Order*").

6. *Id.* 12 FCC Rcd 8776, at 8900-8901, paras. 227-229.

7. Industry Analysis Division, Federal Communications Commission, *Interstate Rates of Return for Local Exchange Carriers*, December 2002.

data to the Commission to allow it to determine the earnings levels of the individual RORR RLECS.⁸

Thus, interstate access services of the Rural ILECs continue to be nominally regulated by the FCC on a rate of return basis, but in practice hardly at all. Following the FCC's lead, most state regulators also continue to nominally utilize RORR for RLECs, even where an alternative regulatory mechanism has been adopted for the larger ILECs in the state. In reality – and compounding the problem – even this form of “regulation” of these small carriers in many cases applies in name only, with no operative “regulation” or even substantive regulatory oversight actually taking place.

Rate of Return Regulation of the 1400 RLECs results in an unduly burdensome system.

The FCC appears to be relying upon state regulators to police the overall operations of the RLECs to which it is funneling approximately \$3-billion per year. In many of the states in which rural carriers are most prevalent, the sheer number of carriers makes it difficult for understaffed state regulators to be able to review carrier operations with anything approaching an eagle eye. For example, the Iowa Utilities Board oversees 152 rural ILECs in addition to the single large carrier operating in its territory – Qwest. The PUC of Texas (PUC-T) has jurisdiction over 55 rural ILECs and two larger carriers (SBC, GTE/Verizon). The story told by these numbers is repeated in jurisdictions across the country: Wisconsin has 88 rural ILECs and two non-rural ILECs (SBC-Ameritech, Verizon); Mississippi has 18 rural ILECs and one non-rural ILEC (BellSouth). Moreover, looked at from the state regulators' perspective, as long as the rural ILECs are providing adequate service and are not seeking rate increases on their intrastate services, there is little reason to interfere with or investigate those carrier's operations.

The unique brand of rate of return regulation being applied to rural ILECs – with minimal financial reporting and almost no actual regulatory oversight – not only encourages and rewards operational inefficiencies in the rural ILECs themselves, but is also an inefficient and ineffective regulatory device for regulators as well. To work properly, RORR requires detailed review of cost and operational data, pricing structures, investment and depreciation levels, and myriad other issues. All other concerns with RORR aside, it is simply not a practical method for the regulation of close to 1400 separate corporate entities by a single federal agency. It is impossible to look at the present USF funding mechanism, and the tremendous growth in the level of funds flowing out of the pockets of US consumers and into the coffers of rural telcos, without seeing that the present system is broken.

8. Based upon a review of the NECA data reported on the FCC Industry Analysis Division's website. *See*, Industry Analysis Division, Federal Communication Commission, NECA and USAC Data, available at <http://www.fcc.gov/wcb/iatd/neca.html>, (accessed January 10, 2004).

Under Rate of Return Regulation, RLECs have many opportunities for abuse.

A review of the record clearly demonstrates that there is ample *opportunity* for abuse in the system as it is structured today. The following examples, which involved ILECs operating under RORR,⁹ are provided for the purpose of illustrating the type of conduct that has been uncovered in the past. These cases were uncovered as a result of the kind of detailed cost review that the FCC had historically undertaken of the largest of the carriers regulated under RORR.

- *Affiliate Transactions:* Transactions between affiliates create opportunities for improper shifting of costs and revenues. When one division of a firm is regulated and is guaranteed to recover its costs and another is not, there is a strong incentive to record costs in the regulated entity and revenues in an unregulated affiliate. As an example of this practice, the FCC found in the late 1980s that NYNEX was paying grossly inflated prices for standard office products purchased from an affiliate – NYNEX Materiel Enterprises (MECo) -- set up expressly for this purpose.¹⁰
- *Inaccurate regulatory accounting records:* In February 1999, the Federal Communications Commission released staff audits of the Regional Bell Operating Companies' Continuing Property Records (CPRs) as these existed on June 30, 1997.¹¹ The audits revealed a pattern of systematic overstatement of capital investments on the RBOCs' books relative to assets

9. While both examples involved RBOCs, in both cases the primary abuse occurred while the RBOC was operating under RORR although in one case the abuse was not uncovered until a later date.

10. See, e.g., *In the Matter of New York Telephone Co.; New England Telephone and Telegraph Co., Apparent Violations of the Commission's Rules and Policies Governing Transactions with Affiliates*, Order, FCC 90-328, 5 FCC Rcd 5892 (1990), and *Proceeding on Motion of the Commission to Investigate Transactions Among New York Telephone Company and its Affiliates*, New York PUC Case No 90-C-0912; *Proceeding on Motion of the Commission to Investigate the Directory Publishing Operations of New York Telephone Company and its NYNEX Affiliates*, New York PUC Case 92-C-0272, *Opinion* 97-9, June 5, 1997.

11. Federal Communications Commission, *FCC Releases Audit Reports on RBOCs' Property Records*, Report No. CC 99-3, Common Carrier Action, February 25, 1999. See also, *Audit of The Continuing Property Records of Ameritech Corporation, as of July 30, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*Ameritech CPR Audit*”); *Audit of The Continuing Property Records of NYNEX Telephone Operating Companies also known as Bell Atlantic North, as of March 31, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*Bell Atlantic North CPR Audit*”); *Audit of The Continuing Property Records of Bell Atlantic Telephone Operating Companies, also known as Bell Atlantic South, as of March 31, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*Bell Atlantic South CPR Audit*”); *Audit of The Continuing Property Records of BellSouth Telecommunications, Inc., as of July 31, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*BellSouth CPR Audit*”); *Audit of The Continuing Property Records of Pacific Bell and Nevada Bell Telephone Companies, as of June 30, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*Pacific Bell CPR Audit*”); *Audit of The Continuing Property Records of Southwestern Bell Telephone Company as of June 30, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*SWBT CPR Audit*”); *Audit of The Continuing Property Records of US West Telephone Operating Companies, as of June 30, 1997*, FCC Accounting Safeguards Division, December 22, 1998 (“*US West CPR Audit*”); Sections VI. Collectively, the seven RBOC CPR audits (“*The RBOC CPR Audits*”).

physically present in their networks. To the extent that existing BOC rate levels – in both the state and federal jurisdictions – are linked, directly or indirectly, to the net book value of plant in service, an overstatement of such book value would necessarily result in excessive prices for BOC services. In conducting the BOC CPR audits, the Commission unearthed a staggering history of BOC overstatement of capital investment, translating into the estimate of \$5-billion worth of “missing” assets that could not be located either by the auditors or by the BOCs' own plant technicians. One out of every five line items of hard-wired central office equipment (i.e., slightly over 20%) that FCC auditors had attempted to verify could not be located.¹² The regulatory implications of overstated plant accounts, especially an overstatement of the magnitude of 20%, are substantial. Whatever the cause of the missing investment on the RBOCs' books – whether it was phantom (never existed), simply misplaced (no longer being used), or the result of sloppy bookkeeping – the effect is that the plant was nowhere to be found. Such overstatements, should they be occurring on the books of the RLECs, would necessarily inflate these companies' cost of service and consequently their “high-cost” requirements. As a result, US consumers in all states are being tapped for the dollars to fund “costs” that are not serving any actual universal service needs.

USF subsidies represent a substantial share of overall revenues for some RLECs.

Responding to the perverse incentives described above, RLECs have become increasingly dependent on universal service support as a form of corporate welfare. Disbursements from the fund have become an increasingly large – sometimes even predominant – share of the RLECs total revenues. In many cases the revenues being generated by the telephone services sold to the RLECs' subscribers are dwarfed by the revenues received by these carriers in the form of USF subsidies. This is particularly true in states in which federal universal service funds are supplemented by state program funds. Table 1 below presents the results of an analysis of the composition of the revenue stream of ten RLECs in Texas as reported in Earnings Report made to the Texas PUC. For all but one of these companies, USF revenues accounted for more than half of the total operating revenues; for seven out of the ten, USF accounted for two-thirds or more of the total revenues. The proportion of total revenues generated by state-regulated end user and intrastate access charges represents less than a third and in one cases only 5% of the RLEC's total income. The relatively small proportion of total revenues that falls under the state regulators' purview puts the responsibility for overseeing the operations of these RLEC entities squarely within the FCC realm of responsibility.

12. See *Ameritech CPR Audit*, at para. 19; *Bell Atlantic North CPR Audit*, at para. 19; *Bell Atlantic South CPR Audit*, at para. 18; *BellSouth CPR Audit*, at para. 18; *Pacific Bell CPR Audit*, at para. 19; *SWBT CPR Audit*, at para. 19; and *US West CPR Audit*, at para. 19.

Table 1.1			
USF Support and Revenues Breakdown of Selected Texas LECs			
Carrier	Federal USF Support	TX State USF Support	Intrastate End User Service And Access
Electra Telephone Co	52.8%	22.9%	16.7%
Big Bend Tel Company	24.1%	14.2%	19.1%
Coleman Cty Tel Coop	47.6%	13.9%	29.2%
Border to Border	48.5%	19.1%	5.0%
Lake Livingston telco	53.6%	21.4%	15.2%
Tatum Tel Exch	41.9%	34.3%	17.9%
Dell Telephone Coop	49.9%	9.4%	10.3%
XIT	55.7%	19.2%	16.7%
Valley Tel Coop	39.4%	26.2%	14.0%
Alenco	44.3%	29.6%	14.6%

Sources: Rural IIECs, 2002 Earnings Reports to the Texas PUC, Year Ending December 31, 2003; Industry Analysis Division, Federal Communications Commission, *Federal-State Joint Board Monitoring Report*, December 2003, Table 3.30 (data as of 2002).

Rate of Return Regulation of RLECs has resulted in increasing USF disbursements during a time when costs have been declining.

Rural carriers receive high cost compensation from the FCC’s High Cost Fund through a variety of mechanisms.¹³ The underlying financial records and operations of the RLECs drawing from the funds, and the investments and expenses being measured and recovered by the various funding mechanisms, are subject to rate of return regulation. Projections for the second quarter of 2004 put total federal High Cost Fund program demand (expressed on an annual basis) at \$3.6-billion. Of that \$3.6-billion, 77% (\$2.7-billion) goes to Rural ILECs through five different mechanisms. Total annual High Cost Fund support flowing to the RLECs has grown beyond any expectations at the time the fund mechanisms were established. In 1986, total High Cost Fund disbursements amounted to about \$55-million. Less than twenty years later (during which time the telecom industry generally experienced significant productivity improvements) projections for 2004 call for disbursements of \$3.6-billion.

13. The federal High Cost Fund components that apply to Rural ILECs are: High Cost Loop (HCL), Long Term Support (LTS), Local Switching Support (LSS), Interstate Common Line Support (ICLS) or Safety Value (SV).

Introduction

The RLECs attempt to shift responsibility for this growth away from themselves. They have claimed that the larger fund size is caused by Competitive Eligible Telecommunications Carriers (CETCs) drawing from the fund.¹⁴ However, the CETC draw is minuscule relative to the total size of the fund: in 2003 USAC projected that CETCs would draw, on an annual basis, approximately \$250 million of the projected \$3.4-Billion High Cost Fund. However, more than half of the draw projected for CETCs (\$130-Million) was projected for CETCs that had not been deemed eligible., such that the actual funding to CETCs based upon those projections would have been closer to \$120-million of the more than \$3-Billion funding requirement.¹⁵ Some have argued that the fund has not really grown, but has simply expanded as costs that were *implicitly* recovered through revenues generated by access services have been identified and moved out of access services and are now *explicitly* recovered through the High Cost Fund.¹⁶ Certainly, the FCC has instituted changes that shifted cost recovery from RLEC interstate access charges to the USF High Cost Fund (the LTR, LSS and ICES mechanisms). However, there is a huge gap between the costs that were transferred and the amount of revenue presently being recovered through the USF High Cost Fund. Table 1.2 below documents the first full reporting year that the revenue transfer mechanism was in place, the amount of revenue recovered from the USF High Cost Fund during that first full year, and the projected disbursement requirement associated with that mechanism for 2004. As the table demonstrates, the total revenue requirement *transferred* from interstate access to the USF fund by the FCC equaled \$919-million, yet 2004 disbursements from those mechanisms will be more than 50% greater – \$1.49-billion. The only compelling explanation for the unstoppable growth in the High Cost Funding requirement is that the fundamental underpinning of the system – rate of return regulation – is flawed.

14. Most recently, RLECs have been pointing to CETC's as the cause of growth in the fund (See, *In the Matter of Western Wireless Petition for Rulemaking to Eliminate Rate-of-Return Regulation of Incumbent Local Exchange Carriers*, RM-10822; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Comments of Oklahoma Rural Telephone Companies, January 16, 2004 ("*Oklahoma Rural Telephone Companies Comments*"), at 5.)– nothing could be further from the truth. Over the last decade(1993 - 2003), High Cost Fund *annual* disbursements increased by \$2-Billion dollars per year (from \$1.3-Billion to \$3.4-Billion) – of the \$2-Billion in additional high cost disbursements made in 2003, approximately \$120-million, or \$0.12-Billion (less than 7% of the total) went to CETCs.

15. Universal Service Administrative Company, Fourth Quarter 2003 Filing to the FCC, Appendix HC01 ("*High Cost Support Projected by State by Study Area – 4Q2003*"), available at <http://www.universalservice.org/overview/filings/> (Accessed February 4, 2004).

16. See, for example, *Oklahoma Rural Telephone Companies Comments*, at 5.

	First Year Instituted	First Full Year Funding	2004 Projected*
Long Term Support	1989	\$ 235.70	\$ 571.60
Local Switching Support	1993	\$ 311.00	\$ 465.63
Interstate Common Line Support	2003	\$ 372.34	\$ 453.29
Total		\$ 919.04	\$ 1,490.52

Sources: Industry Analysis Division, Federal Communications Commission, *Federal-State Joint Board Monitoring Report*, October 2002; Universal Service Administrative Company, Fourth Quarter 2003 FCC Filing, Appendix HC01; Universal Service Administrative Co

Notes: 2004 - annualized from projected second quarter data.

In the present system, it is not the carrier that operates most efficiently or that provides the best service at the lowest cost that is being rewarded with an infusion of funds. Rather, it is the carrier with the highest costs that gets the bulk of the HCF support. The present “high cost” funding system makes no effort to distinguish between those small carriers that exhibit high costs because of specific high cost characteristics associated with the geographic realities of the areas they serve and those carriers that exhibit high costs because of inefficient operations, sloppy accounting, or worse. If a carrier is small and if its costs are “above average,” it receives money from the fund. Subject to limited exceptions,¹⁷ the higher a carrier’s costs – whatever the costs are for – the more it receives from the fund.

17. As an example, there is a limit on the level of corporate operations expense that can be recovered from the fund for those carriers that exhibit costs that exceed a specified “benchmark.” Below the benchmark, however, increases in a carrier’s corporate overhead expenses generates increases in the carrier’s draw from the USF fund.

The failure of the present system is evidenced by the sales of rural exchanges from large ILECs at levels substantially above book value and by the relatively low level of consolidation of rural “study areas” that has occurred during a period in which the remainder of the telecommunications industry has undergone significant consolidation.

The present system rewards small carriers for remaining small, and has even created the incentive for large carriers to sell off rural exchanges so that they will be owned by “small” carriers. The structure of the fund eliminates all incentives for small carriers to attempt to minimize costs through consolidation. An analysis of fund distributions shows that the smallest carriers receive the most per-loop support, and that larger carriers support drops dramatically as loop counts increase. For example, the average *H.C.L. support payment per line* to Rural ILECs with fewer than 50,000 lines is \$140. The average H.C.L. per line support payment for carriers with between 100,000 and 350,000 lines in a study area is more than 75% lower at \$30.¹⁸ Therefore, any dis-economies that carriers might achieve because they are small that might otherwise be unacceptable, are not—as they can recover those costs via USF mechanism. This is true even in cases in which costs could be decreased substantially via consolidation and associated scale and scope economies. This point is emphasized by the premium prices above net book costs that the larger ILECs like Qwest and GTE-Southwest (who receive minimal USF per-loop support) were able to command for sale of rural exchanges to small carriers (like Century and Valor). Although this problem has been somewhat mitigated, the incentive for small carriers to remain small is still very present. An analysis of industry consolidation finds that generally, carriers have opted for large-scale, across the board consolidation, *except* in the cases of Rural ILECs.

Inefficiencies in RLEC operations are real and identifiable.

Throughout the remainder of this report, we identify inefficiencies found in the operations of the RLECs being subsidized by the Commission’s RORR based system. Based upon this analysis, we estimate that in total, the Federal USF funding mechanism is subsidizing the Rural ILECs by as much as twice what would be necessary to fund efficiently operating entities.¹⁹ Since Rural ILECs are projected to receive something in the range of two and a half billion dollars in 2004, a savings of 50% would reduce overall USF expenditures by over \$1-Billion per year (or more). While the regulatory method in place is clearly responsible for the overall level of inefficiencies observed across a broad sampling of RLECs, no attempt has been made to attribute these inefficiencies among the trio of possible RORR-related causes: system-incented inefficiencies; lack of regulatory oversight; and abuse. Our analysis of RLEC inefficiency focuses upon those limited areas where clean, comparable data for multiple RLECs exist—specifically, corporate operations expense and manage-

18. See Table 3.1 in Chapter 3.

19. This estimate presumes that the inefficiencies that we have been able to identify in the areas that we have reviewed are occurring throughout the RLECs operations.

ment workforce levels. In addition to analysis of quantifiable evidence, we have also included “case studies” of several Rural ILECs.

The reliance of the High Cost Fund on embedded costs presumes that those costs are due to factors beyond the control of the LEC’s management. Thus, the fund mechanism presents the Rural ILECs with an incentive to inflate their expenses in order to recuperate them via USF. The FCC has noted, in particular, that Corporate Overhead expense is one area particularly susceptible to inefficiency. Chapter 4 of this report contains a general analysis of inefficient Corporate Operations expense including the development of an efficiency benchmark and a calculation of the total inefficiency present nation-wide.

Chapters 5 and 6 continue the analysis of inefficiencies on a detailed, company specific basis. Chapter 5 illustrates that, despite a general relationship between the level of Corporate Operations expenses and firm size, there are significant deviations that occur between firms of a similar size. The combination of RORR and the USF mechanisms allow RLECs the ability to operate at inefficient levels. Analysis of individual company rate of returns before and after an adjustment to reflect efficient Corporate Operations expense demonstrates this fact. Chapter 6 undertakes a similar firm to firm comparison, using counts of Official and Management employees as the metric, and concluding, again, that RORR and USF combine to ensure the Rural ILECs that operate inefficiently are not penalized for doing so.

Replacement of the existing system with a USF-system based upon forward-looking costs will provide the appropriate incentives to RLECs while simultaneously replacing the cumbersome RORR-based system with a more easily implementable, and less regulatory, mechanism.

Replacement of rate or return regulation with an alternative regulatory mechanism similar to the original price cap plan implemented for the Tier 1 ILECs will eliminate some, but not all, of the inefficiencies encouraged by the present system. Combined with the use of a forward-looking cost model for determining high cost USF funding requirements in place of the embedded-cost based mechanism used today, the rewards for inefficiency and the opportunities for abuse would be drastically reduced. A forward-looking cost mechanism would result in USF funding that reflects the kinds of efficiency RLECs *should be obtaining* in their networks. More importantly, it should provide funding to those carriers that exhibit high costs as a result of the physical characteristics of the customer groups they serve, not those that exhibit high costs simply as a result of the ways they have historically chosen to do business.

2

RURAL ILECS EARNINGS: EVIDENCE THAT THE RORR SYSTEM IS NOT WORKING TODAY

Compounding the inefficiencies and opportunities for abuse that exist within the boundaries of the present rate of return-based USF funding mechanism is the fact that no single regulatory mechanism exists for *reviewing* the operating results of the firms drawing the funds. In essence, nobody is minding the regulatory store. A review of total company return information for rural ILECs from Texas, and interstate return data for RLECs that file form 492 data with the FCC corroborates what many in the industry have suspected to be true – many of these rural telcos have earnings that significantly exceed the level that has historically been authorized by regulators (in the 12% range), and in some cases double that amount.

Moreover, as interesting as the rural companies with earnings in excess of 20% are, those rural companies that have historically reported return levels in the negative or very low range (2%, 3% or 4%) may be even more interesting. One has to ask, why, in a regulated environment and with monopoly customers, a company would accept earnings of only a 2% or 3% return when its authorized rate is probably in the range of 12%? Assuming its investments and expenses are all legitimate, all such a firm would need to do to implement a rate increase – more than doubling or tripling its after-tax profits – is to demonstrate that it is earning below the authorized return. The only plausible explanation is a reluctance to have its books reviewed, as might be anticipated in the review of a rate increase application. Thus, by relying on USF funds rather than rate hikes to keep them afloat, such carriers are likely to avoid both the review of their earnings and any review of their regulatory accounting practices.

Among the problems inherent in a rate of return regulatory regime is the exacting examination of carriers operating costs, capital investments, and affiliate transactions that is required to ensure that the system is not being abused. In the case of the RLECs, detailed review and auditing of the rate of return based operations of the *approximately 1400* RLEC study areas is beyond the scope of anything either the FCC or the state regulators can manage. The FCC cannot eliminate rate of return regulation for the state operations of the RLECs, but, as the examples discussed below

demonstrate, it can and should get rid of this regulatory regime (used for the calculation of USF disbursements and for the regulation of interstate access services) that it cannot and is not managing. Replacement of the existing rate of return based high cost loop funding mechanism with a subsidy mechanism based upon easily auditable forward-looking cost model results, combined with a *true* price caps plan for regulation of interstate access services would, in addition to improving efficiency incentives, eliminate much of the need for detailed actual cost reviews.

Table 2-1 below contains a listing of selected rural ILECs and their reported RORR levels, representing both a high and a low range. The listing is not meant to be comprehensive, but rather illustrative of the levels of earning exhibited across rural ILECs drawing from the fund. The table also documents disbursements to these RLECs from the federal high cost fund and the number of lines served by the RLEC in that study area. The dual jurisdictions (federal and state) in which these carriers file reports and earn USF subsidies means that a unified view of their operations and practices is frequently not available. Compounding this effort, most of these companies are privately owned (and thus they have no SEC reporting requirements), and many file their interstate cost data with NECA rather than with the Commission directly. Thus, it is extremely difficult to look at the “whole picture” for any of these carriers and to evaluate the legitimacy of expenses or investments.

Fortunately, some limited data is available. In an effort to understand how “rate of return” regulation is being applied to the Rural ILECS, we chose to review the financial filing of the Electra Telephone Company (Electra) in Texas made to the PUC of Texas (PUC-T) in conjunction with the requirements of Texas Substantive Rule 26.71(f)(3).²⁰ Electra is a small Rural ILEC that was providing service to 1,947 access lines at the end of 2002. Electra is owned by Townes Telecommunications, a Rural ILEC holding company that owns several small Rural ILECs in Southern and Southeastern states. Electra has four employees located in Texas: one manager, one secretarial/administrative staff member, and two technicians.²¹ USAC data shows that Electra has drawn approximately \$1.5-million per year for each of the last six years from the federal high cost fund (total draw, \$9.3-million for the period 1998 - 2003). The financial data filed by Electra for the year ending 2002 with the PUC-T shows it earning a rate of return of 27.9% on a total company basis. The preliminary evaluation of Electra is summarized below in Table 2-2. As the table demonstrates, 76% of Electra’s reported income in 2002 came from universal service funding (the Texas and Federal funds combined). That factor, combined with an interstate RORR of almost 30%, suggested that Electra might be a good choice for further exploration.

20. During the course of preparing this report we had occasion to review the Earnings Reports of a number of the Texas RLECs – this analysis revealed that not all carriers populated the Earnings Reports forms in the same manner. It is possible that some of the anomalous data discussed below are the result of filing or interpretation errors.

21. Electra Telephone Company, Workforce and Supplier Diversity Form to the Texas Public Utility Commission, Year Ending December 31, 2002 (“*Electra 2002 Workforce Report*”).

Rural ILECS Earnings: Evidence That The RORR System Is Not Working Today

Table 2.1				
Analysis of Selected Rural ILEC Earnings and USF High Cost Disbursements				
Carrier	Access Lines	Total Company RoR	Interstate RoR	Federal HCF Disbursements (2002)
Fort Bend Tel Co	46,078	2.3%	17.28%	\$3,035,189
West Texas Rural Coop	2,093	2.5%	12.89%	2,240,339
North TX tel coop	944	2.7%	29.76%	115,325
Wes-Tex Tel Coop	3,262	2.7%	13.08%	943,974
XIT	1,348	3.0%	4.42%	29,745
Comanche Cty Tel Co	5,684	-4.1%	5.96%	1,148,502
Riviera telco	1,270	4.2%	4.81%	1,575,545
Eastex Telephone Coop	33,381	4.8%	9.35%	7,997,092
Valor	306,823	17.3%	29.24%	5,622,627
Century Tel Lake Dallas	13,223	18.1%	13.07%	2,234,448
Centel of TX	233,504	18.4%	29.92%	3,215,526
South Plains Tel coop	5,527	18.4%	25.56%	574,986
Cumby Tel Coop	1,960	21.5%	11.25%	495,507
ENMR	950	23.2%	34.25%	16,872
Nortex comm	4,379	26.0%	31.87%	0
Border to Border	102	26.7%	36.23%	624,177
Electra Telephone Co	1,947	27.9%	31.30%	1,653,797
ACS of Alaska	n/a	n/a	20.5%	1,163,837
Illinois Consolidated Telephone	n/a	n/a	23.6%	4,470,223
Yates City Telephone	n/a	n/a	22.4%	1,756,767
Moultrie Independent Tel. Co.	n/a	n/a	-13.3%	309,794

Source: 2002 RLEC Annual Earnings Report to the Texas PUC.

Note: Some companies report customer counts in lieu of line counts. Those counts have been substituted herein. See Comanche, Eastex, and Cuby 2002 Earnings Reports.

Table 2.2	
Electra Telephone Company: A Case Study	
	2002
Total Reported Access Lines	1,947
Number of Employees	4
Total Income inclusive of USF dollars (2002)	\$ 3,130,112
Total Federal USF Dollars (2002)	\$ 1,653,797
Total Texas USF Dollars (2002)	\$ 718,068
USF Income as a percentage of total income	76%
Total Company ROR reported to Texas PUC	27.9%
Intrastate ROR reported to Texas PUC	26.5%
Estimated Interstate ROR	29.5%

Source: Telephone Utilities Earnings Report of Electra Telephone Company to the Texas PUC of the twelve months ending December 31, 2002.

Review of Electra’s 2002 filing raises more questions than it answers – in the case of Electra, rate of return regulation appears akin to no regulation at all.²² Although it has four employees to provide service for the 2,000 lines in its territory, Electra made “affiliate” payments of just under \$1-million to Townes Telecommunications in 2002 (Texas does not require filers to detail the transactions, so it is not possible to see what services were provided in exchange for the \$983,323).²³ Put in perspective, Electra purchased \$505 worth of “services” from Townes for each and every access line it provided (none of the payment to Townes was capitalized). Combined with the \$782,917 in net return (after taxes) generated for its parent, a total of \$1.7-million in funds flowed out of Electra, Texas and into the coffers of Townes Telecom in Florida in 2002. It is extremely unlikely that any of the dollars being paid to Townes reflect the specific high-cost characteristics of Electra’s service area, *yet these expenses are included in the basis for Electra’s High Cost support.*

Even a cursory review of Electra’s filing with the PUC of Texas raises questions. Additional metrics of Electra’s operations are found on Table 2-3. It appears likely that there has not been a formal review of Electra’s operations in many years. Townes Telecommunications purchased the Electra Telephone Company in 1988. Review of the current filings appears to indicate that at that

22. As the discussion that follows will reveal, further review of Electra revealed that it inexplicably has historically reported very low and negative earnings -- although the earnings reported for each of the last three years has been higher than the year before, the jump between the 7.7% earnings for 2001 and the 27.9% reported for 2003 is in and of itself worthy of investigation.

23. Electra Telephone Company, 2002 Earnings Report to the Texas Public Utility Commission , Year Ending December 31, 2002 (“*Electra 2002 Earnings Report*”). Schedule VI.

time, Townes paid \$4.5-million in excess of the net book value of Electra's plant (estimated to have been around \$5-million)²⁴. Electra appears to have been expensing the amortization of the premium it paid above book value in irregular increments, as it sees fit. Its accumulated depreciation expense likewise does not appear to be increasing in any regular pattern. In response to General Question 15 in the Texas Earning Reports, seeking information as to when depreciation rates were most recently set for the company, Electra responds that it does not know when the Company received authorization for the depreciation rates it is using – "Date unknown. Rates in effect when company purchased." At best this means that it has been 15 years since any regulator determined appropriate rates for the depreciation of Electra's capital investment.

Frequently, review of a company's financial reports is assisted by looking at its prior year's activities. Review of Electra's 2002 report in conjunction with the reports for the three previous years simply raises more questions. Consider the following: Electra's \$1-million payment to Townes for affiliate services in 2002 looks positively conservative following the \$1.8-million in affiliate payments Electra sent home to Townes for affiliate services in 2001 (\$1,016 per access line).²⁵ Interestingly, Electra's overall level of "operating expenses" reported for 2002 was about \$1-million less than that reported for 2001 – an amount almost entirely explained by the reduction in affiliate payments to the parent Townes Telecommunications. Expenses in the plant-specific accounts, those accounts primarily associated with maintenance of equipment dropped by 50% (from \$1.2-million to \$0.6-million) – *yet no major plant additions were reported for the preceding five years that might signal a change from an outdated, expensive-to-maintain network, to a new technologically efficient one.* Corporate Operation expenses plunged in a similar manner – from \$987,000 in 2001 to \$537,000 in 2002.²⁶

24. *Id.*, at Schedule II, line 46. The Telephone Plant Acquisition account reflects the amount above book value paid for Telecommunications Plant. See 47 C.F.R. §32.2000 (b) (2002), and 47 C.F.R. § 32.2005 (a) (2002).

25. *Electra 2002 Earnings Report*, Schedule VI.

26. This reduction in expenses may well be related to the cap on corporate operations expense recovery implemented as part of the RTF plan implemented in 2001.

Analysis of USF Disbursements and Selected Metrics for Electra Telephone Company			
Total Federal USF Dollar Received 1998 - 2003		\$	9,267,772
Total Plant Additions recorded - 1998 - 2002	approx.	\$	175,000
Total Gross Plant in Service (year end 2002)		\$	5,417,561
Total Rate Base -Net Plant in Service (year end 2002_ (Invested Capital after Depreciation and w/o "Plant Acquisition")		\$	2,858,713
Estimated Average Month Rate for Local Service Per Line (including SLCs and all ancillary features)		\$	24.51
Total Return (before taxes)		\$	1,366,062
Total Return (after taxes)		\$	782,917
Total other direct "payments" to parent company		\$	983,323

Source: Telephone Utilities Earnings Report of Electra Telephone Company to the Texas PUC of the twelve months ending December 31, 2002.

Such a substantial drop in overall operating expenses (a decrease of almost 40%) and affiliate payments should be accompanied by some major change in an RLEC's operations, but in this case that does not appear to be the case. No readily apparent explanation exists for the substantial drop in affiliate payments, or expenses overall, from the \$1.8-million range that was reported for 1999 through 2001, to the substantially lower \$1-million payment amount made in 2002. The number of access lines in service has varied by no more than a hundred or two during that time²⁷, and the number of employees in Texas has remained at the same – four – throughout the entire period.²⁸

While the need to invest in modern plant and upgrade facilities is frequently cited as justification for continuing rate of return regulation of the RLECs, substantial USF payments appear not to have stimulated much investment by Electra. *During the period from 1998 to 2002, when Electra*

27. Ranging from a high of 2,032 in 1999, to a low of 1,824 in 2001. See, Electra Telephone Company, 1999 Earnings Report to the Texas Public Utility Commission, Year Ending December 31, 1999; Electra Telephone Company, 2000 Earnings Report to the Texas Public Utility Commission, Year Ending December 31, 2000; Electra Telephone Company, 2001 Earnings Report to the Texas Public Utility Commission, Year Ending December 31, 2001; *Electra 2002 Earnings Report*, General Question 16.b.

28. *Id.*, General Question 16.a.

Rural ILECS Earnings: Evidence That The RORR System Is Not Working Today

collected in excess of \$7.6-million in USF high cost funds,²⁹ it reports less than \$0.2-million on Plant Additions.³⁰ TPIS held relatively steady at just between \$5.2- and \$5.4-million between 1998 and 2002.

Table 2-4 provides a comparison of results for Electra Telephone for the years 1999-2002 as reported in the earnings reports made to the PUC-T for some of the major rate of return reporting requirements. As the comparison demonstrates, while the quantity of access lines in service, number of employees, rate base, and total revenues remained relatively consistent across the four years for which data was available, overall expenses, particular in the last two years, changed dramatically.

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>Change</u> <u>2001-2002</u>
Income (including USF)	\$2,774,899	\$3,177,096	\$3,181,680	\$3,130,112	-2%
Expenses					
Plant Specific	\$1,238,164	\$1,186,157	\$1,245,653	\$622,579	-50%
Depreciation and Amort.	\$385,770	\$507,390	\$269,044	\$251,414	-7%
Other Plant Non-Specific	\$41,422	\$57,283	\$97,645	\$207,390	112%
Customer Ops	\$123,577	\$120,869	\$101,127	\$130,089	29%
Corporate Ops	\$989,262	\$1,012,684	\$985,951	\$537,113	-46%
Gross Plant in Service	\$5,299,517	\$5,374,321	\$5,398,310	\$5,417,561	0%
Net Plant in Service	\$4,302,603	\$4,208,490	\$3,079,951	\$2,858,713	-7%
Return before taxes	-\$3,296	\$292,713	\$482,260	\$1,381,527	186%
Return after taxes	-\$128,508	\$106,999	\$237,531	\$797,206	236%
RoR	-3.0%	2.5%	7.7%	27.9%	262%
Direct Expenses Paid to Affiliates	\$1,729,956	NA	\$1,853,735	\$983,323	-47%
Lines in Service	1,973	\$2,032	1,824	1,947	7%
Employees	4	4	4	4	0%
Source: Texas Earnings Reports					
Note: 2000 Affiliate Transaction data is not available.					

29. Industry Analysis Division, Federal Communications Commission, *Federal-State Joint Board Monitoring Reports*, December 2003 ("Joint Board Monitoring Report"), Table 3.30.

30. *Electra 2002 Earnings Report*, Schedule XIV.

There may well be quite reasonable explanations for the data discussed above, including perhaps, some costs and/or revenues having been filled in improperly, or investments mistakenly labeled as expenses. Looked at in the best light, Electra made some amazing efficiency enhancements between 2000 and 2001, reducing expenses by almost 40% overall. In such a scenario the 27.9% 2002 earnings might represent a one time upward blip that will reveal itself to have been corrected downward (by reduced prices and/or USF payments) to a more reasonable level when the 2003 results are filed. However, even if the 2002 report represents nothing more than sloppy record-keeping, sloppy record keeping by entities that are regulated and receive federal funds based upon that record-keeping can have major ramifications – particularly *if* such record-keeping is endemic across an industry. Assume, for example, that Electra has been upgrading its plant, and has been purchasing the equipment from its affiliate (a possible explanation for the large affiliate expenses prior to 2002 and the drop off in 2002), but has been classifying those dollars as expenses and recovering them in a single year, rather than capitalizing them. Such a mis-classification would have the effect of reducing Electra’s reported earnings, thereby keeping regulators from requiring rate reductions or resulting in reductions in USF payments. Other, less favorable, interpretations might also exist, however, the lack of detail in the Texas reports makes it impossible to make any value judgements about those changes.

The unanswered questions about Electra’s reports, the general lack of data available on the operations of these carriers, the wide range of rates of return, the absence of uniform reporting requirements, the lack of regulatory scrutiny – these evidence all suggest that the current rate of return system is not working properly. Further, they demonstrate the opportunities for substantial and harmful abuse. More important than any of the specifics uncovered in the review of Electra’s filing with the PUC of Texas is the fact that unless the PUC of Texas (that is responsible for regulating close to 60 ILECs) identifies a problem within the Electra filing and chooses to undertake a comprehensive review of Electra’s 2002 results, it is unlikely that anyone will seek answers to the questions raised by that filing.

3

RORR-BASED FUNDING MECHANISMS DISCOURAGE EFFICIENT CONSOLIDATION OF STUDY AREAS

Federal universal service funding mechanisms discourage efficient consolidation of study areas. The data clearly show that the smallest Rural ILECs receive a disproportionate amount of federal USF support. The present system rewards small carriers for remaining small and has even created the incentive for large carriers to sell off rural exchanges so that they will be owned by “small” carriers. These incentives are incorporated into the very structure of the existing federal universal service support mechanisms.

The evidence presented in the chapters that follow suggests that Rural ILECs experience some scale economies relating to corporate overhead and administrative functions (see discussion of Table 3.1), and it is likely that their network-related costs may have some scale economies as well. However, unlike the large ILECs, the Rural LECs often avoid the consolidation that would permit them to reduce costs by obtaining larger scale operations, because any per-line cost reductions they achieve as a result of more efficient operations eventually will result in the reduction of their universal service support. Thus, from the RLEC’s perspective, consolidation yields no benefits whatsoever.³¹ Table 3.1 below demonstrates how the funding mechanism skews the disbursement of universal service support disproportionately to the smallest Rural ILECs.

31. One would think, for example, that the Border to Border Telephone Company of Texas, with 102 lines (see Table 3.1) would have a strong incentive to combine its operations with another rural carrier, but because it is guaranteed to receive federal support based on its embedded costs, it can survive and even turn a profit.

Table 3.1				
Federal High Cost Loop Payments by Carrier Size Category				
Size Category	HCL Support Payments (2003)	Loops within Size Category	Average Payment/Loop, Annual	
0 - 50,000 Lines	\$ 826,303,788	5,875,268	\$	140.64
50 -- 100,000 Lines	\$ 163,534,407	2,050,274	\$	79.76
100 -- 350,000 Lines	\$ 101,391,039	3,355,535	\$	30.22
All RLECs receiving HCL	\$ 1,091,229,234	11,281,077	\$	96.73
Further disaggregations:				
0 -- 5,000 Lines	\$ 246,150,288	1,378,432	\$	178.57
0 -- 10,000 Lines	\$ 452,822,811	2,612,471	\$	173.33
0 -- 20,000 Lines	\$ 648,607,602	4,154,931	\$	156.11
Source: Universal Service Administrative Company, Fourth Quarter Filings to the FCC, 2002-2003, Appendix HC05, available at http://www.universalservice.org (accessed January 27, 2004).				

Table 3.1 is based on an analysis of the 2003 projected disbursements from the High Cost Loop (“HCL”) support mechanism and it shows the direct (inverse) correlation between RLEC size and the size of its HCL payment: that is, the smaller the ILEC, the higher its per-loop HCL fund payment. The underlying data set includes all Rural ILECs projected to receive an HCL disbursement in 2003.³² We grouped those ILECs into three size categories, with breakpoints at 50,000 lines and 100,000 lines, and calculated the total HCL support payments due to ILECs within each size grouping, and their total lines. From that data, we calculated the average support payment per loop. In a similar fashion, we determined that the average support payment for all RLECs receiving HCL support was \$96.73 per loop. As 3.1 demonstrates, the carriers in the smallest size grouping, 0-50,000 Lines, receive far more support per loop, \$140.64, than the average for all carriers. And not surprisingly, the per-loop support falls off rapidly for the larger categories, from \$79.76 for the 50,000-100,000 Lines category, down to \$30.22 for the 100,000-350,000 Line category. The lower half of the table presents further disaggregations of the smallest carrier category, which confirms that the smallest ILECs are obtaining the highest levels of support on a per-loop basis. Considered in aggregate, the smallest size grouping, 0-50,000 Lines, receives over 75% of the HCL support

32. We excluded five ILECs in the USAC spreadsheet that were shown to have a projected payment of less than \$1000.

payouts, while serving half of the loops.³³ Additionally, it is only these same loops in the 0-50,000 Line size grouping that are eligible to receive Local Switching Support (LSS) funds. USAC projected LSS disbursements to RLECs in 2003 of a little over \$400-million, which equates to another \$70 per loop per year. Thus the average per-loop annual payment for LSS and HCL combined is \$240 – more than four times greater than the support being paid to carriers in study areas in the 100 - 350,000 Line size grouping.

The failure of the present system is evidenced by the sales of rural exchanges from large ILECs at levels substantially above book value of the operations.

The sale of rural exchanges from large carriers to small carriers provides prima facie evidence that the existing funding mechanism rewards telcos for being small. The sale of rural exchanges at prices significantly in excess of net book value suggests something more – an expectation that the cash flow generated by the combination of local service revenue, interstate access charges and universal service subsidies will be sufficiently large to cover not only the cost of the plant and its operation, but the amortization of the substantial premium paid as well.

Table 3.2 below documents the above-cost premium paid to GTE-Southwest in connection with the sale of exchanges in three separate transactions in four states in the year 2000.³⁴ As the table demonstrates, in summer of 2000, GTE-Southwest concluded sales to Valor Telecom and Century Telephone (“Century Tel”) of approximately 650,000 lines in four states. In each sale, the price paid for the access lines was more than twice their net book value. Valor Telecom paid a premium of more than \$2,000 per access line for property in Oklahoma and a \$1600 per line premium for the exchanges in Texas and New Mexico, while Century Tel paid a premium of \$2,200 per line in Arkansas. In total, GTE-Southwest booked a gain of in excess of \$1-billion for the sale of these exchanges. Like GTE, Qwest also sold off a number of exchanges to smaller carriers. Qwest reported the sale of 20,000 access line in North Dakota and South Dakota in 2000.³⁵ The access lines were sold for a total payment of \$19-million, more than half of which – \$11-million – was recorded as a gain. Based upon this data, it appears that Qwest sold these access lines, whose net book cost must have been in the range of only \$400 per line (for all plant, not just NTS plant), for approximately \$950 per line. Why would a Rural LEC pay so large a premium for second-hand plant and the right to serve the associated customers? It is unlikely that the RLEC can raise prices to twice the level these customers paid for service from Qwest. It is also unlikely that these providers have an expectation of operating twice as efficiently. Thus, the most plausible explanation is

33. That is, \$826-million / \$1.09-billion equals 76%, while 5.9-million / 11.3-million equals 52%.

34. GTE-Southwest, 2000 10K Report filed with the US Securities and Exchange Commission, March 30, 2001.

35. Qwest Corporation, 2000 10K Report filed with the US Securities and Exchange Commission, April 2, 2001.

that the buyers are anticipating that the flow of support from USF payments will exceed the costs of providing service.

Table 3.2							
Access Lines Sold by GTE-Southwest to Smaller Entities Commanded a Premium More Than Twice the Net Book Cost of the Assets							
Buyer	State/Date of Sale	No. of Lines	Cash Proceeds	Gain Recorded on Sale	Estimated Net Book Value	Sale Price as a % of Book Value	Premium Paid Per Line
		(a)	(\$000) (b)	(\$000) (c)	(\$000) (a) - (b)		
Valor	Oklahoma 6/30/00	130,000	\$ 420,300	\$ 264,500	\$ 155,800	270%	\$ 2,035
Century	Arkansas 7/31/00	93,000	\$ 332,900	\$ 208,900	\$ 124,000	268%	\$ 2,246
Valor	TX & NM 8/31/00	425,000	\$ 1,249,600	\$ 681,600	\$ 568,000	220%	\$ 1,604

Source: GTE-Southwest, 2000 10K Report filed with the U.S. Securities and Exchange Commission, March 30, 2000.

In fact, state regulators appear to be aware of this potential motivation. In an Order approving a settlement related to the proposed (but never consummated) sale of 154,000 access lines in Arizona from Qwest to Citizens Tel (originally brokered in December, 1999) the Arizona PUC discusses the possibility that additional funds might flow from the Federal USF once the sale is completed.³⁶ As documented in the Order, Citizens had agreed to purchase 154,000 access lines in Arizona for a price approximately \$112-million in excess of the net book value of the plant (identified in the Order as Qwest’s “gain”). The settlement included a provision that Citizens would “provide the same products and services” as Qwest at rates “which mirror Qwest’s tariffs on file at the Commission.” Looking forward, it also contained the following provision:

If Citizens obtains additional revenues from the Federal Universal Service Fund related to the wire centers it is acquiring from Qwest, the rates and charges adopted by Citizens will

36. *In the Matter of Joint Application of Qwest Corporation and Citizens Utilities Rural Company, Inc. for Approval of the Transfer of Assets in Certain Telephone Wire Centers to Citizens Rural and the Deletion of those Wire Centers from US West’s Service Territory*, Arizona Corporation Commission Docket Nos. T-01051B-99-0737, T-01954B-99-0737, Decision No. 63268, 2000 Ariz. PUC LEXIS 3, August 24, 2000, at 5.

be interim and subject to refund in the next rate case, effective on the date Citizens becomes entitled to the additional Federal Universal Service Fund revenues.³⁷

Taken at face value, the Arizona stipulation seems to acknowledge that Citizens any additional funds that Citizen might obtain from the Universal Service Fund (as a result of acquiring the new exchanges) would not actually be needed by Citizen's in order to cover its cost of service.

The Commission has taken one positive step toward addressing this situation. As part of its adoption of the 2001, Rural Task Force Plan, the FCC attempted to implement stop-gap caps into its USF rules, for the purposes of removing the incentives that allowed carriers like Qwest and GTE to benefit from selling rural exchanges and the rural telcos to benefit from buying them. The new "cap" limited the draw of Rural LECs who acquired an exchange to the draw of the carrier from whom the exchange was purchased. Moreover, it applied not only on a going-forward basis but also to any access lines subject to exchange sale agreements concluded after May 7, 1997.³⁸ Less than two years after the RTF order was released,³⁹ Valor – a company formed through purchase of rural exchanges from GTE – asked for a broad waiver of this rule. As of this writing, Valor's waiver petition remains pending.⁴⁰

The cap on USF funds drawn from sold rural exchanges imposes some limitations, but the fact remains that the inefficient RORR-based USF system continues to allow the rural telcos to buy exchanges and get some additional amounts of USF support, higher access charges, and increased interconnection rates. Moreover, for exchanges that have not been owned by small Rural ILECs all along, the system continues to generate precisely the same kinds of revenues flows that caused the value of those exchanges (described above) sold from Qwest and GTE-Southwest to be more than twice the net book value of the plant.

37. *Id.*, at 5.

38. 47 C.F.R. § 54.305.

39. *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45; *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, CC Docket No. 00-256, *Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking in CC Docket No. 96-45, and Report and Order in CC Docket No. 00-256*, FCC 01-157, 16 FCC Rcd 11244 (2001) ("Rural Task Force Order").

40. As Table 3.2 illustrates, Valor purchased at least some of the access lines that it now seeks additional funding for at a cost greatly in excess of the net book costs of the plant. See, *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Valor Telecommunications of Texas L.P. Petition for Waiver of Section 54.305, April 11, 2003.

The number of RLEC study areas has remained relatively constant despite the significant consolidation that has occurred throughout the rest of the telecom industry.

Corroborating the evidence that the present system provides an incentive to RLECs to remain small is the relatively low level of consolidation of rural study areas that has occurred during a time when the rest of the telecommunications industry has experienced significant consolidation. There was a string of large mergers involving the original seven RBOCs starting in the late 1990s, including: SBC-Pacific Telesis, effective January 30, 1997;⁴¹ NYNEX-Bell Atlantic, effective August 14, 1997;⁴² SBC-SNET, effective October 23, 1998;⁴³ Ameritech-SBC, effective October 8, 1999;⁴⁴ Qwest-US West, effective March 10, 2000;⁴⁵ and GTE-Bell Atlantic, effective June 16, 2000.⁴⁶ These mergers reduced the number of the largest ILECs (including GTE) from eight to four. Figures 3.1 and 3.2 demonstrates the consolidation of access line shares that has occurred for the non-rural segment of the local exchange industry.

41. *In re Applications of Pacific Telesis Group Transferor, and SBC Communications, Inc. Transferee, For Consent to Transfer Control of Pacific Telesis Group and its Subsidiaries*, Report No. LB-96-32, *Memorandum Opinion and Order*, FCC 97-28, 12 FCC Rcd 2624 (1997).

42. *In re Applications of NYNEX Corporation, Transferor, and Bell Atlantic Corporation, Transferee, For Consent to Transfer Control of NYNEX Corporation and its Subsidiaries*, File No. NSD-L-96-10, *Memorandum Opinion and Order*, FCC 97-286, 12 FCC Rcd 19985 (1997).

43. *Section 214 Authorizations from; Southern New England Telecommunications Corporation, Transferor To SBC Communications, Inc., Transferee*, CC Docket No. 98-25, *Memorandum Opinion and Order*, FCC 98-276, 13 FCC Rcd 21292 (1998).

44. *In re Application of Ameritech Corp., Transferor, and SBC Communications, Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission Rules*, CC Docket No. 98-141, *Memorandum Opinion and Order*, FCC 99-279, 14 FCC Rcd 14712 (1999).

45. *In the Matter of Qwest Communications International Inc. and US WEST, Inc.; Applications for Transfer of Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License*, CC Docket No. 99-272, *Memorandum Opinion and Order*, FCC 00-91, 15 FCC Rcd 5376 (2000).

46. *In re Application of GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee, For Consent to Transfer Control of Corporations Holding Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License*, CC Docket No. 98-184, *Memorandum Opinion and Order*, FCC 00-221, 15 FCC Rcd 14032 (2000).

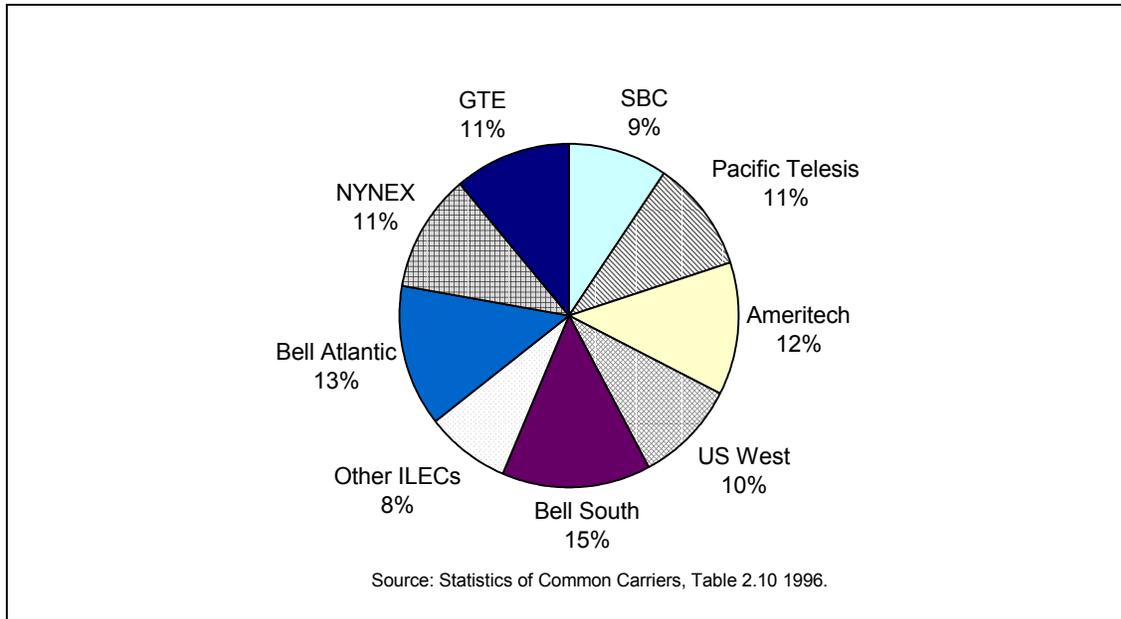


Figure 3.1. Access Line Shares Prior to RBOC Mergers (1996).

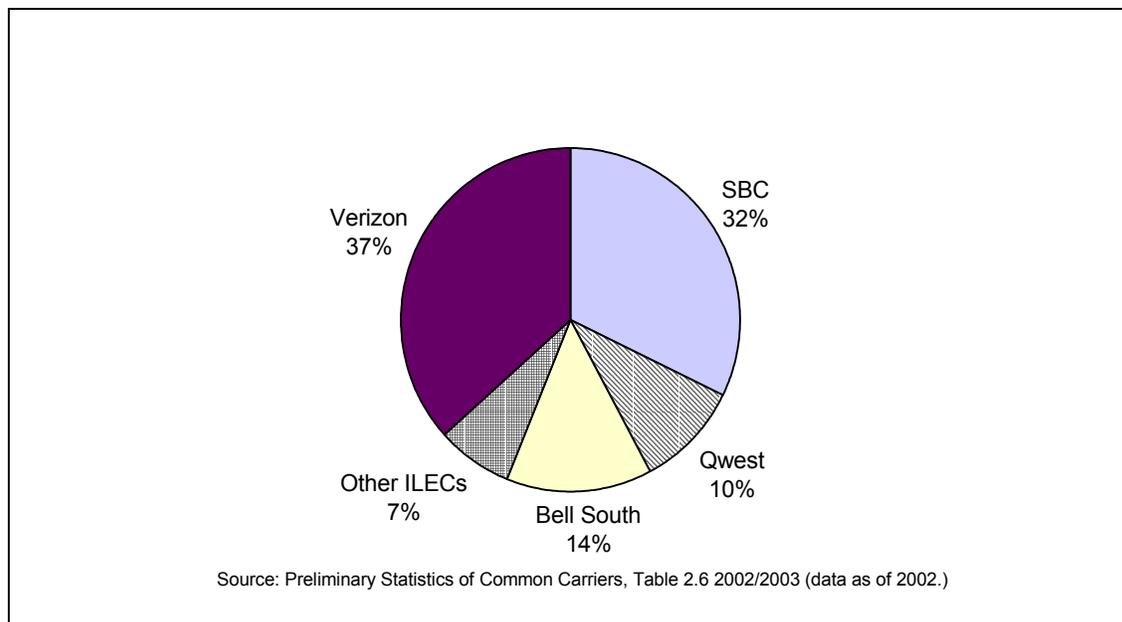


Figure 3.2. Current Access Line Shares After SBC/Ameritech Merger (2002).

In contrast, Rural ILECs appear to have experienced much less merger and consolidation activity over that time frame than did the large ILECs. Although it is difficult to collect data that tracks changes in Rural ILEC ownership and consolidation over time across the country, a database maintained by the Wisconsin PSC provides some illustrative data. In Wisconsin, only a handful of

companies were acquired, merged, or sold exchanges between 1996 and 2001. In 1996, there were 87 operating companies in Wisconsin.⁴⁷ In 2001, that number had fallen by only five, to 82.⁴⁸ The largest transaction by far was the sale of the exchanges in two GTE-North Study Areas to Century Tel, which involved about 470,000 access lines. However, rather than integrating those exchanges into its existing Wisconsin operating companies, Century Tel organized them into distinct operating companies (known as Telephone USA and Century Tel of Central Wisconsin). In 1998, Century Tel also acquired 19 exchanges from Ameritech-Wisconsin and similarly maintained them as a separate operating company and study area. All of these entities continue to receive high cost support.⁴⁹ The remaining transactions in Wisconsin over those five years – involving the Crandon Telephone Company, Fairwater-Brandon-Alto Telephone Company, Frontier Communications Lakeshore, Headwaters Telephone Company, People’s Telephone Company, Rib Lake Telephone Company, and the Wayside Telephone Company – affected about 26,000 lines, or less than one percent of the state’s total number of access lines in 1996.⁵⁰

Data maintained by the Federal-State Joint Board on study area changes also suggests that there has been little consolidation of Rural ILEC operations in other states as well. A Joint Board summary of study area changes that occurred across the country from 1998 through 2002 shows only nine ILEC mergers or acquisitions that resulted in the elimination of a study area by consolidation with another study area.⁵¹ Only one such transaction is reported for each year 1998, 2000, and 2001, and the remaining six occurred in 1999.⁵² Excepting the 1998 merger of the Danube Telephone Company (Minnesota) for which we do not have data, the other eight companies combined reported only some 21,000 lines in 1999,⁵³ confirming that the scale of this activity has been exceedingly small. The only meaningful consolidations that have occurred since 1998 have been the formation of Iowa Telecom Services and the Valor Telecommunications Company, both of which were new ILECs formed by acquiring exchanges from other operators. Today, these

47. Wisconsin PSC telephone company database; several of the operating companies were subsidiaries of Century Tel; however, they remained separate entities for regulatory reporting and ratemaking purposes.

48. *Id.*

49. See Universal Service Administrative Company, First Quarter 2004 Filing to the FCC, Appendix HC01 (“High Cost Support Projected by State by Study Area – 1Q2004”), available at <http://www.universalservice.org/overview/filings/> (accessed February 10, 2004).

50. Analysis of Wisconsin PSC database (comparing 1996 vs. 2001 data for “Annual_Rpt_View”).

51. *Joint Board Monitoring Report*, Table 3.37.

52. *Id.*

53. Universal Service Administrative Company, First Quarter 1999 Filing to the FCC, Appendix HC01 (“High Cost Support Projected by State by Study Area – 1Q1999”), available at <http://www.universalservice.org/overview/filings/> (accessed February 10, 2004).

RORR-Based Funding Mechanisms Discourage Efficient Consolidation of Study Areas

companies serve 120,621 and 536,274 access lines, respectively – in total, just 3% percent of the 21,480,848 lines served today by Rural ILECs.⁵⁴ Moreover, the formation of those companies did not result in a net reduction in study areas.⁵⁵ Indeed, the Joint Board data indicates that 27 new study areas were created during the 1998-2002 period, only two of which covered previously unserved territory.⁵⁶ Even when considered net of the nine study areas eliminated through consolidations noted above, the net gain of 18 study areas suggests a trend toward fragmentation rather than consolidation among Rural ILECs.

54. Universal Service Administrative Company, Second Quarter 2004 Filing to the FCC, Appendix HC05 (“High Cost Loop Support Projected by State by Study Area – 2Q2004”), available at <http://www.universalservice.org/overview/filings/> (accessed February 10, 2004).

55. *Joint Board Monitoring Report*, Table 3.37.

56. *Id.*

4

BENCHMARKING ANALYSIS DEMONSTRATES RORR-REGULATED RURAL ILECS ARE OPERATING INEFFICIENTLY

This chapter of our Report examines the comparative performance of Rural ILECs, to identify the best-performing Rural ILECs and to assess the extent to which under-performing Rural ILECs are diverting federal USF payments from their primary mission. We conduct a benchmarking analysis that demonstrates that about one-third of the Rural ILECs' claimed expenses relating to corporate overheads are being incurred in an inefficient manner. On an aggregate basis, these inefficiencies amount to some \$545-million annually. Finally, we show that the existing FCC cap on corporate overheads applied in the High Cost Loop support mechanism fails to prevent the lion's share (some 77%) of those inefficiencies from flowing into the cost calculations that are the basis for Rural ILEC's HCL payments, meaning that HCL requirements are also being significantly overstated.

High Cost support is ultimately intended to benefit telephone subscribers, but it is disbursed to LECs.

The primary mission of the FCC's "high cost" universal service support program is to ensure that the rates for basic telephone service in the relatively high-cost, rural regions of the U.S. will continue to be affordable by keeping rural telephone rates "reasonably comparable" to the rates prevailing in lower-cost areas of the country.⁵⁷ While the intent is clearly to promote the welfare of telephone service

57. See, e.g., *Federal State Joint Board on Universal Service*, CC Docket No. 96-45, *Order on Remand, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order*, FCC 03-249, 18 FCC Rcd 22559 (2003), ("Remand Order"), at para. 15, footnote 29. The "reasonably comparable" standard stems from Section 254(b)(3) of the Telecommunications Act of 1996. See, Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) ("1996 Act"). The 1996 Act amended the Communications Act of 1934, 47 U.S.C. §§ 151, et seq. ("Communications Act" or "Act"). References to section 254 in this Report refer to the universal service provisions of the 1996 Act, which are codified at 47 U.S.C. 254 of the Act. 47 U.S.C. § 254; see also 47 U.S.C. § 214(e).

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subscribers, the program's funds are disbursed to the *carriers* providing service in the rural high-cost service territories. Each of the five federal high-cost programs in place today for rate-of-return regulated Rural ILECs⁵⁸ relies on carrier submissions of certain embedded (i.e., booked) cost and demand data. These filings are used to determine how much financial support will be provided to each Rural ILEC to compensate it for operating in a service territory with relatively high costs of providing basic telephone service.⁵⁹

All of these programs presume, without any substantive process for verification, that when a Rural ILEC reports that its costs exceed the benchmark level to qualify for universal service funding, that those costs reflect legitimate differences in costs of service due to factors beyond the control of the ILECs' management. There are, of course, many such exogenous influences on costs for the facilities and activities that are directly related to provision of telephone service. For example, a Rural ILEC operating in a mountainous region may incur higher outside plant construction costs than it might elsewhere, e.g. if excavation encounters more rock and network routing has to accommodate more natural obstacles. Similarly, a Rural ILEC operating in higher northern latitudes may confront higher outside plant maintenance costs due to colder weather, storms, and tree-trimming requirements. Demographic factors, particularly low population density and a dispersed customer base, can also drive costs of service upward in rural areas.

However, under the current federal USF system, Rural ILECs can (and as shown later in this section, apparently do) receive federal USF support when their claims of higher costs are not driven by these types of legitimate exogenous costs, but instead reflect inefficient operations, poor management, waste, or even outright fraud. The basic problem of a cost-based universal service system is exacerbated by the fact that the great majority of Rural ILECs have been operating under traditional rate of return regulation for decades. It is generally accepted by economists and regulators who have examined the issue that a firm regulated under an RORR framework faces incentives to increase and/or overstate its costs. Indeed, the FCC reached this conclusion when it reviewed the incentives of rate of return regulation and their effects upon ILEC behavior in the *Further Notice of Proposed Rulemaking* in its price caps proceeding, CC Docket 87-313. As explained by the Commission at that time:

... rate-of-return regulation provides regulated firms with very strong incentives to pad their rates, for essentially two reasons. First, as a profit-maximizer, the firm is led to adopt the most costly, rather than the most efficient, investment strategies because its primary means of increasing dollar earnings under rate-of-return

58. Rural ILECs are eligible to receive USF funding from the High Cost Loop support ("HCL"), Long Term Support ("LTS"), Local Switching Support ("LSS"), Interstate Common Line Support ("ICLS"), and Safety Valve support ("SV") programs.

59. While competitive ETCs are eligible for high-cost support, they receive support based on the costs reported by the Rural ILEC operating in the given study area.

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constraints is to enlarge its rate base. This is commonly known as the Averch-Johnson effect or “A-J” effect of rate-of-return. Second, since all operating expenses are included in a firm's revenue requirement under rate of return, management has little incentive to minimize operating costs. This is commonly known as “X-inefficiency.” The firm's shareholders profit from the first phenomenon, and the benefits of the second redound to the firm's management. In both cases, however, consumers suffer because these distorted incentives increase the cost of doing business - and thus the rates consumers must pay for service.⁶⁰

The FCC's review noted several studies that found these effects to have significant impacts upon regulated firms' costs, including “one showing unit cost increases on the order of 6 to 12 percent” due to A-J type distortions⁶¹ and a unit cost differential of approximately 11 percent for monopoly electric utilities subject to RORR relative to such utilities in situations where some competitive forces exist.⁶² These studies presumably were assessing RORR in situations where some regulatory monitoring and investigations were actually being performed. As discussed earlier in this report, the minimal amount of regulatory oversight that is actually being applied to the vast majority of Rural ILECs would only increase their incentives and opportunities to swell their costs further.

We now turn to an examination of the costs reported by Rural ILECs and an assessment of how much of those costs can be attributed to inefficient performance.

Corporate operations expenses can be compared among Rural ILECs and analyzed for inefficient performance.

Our examination focuses on the costs for Corporate Operations (USoA accounts 6710-6790) that are reported by Rural ILECs.⁶³ These accounts record the expenses for general corporate overhead functions such as executive management, accounting and finance, human resources/personnel, information management, legal support, and other similar administrative support activities. As discussed below, the FCC has previously conducted its own analysis of these expenses and determined that certain

60. *In the Matter of Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, *Further Notice of Proposed Rulemaking*, FCC 88-172, 3 FCC Rcd 3195, 3219 (footnotes omitted).

61. *Id.*, 3 FCC Rcd 3195, 3220.

62. *Id.*, 3 FCC Rcd 3195, 3222.

63. Our analysis does not encompass competitive local exchange carriers (“CLECs”) that provide service in rural areas as ETCs that may also qualify for high cost support, as the CLECs tend to have very different cost structures than the ILECs and are not operating under rate of return regulation.

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limits should be placed on how much of Corporate Operations are recoverable from the federal high cost USF programs.

Corporate Operations normally represent a relatively small share of an ILECs' total cost structure, which is dominated by the capital costs of its network plant (i.e., depreciation, return on investment, and taxes) and the plant-related expenses associated with network maintenance and repair activities. However, it is difficult to evaluate directly the efficiency with which Rural ILECs incur those latter plant-related capital costs and expenditures. In particular, many measures of ILECs' plant-related costs (such as Total Plant in Service ("TPIS") per access line or route mile, or annual outside plant maintenance expense on a similar basis) can be expected to vary widely among differently-situated carriers, precisely because of the kinds of exogenous geographic and demographic cost drivers noted above. Thus, it can be quite difficult to isolate any management or operational failings from those effects. Analysis of annual outlays for capital expenditures ("capex") runs into similar problems. For example, if one Rural ILEC spends 50% more per-mile of feeder plant deployed, does that reflect inefficient construction practices (excessive wage rates, "gold-plating" of facilities), or more costly soil conditions for excavation? Making such determinations would require far more data than is available in carriers' annual financial/operational reports, and is beyond the scope of this Report.⁶⁴

In contrast, Corporate Operations are largely unaffected by those types of exogenous conditions, and thus are more amenable to comparative analysis. Corporate overheads are largely driven by the size and complexity of the firm.⁶⁵ Consider, for example, the expenses relating to maintaining a company's physical security. By definition, physical security surveys, investigations, and arrangements are intended to safeguard specific land and buildings, other capital assets, and/or employees of the company. For example, if the company acquired a new building, the company would incur the costs of installing and operating security card access mechanisms, alarm systems, and possibly surveillance cameras. In addition, the company would hire some security staff for that particular building. Thereafter, the building would need to be included in routine physical security surveys, and incidents in the building might trigger specific security investigations. Clearly, these security costs are sensitive to the volume of land/buildings, other capital assets, and/or employees of the company, all of which will tend to increase with the size of the company. Moreover, none of those expenses tend to bear any direct relationship to exogenous cost factors rooted in rural geography or demographics.

64. Of course, the fact that inefficiencies relative to network-related costs are harder to identify does not mean that they do not exist. To the contrary, the inherent complexity of modern telecommunications networks suggests that local networks are more difficult to manage and operate efficiently than many other kinds of businesses.

65. In earlier work, ETI has demonstrated by statistical regressions that overhead costs vary directly with firm size. See California Public Utilities Commission Docket R.93-04-003/I.93-04-002, *Declaration of Patricia D. Kravtin and Sonia N. Jorge in Support of Opening Comments of AT&T Communications of California, Inc. and MCI Telecommunications Corp. on Pacific Bell's Cost Studies*, April 8, 1997.

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Consequently, for similarly-sized companies, one would not expect to find large variations in the overall level of costs reported for most categories of corporate overheads. Where large variations exist, they are more likely to reflect differences in endogenous performance. The most efficiently-performing carriers will tend to have the lowest levels of corporate overhead costs. Conversely, the highest reported levels of corporate overheads suggests that those ILECs may have unusual degrees of management and administrative inefficiency, or possibly may be engaged in fraud or other forms of malfeasance. The data that we have been able to collect and review is insufficient on its own to conclude that any specific company is engaged in improper accounting or other specific misconduct or inefficiencies. Nevertheless, as discussed in further detail below, we are able to conclude that Rural ILEC inefficiencies are real and identifiable, and are having a substantial upward impact on the cost-based federal USF programs.

The FCC imposed a cap on corporate overhead expenses recoverable through HCL support, in recognition of the discretionary nature of corporate overhead expenditures.

The Commission has recognized for many years the potential problems created by allowing ILECs to recover corporate overheads and other administrative expenses through the federal USF programs. In a July 1995 *Notice of Proposed Rulemaking* in CC Docket 80-286, the Commission observed that:

Some regulators and industry commenters are troubled by the inclusion of administrative costs in the loop costs that define a LEC's eligibility for USF assistance under the current rules, because they believe that such costs are highly discretionary. Several parties suggest that we should exclude some or all administrative costs from the USF formula. We tentatively agree that administrative costs do not appear to be costs inherent in providing service in high-cost areas of the country. For those reasons, we propose to remove costs recorded in Account 6710, Executive and Planning, and Account 6720, General and Administrative, and Account 6120, General Support Expenses, from the loop costs used to determine eligibility for a level of USF assistance.⁶⁶

The Commission subsequently adopted a limitation on LECs' ability to recover corporate overhead costs from the High Cost Loop ("HCL") support program in its major May 1997 universal service order.⁶⁷ After agreeing with commenters that "these [corporate operations] expenses do not appear to

66. *Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board*, CC Docket No. 80-286, *Notice of Proposed Rulemaking and Notice of Inquiry*, 10 FCC Rcd 12309, 12324-25 (1995).

67. *Universal Service Report and Order*, 12 FCC Rcd 8776.

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be costs inherent in providing telecommunications services, but rather may result from managerial priorities and discretionary spending,”⁶⁸ the Commission adopted a cap on the amount of Corporate Operations expense that a LEC could include in its HCL support calculations.⁶⁹ The cap was adopted for Rural ILECs as well as Non-rural ILECs.⁷⁰

However, in the *Rural Task Force Order* released in May 2001,⁷¹ the Commission made further adjustments to the cap that loosen it considerably. First, the Commission modified the cap by adopting an annual inflation adjustment, so that it will increase each year by the amount of the Gross Domestic Product-Chained Price Index (“GDP-CPI”).⁷² Second, the Commission also increased the Corporate Operations expense cap applying to the smallest Rural ILECs (under 6,000 lines), from \$300,000 to \$600,000 per year.⁷³ Finally, the Commission re-based the cap so that it would be raised to reflect accumulated inflation (per the GDP-CPI) since 1995, which was the vintage of the data used in analysis supporting the original cap.⁷⁴ The latter change alone has allowed the per-line cap (excluding effects of the small Rural ILEC limitation) to increase 13.8% from the level originally adopted.⁷⁵

Apart from these adjustments, it must be recognized that the FCC cap was not designed to limit Rural ILECs’ Corporate Operations expenses to *efficient* levels, but only to the *average* level of performance that they had achieved in the past. Because the cap was derived from a regression analysis on the ILECs’ 1995 cost support filings, it reflected *all* ILECs, regardless of whether they were operating efficiently or not. Therefore, while the cap has offered some protection against the recovery of excess corporate overheads through the HCL support mechanism, it can also be said to have *institutionalized* the level of corporate operations inefficiency extent in 1995, and thus allowed those inefficiencies to continue to be reflected in the HCL support mechanism up to the present day. As we

68. *Id.*, 12 FCC Rcd 8776 at 8931, para. 283.

69. The original cap was based on a regression performed by FCC Staff on ILEC expense data submitted by the National Exchange Carrier Association (“NECA”) in its annual filing (using 1995 data). The regression produced a “projected” level of Corporate Operations expense per access line for ILECs of varying sizes, and the Commission limited ILECs’ recoverable expenses to a “zone of reasonableness” of no more than 115% above those projections. *Id.* at 8931-32.

70. *Id.*, 12 FCC Rcd 8776 at 8942.

71. *Rural Task Force Order*, 16 FCC Rcd 11244 .

72. *Id.*, 16 FCC Rcd 11244, at 11275, para. 72.

73. *Id.*, 16 FCC Rcd 11244, at 11275, para. 74

74. *Id.*, 16 FCC Rcd 11244, at 11275, para. 73.

75. The GDP-CPI increased from 93.30 at year-end 1995 to 106.16 at year-end 2003, a 13.8% increase. Bureau of Economic Analysis, US Department of Commerce, available at <http://www.bea.doc.gov/bea/> (Accessed February 6, 2004).

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address below, however, it is possible to identify and root out those embedded inefficiencies, by benchmarking Rural ILECs' corporate overhead levels against the best-performing of their peers.

Benchmarking analysis reveals that about one-third of Rural ILECs' total claimed corporate operations expenses are attributable to inefficient performance.

Benchmarking is the comparison of one company's operations with those of other companies that exhibit superior performance in the specific areas to be analyzed. Originally popularized by Robert C. Camp⁷⁶ (among others), benchmarking is now a fairly common management tool that seeks to identify "best practices" among comparable firms and apply those business processes to another firm to improve its performance. Although the process of re-engineering aspects of a comprehensive benchmarking effort are beyond the scope of this report, it is feasible to compare the Corporate Overheads of the Rural ILECs and identify a superior-performing, "best-in-class" subset of those companies. Using the "best-in-class" as a baseline of presumably efficient performance, one can estimate the amount of reported Corporate Operations expenses that is in excess of the baseline level, and thus attributable to inefficient performance.⁷⁷

We have undertaken such an analysis using data supplied in the National Exchange Carrier Association ("NECA") USF Submission for 2003, filed with the Commission and USAC on October 1, 2003.⁷⁸ This filing provides calendar year 2002 embedded cost data and access line (loop) information on a study area basis, for 874 Rural ILEC study areas.⁷⁹ These study areas contain some 90% of the working loops operated by Rural ILECs that are under rate-of-return regulation,⁸⁰ and thus provide a close approximation to the entire universe of Rural ILECs subject to RORR. Figure 4-1 below provides a graph of total Corporate Operations expense vs. loops for each of the Rural ILEC

76. Robert C. Camp, *Business Process Benchmarking, Finding and Implementing Best Practices*, ASQC Quality Press, Milwaukee, Wisconsin, 1995.

77. In this sense, "inefficiency" would also encompass deliberate overspending (e.g., unwarranted increases to officers' compensation), as well as inferior management practices.

78. Industry Analysis Division, Federal Communications Commission, *NECA's Overview of the Universal Service Fund, Submission of 2002 Study Results, October 2003*, available at <http://www.fcc.gov/wcb/iatd/neca.html> (Accessed January 10, 2004).

79. NECA's filing also includes data for Non-rural ILECs, but we have screened them out of the analysis. Competitive ETCs do not report costs to NECA (or the Commission) and thus are not included in the dataset.

80. That is, 19,508-million (USF loops in NECA Rural ILEC study areas) ÷ 21,577-million (USAC 2002 working loops for Rural ILEC study areas) equals 90.4%.

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study areas with 100,000 lines or less.⁸¹ The graph also shows the FCC’s expense cap, which runs roughly through the center of the envelope of individual datapoints.

Focusing on any particular size range portrayed on the graph, it is clear that there is a wide range of overhead expense levels being reported by the Rural ILECs. For example, the reported expense levels for Rural ILECs in study areas of approximately 40,000 loops fall in the range of roughly \$2-million to \$7-million (see Figure 4.1). Notably, no ILEC of that size has overhead expenses below the \$2-million level, so that \$2-million can be considered the minimum amount of overhead expenditures necessary to run an ILEC operation of that size, and thus an indicator of generally efficient performance of corporate overhead functions.⁸² Once the best-performing (i.e., \$2-million level) ILECs have been identified, the other ILECs in that size class can be seen as performing less-efficiently, to the extent their individual expense levels are higher.⁸³ Our analysis employs this type of “best-in-class”

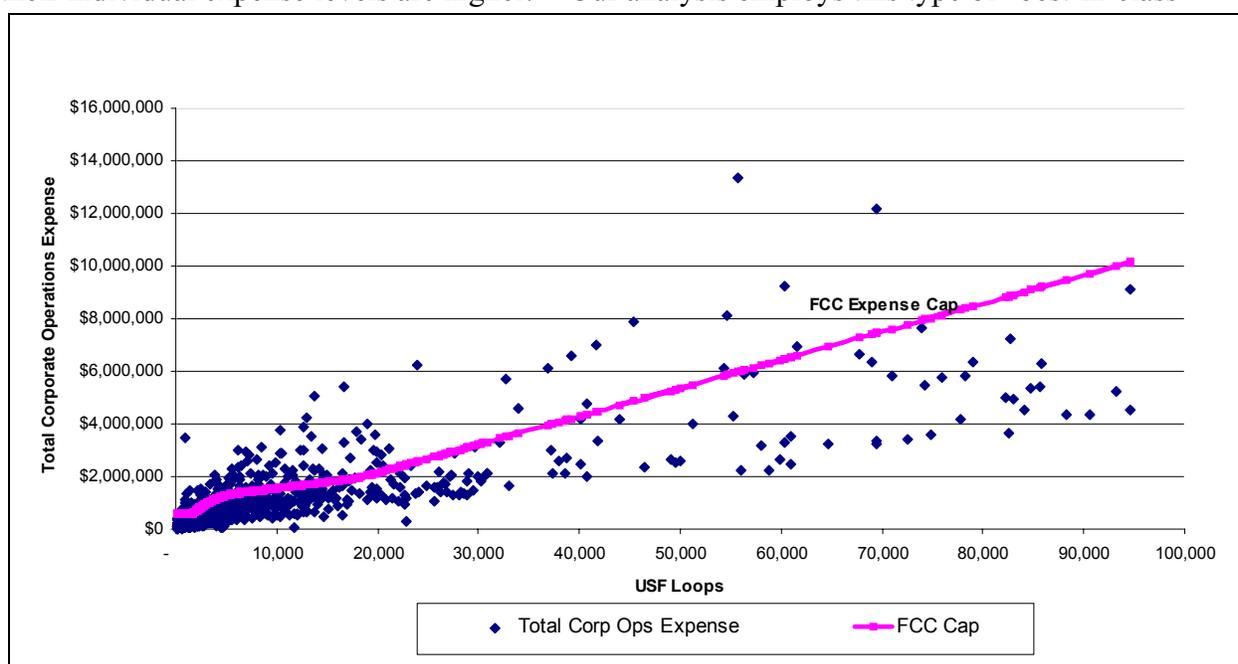


Figure 4.1. Rural ILECs - Corporate Overhead Expenses vs. Study Area Size (Loops).

81. The study areas with more than 100,000 lines are included in the dataset, but not shown here in order to improve the graph’s legibility.

82. Of course, it is possible that even lower levels of costs (and thus higher efficiency) could be achieved if there were greater incentives to be efficient than exist in the current regulatory and operating environment. In that sense, the presumption that the lowest-observed cost level represents the highest achievable efficiency makes our analysis very conservative.

83. While any particular ILEC presumptively identified in this manner as “inefficient” might be able to point to some extenuating circumstance that justifies its relatively higher corporate overheads, the sheer number of ILECs reporting expenses well above the “best-in-class” levels, and their manifestly wide variation, argues for the robustness of the benchmarking approach here.

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evaluation, by defining specific size classes and performance thresholds, and then calculating the amount of expense for each ILEC that exceed the best-in-class level.

We have calculated “best-in-class” benchmarks for Corporate Operations expense, by grouping the Rural ILEC study areas into bands 2,000 loops wide (i.e., group 1 contains the Rural ILECs with 0-2,000 loops, group 2 has those with 2,001-4,000 loops, etc.). We created fifty such groupings, encompassing study areas of up to 100,000 loops.⁸⁴ For each group, we assumed that the “best-in-class” are those ILECs in the top 25 percent of their group, when sorted (in ascending order) by their reported Corporate Operations expense-per-loop levels. For example, there are 103 Rural ILEC study areas in the 4,000-6,000 Loops group, so that the best-in-class subset for that group consisted of the 25 study areas with the lowest reported expense-per-loop levels.⁸⁵ For each group, the (presumptively efficient) benchmark cost level was then calculated as the average expense per-loop within the best-in-class subset, multiplied times the upper breakpoint for the group (e.g., for the 4,000-6,000 Loop group, the upper breakpoint is 6,000).⁸⁶ Nineteen of the original size groupings contained no study areas (e.g., no study area had a loop count between 36,000 and 38,000 loops) and were thus dropped from the benchmarking. A best-fit trend line was determined for the remaining 31 datapoints using simple linear regression.⁸⁷ Figure 4.2 below shows the individual best-in-class datapoints, together with their associated trend line, superimposed on the under-100,000 loops data set. As to be expected, the trend line generally tracks the lower edge of the scatterplot of datapoints, as it represents the ILECs with the best performance, i.e. the lowest expense levels. The ILECs that report corporate operations expenses higher than the trend line are thus manifestly less efficient than their best-in-class peers, with the highest datapoints relative to the trend line indicating the highest degrees of inefficiency.

84. Beyond 100,000 loops, many 2,000 loop groupings would contain few or no study areas, so that benchmarking could not be conducted with those groupings. Limiting the benchmarking to 100,000 loops or less still captures 96% of the Rural ILEC study areas. Given the FCC’s observation in the *Universal Service Report and Order* that the corporate overheads expense trend flattens out after 10,000 lines (*op. cit* at 8931, footnote 741), it is reasonable to assume that groups beyond 100,000 lines would generally follow the same trend line.

85. That is, $103 \times 25\% = 25.75$, truncated to 25. The 25% threshold was applied in this manner to all 50 groups.

86. Using the upper breakpoint rather than the middle of the class (e.g., 5000 loops) provides another aspect of conservatism to our analysis.

87. The T-statistic for the independent variable (size of the ILEC by loop) is 11.062, which is far above a one-tailed critical value (at 30 degrees of freedom) of 3.385, indicating statistical significance at the 99.99% level. Also, the R-squared value is 0.8084, indicating that the size (Loops) independent variable does account for the majority of the variation in Corporate Operations expense for the best-in-class ILECs.

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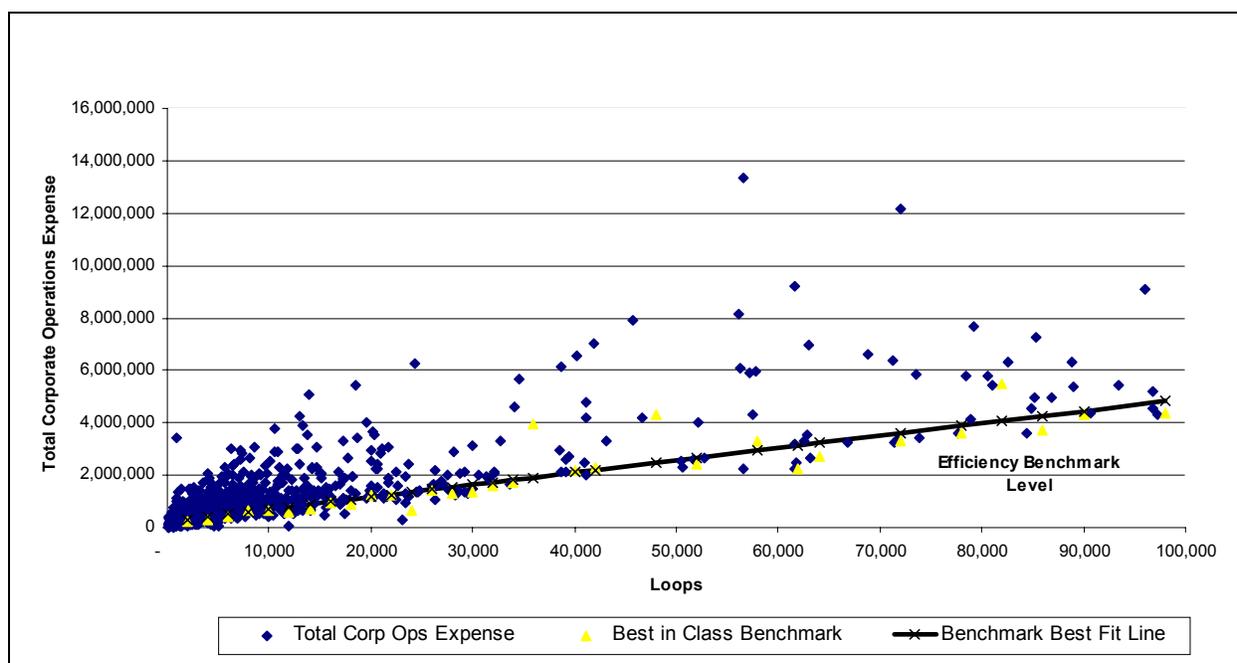


Figure 4.2. Benchmarking of Rural ILECs’ Corporate Overhead Expenses.

We have also calculated the difference between the reported Corporate Operations expense for each Rural ILEC study area, and the presumptively-efficient expense level indicated by the trend line. While this benchmarking is insufficiently precise to quantify the degree to which any particular Rural ILEC is operating inefficiently, in aggregate, the total amount of claimed expense above the benchmark level provides a reasonable indication of the degree of inefficiency prevailing in the Rural ILECs’ corporate overheads. Out of a total reported Corporate Operations expense for the 874 Rural ILEC study areas of \$1.655-billion, some \$545.0-million, or 32.9%, are expenses beyond the benchmark level estimated by the trend line. This indicates that *thirty-three percent, or nearly one-third*, of the Rural ILECs’ claimed Corporate Operations expenses are being incurred in an inefficient manner.⁸⁸ Looked at another way, the Rural ILECs are reporting total corporate overhead expenses that are inflated by nearly *fifty percent* above the presumably efficient level of \$1.11-billion in aggregate.⁸⁹

88. Thirty-seven study areas are larger than the 100,000 loop threshold applied in our benchmarking analysis. If those study areas were excluded from the calculation of the aggregate excess expense (which is equivalent to assuming that they were all efficient enough to match the best-in-class trend line performance), the aggregate excess Corporate Operations expense still amounts to \$434-million, representing 26.2% of the total claimed expense level. However, there is no reason to believe that corporate overheads for the larger Rural ILECs should exceed the trend determined for the under 100,000 loop companies, if they were performing efficiently. Therefore, those additional study areas can also reasonably be evaluated relative to the benchmark trend line.

89. That is, \$1.655-billion divided by \$1.11-billion (i.e., \$1.655-billion minus \$545-million) equals a 49% overstatement.

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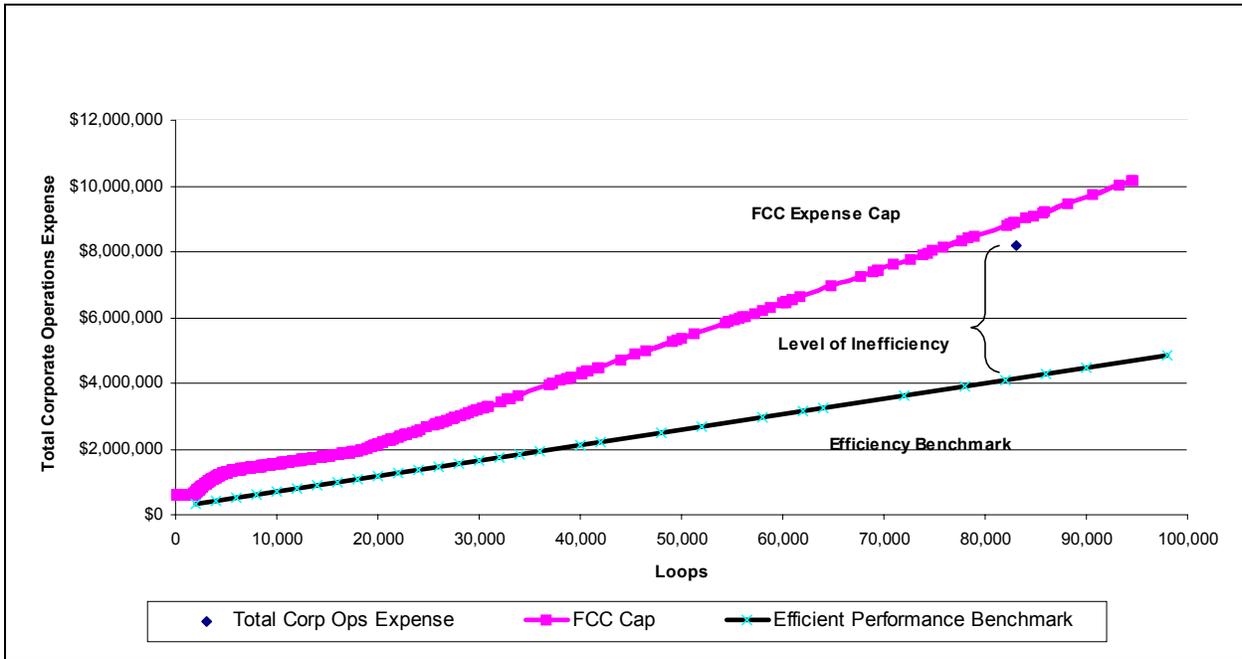


Figure 4.3. The FCC Cap Will Not Prevent the Flow Through of Inefficiently Incurred Corporate Operations Expense into HCL Payments.

Despite the FCC’s expense cap, the lion’s share of the Rural ILECs’ inefficiencies in corporate overheads flow through into the calculation of High Cost Loop support amounts.

It is troubling enough that the Rural ILECs are reporting corporate overhead expense levels that are inflated by nearly fifty percent above the efficient level. If the Rural ILECs were not receiving the billions of dollars of universal service support that they collect today, those inefficiencies would translate into substantially higher rates for their customers.⁹⁰ Instead, however, these inefficiencies largely are being passed into the federal USF system. Specifically, corporate overhead costs are an input into the per-loop revenue requirement calculations that are used to determine how much High Cost Loop support assistance each Rural ILEC can receive. As a result, to the extent that Rural ILECs’ are claiming inflated levels of corporate overheads, their High Cost Loop support requirements are being exaggerated.

While the FCC’s existing expense cap screens out some of the most excessive corporate overhead cost claims, in general it does not prevent the lion’s share of those cost overstatements from being

90. In theory, regulators could be more vigilant in applying RORR to these companies, but in reality regulators rarely have the resources to pursue full-blown rate cases for Rural ILECs.

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flowed into the calculations of High Cost Loop support payments. Figure 4.3 illustrates this point, by showing the FCC's cap in relation to the benchmark trend line we have calculated. While the FCC's cap has the effect of disallowing any claimed expenses that are above the cap line, it will allow expense levels that are above the benchmark trend line level, but below the FCC cap, to flow into the High Cost Loop calculations. As illustrated in Figure 4.3, consider a Rural ILEC serving 85,000 loops, that reports total Corporate Operations expenses of about \$8-million. While that expense level is below the FCC cap, and thus allowed in its entirety for determination of High Cost Loop needs, it is about twice the benchmark level of \$4-million incurred by an efficient Rural ILEC. Thus in this case, some \$4-million of excess, inefficiently incurred Corporate Operations expense (marked as "Level of Inefficiency" in Figure 4.3) would flow into that carrier's cost-based calculation of its High Cost Loop support requirements.

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Figure 4.4 below shows that there are in fact many Rural ILECs who are reporting Corporate Operations expense levels that are below the FCC cap, but nevertheless above the efficient benchmark level. When evaluated on the same basis as the aggregate excess calculation above,⁹¹ the FCC cap excludes only 23.2% of the overstated corporate overhead costs, and allows the vast majority, some 76.8%, to be reflected in the per-loop revenue requirement entering into the HCL support calculations. While we have not attempted to precisely quantify the impact of the corporate overheads cost overstatements on the HCL payments, it is clear that they will have a significant impact.

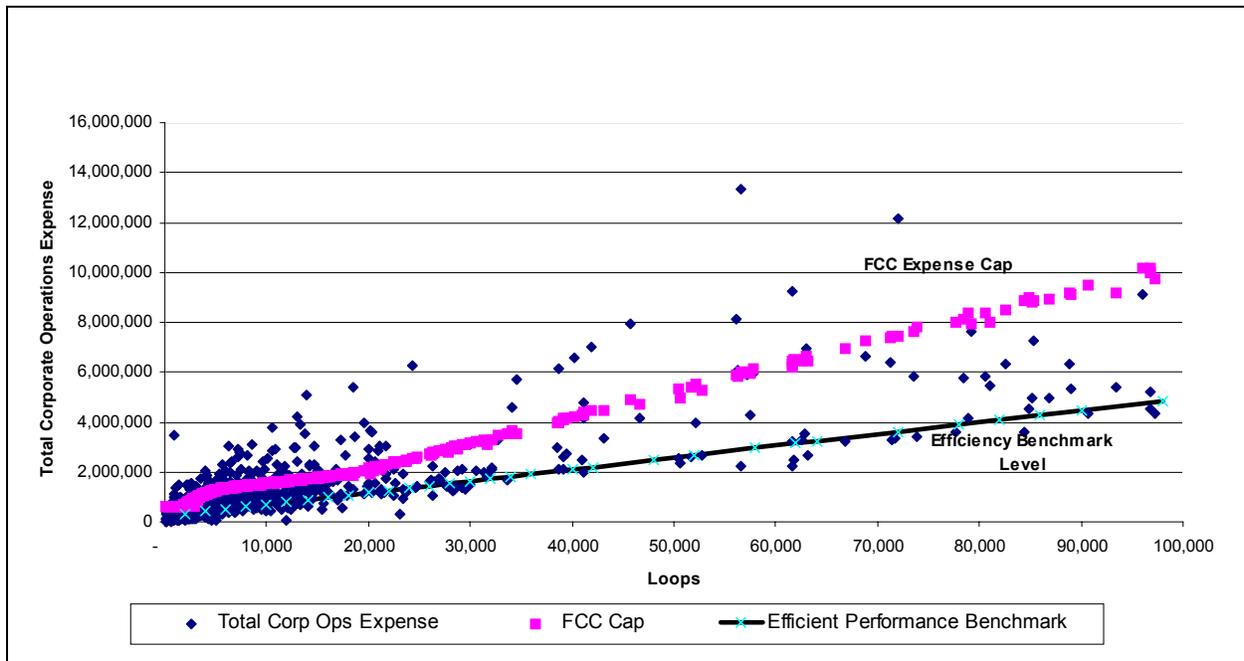


Figure 4.4. The Lion’s Share of Rural ILECs’ Inflated Corporate Overheads Are Not Screened Out by the FCC’s Expense Cap.

91. Our illustration is somewhat simplified, because the specific calculation employed for the HCL mechanism pursuant to 47 C.F.R. 36.621(a)(4) applies a ratio to the corporate operations expense that is intended to allocate only the portion of corporate operations expense attributable to loop plant. While this means that the overall corporate operations expense numbers cited herein do not flow into the HCL mechanism, the 23%/77% proportions we estimate are not affected by that allocation and thus remain valid.

5

WIDE VARIATIONS IN RLEC OVERHEADS POINT TO INEFFICIENCIES

Chapter 4 of this Report provided an analysis of Rural ILECs' reported Corporate Overheads expenses based on a national dataset supplied by NECA. In this chapter, we supplement that analysis by examining the performance of Rural ILECs in three particular states, and consider their Corporate Overhead expenses in the context of their earnings (which is not presented in the NECA submissions). In general, we find that carriers operating in the same state and thus presumably facing similar exogenous conditions for at least some operational factors (e.g., wage rates, climate, etc.) still show enormous variations in Corporate Overhead expenses. While we do not find a clear relationship between earnings levels and Corporate Overheads, one reason for this may be that carriers that would otherwise be overearning can pad their overhead expenses in order to keep nominal earnings sufficiently low to avoid regulatory scrutiny by state PUCs. Supporting this notion, we provide an analysis of certain Texas Rural ILECs that shows that adjusting nominal earnings to recognize inflated corporate overheads tends to produce earnings levels well in excess of authorized rates of return, in several cases up to the 20% range.

The basic data for this analysis is drawn from annual financial reports filed by incumbent LECs operating in Ohio, Texas, and Wisconsin with those states respective public utility commissions. Our initial data set encompassed a total of 140 ILECs: twenty-four ILECs operating in Ohio,⁹² fifty-seven operating in Texas,⁹³ and fifty-nine operating in Wisconsin. Most of our analyses have focused on data for the most recent year we were able to collect (for Ohio and Texas, year-end 2002 data; for

92. The Public Utilities Commission of Ohio ("PUCO") allows ILECs serving 15,000 or more access lines to file their access line counts on a confidential basis. While some Ohio ILECs (notably, Western Reserve) have supplied their access line counts on a public basis, the ones that did not were not included in our analysis.

93. While 58 report filings were reviewed, one carrier, Yipes Transmission, Inc., filed financial schedules populated only with zeroes, and thus was not included in our data set. Of course, the filing of such a vacuous "report" raises further accountability issues.

Wisconsin, year-end 2001 data). However, we also examined some historical data, particularly data from Wisconsin for years 1996-2001.

Figures 5.1, 5.2, and 5.3 below represent, for Ohio, Texas, and Wisconsin respectively, graphs of total Corporate Operations expense versus company size, as measured by access lines, for all of the ILECs in our data set with less than 20,000 lines.⁹⁴ Figure 5.4 combines the data for the three states onto one graph. Two things are immediately evident from Figure 5.4: first, that there is a rough direct relationship between company size and the total magnitude of its Corporate Operations expenses; and second, that there is substantial variation among ILECs of similar size in the Corporate Operations expense levels that they report, with the smaller carriers showing the greatest divergence.

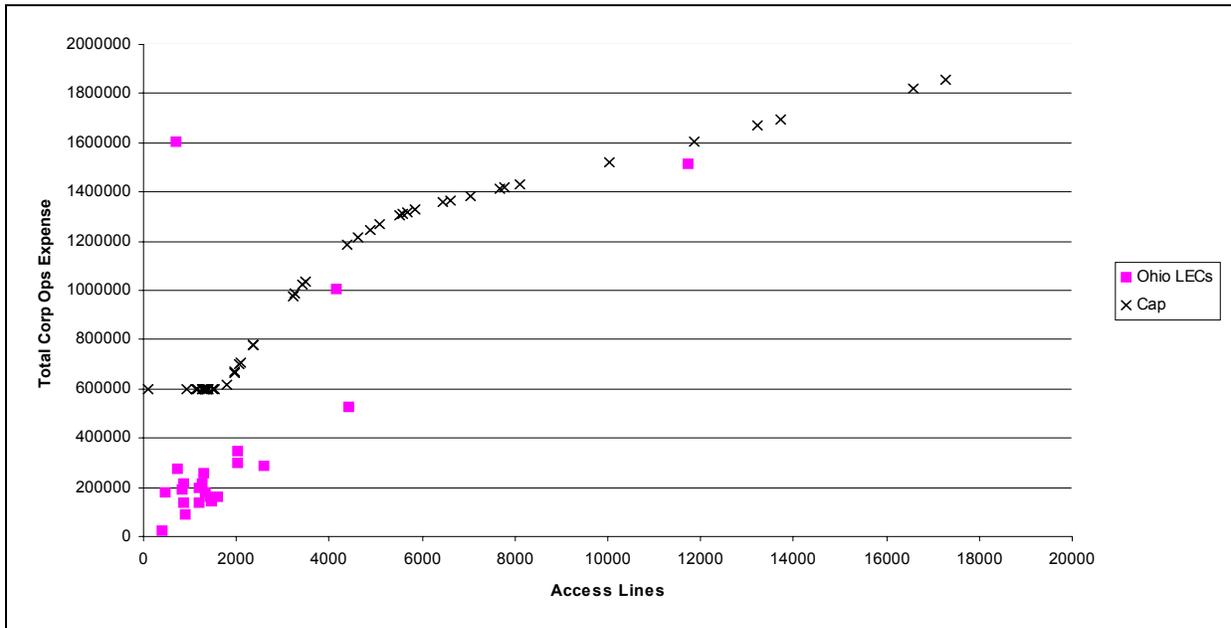


Figure 5.1. Small LECs Report Wide Variations in Overhead Expenses (Ohio).

94. The 20,000 line cut-off was chosen so that the graph's scale is sufficiently large to distinguish the smaller ILECs.

Wide Variations In RLEC Overheads Expenses Point to Inefficiencies

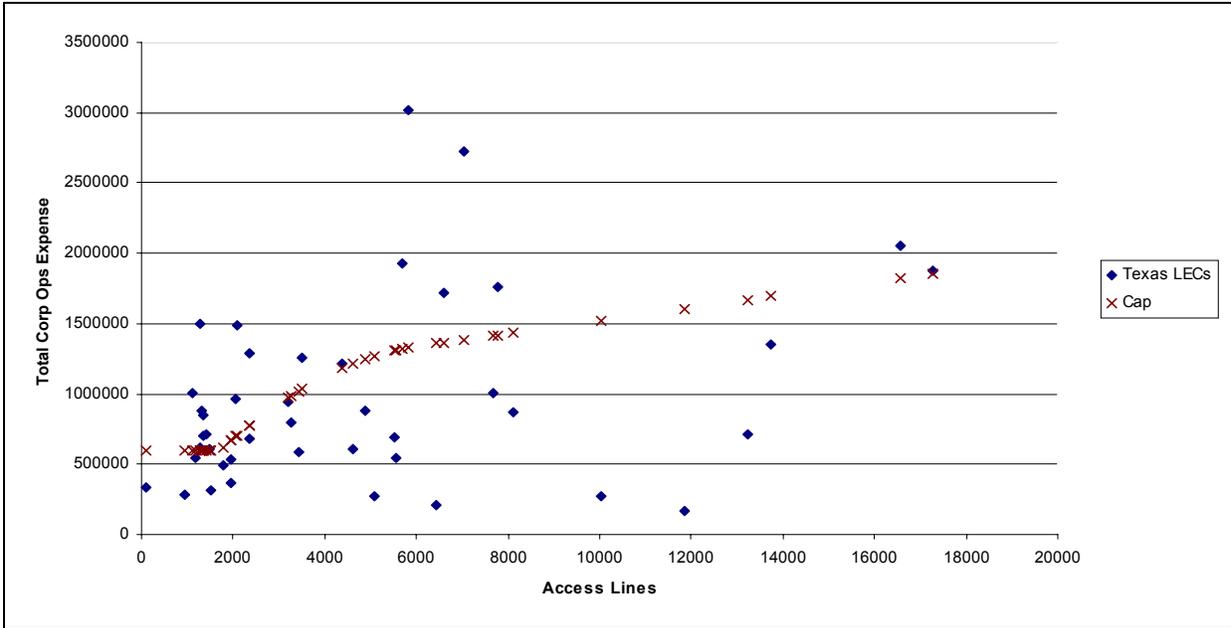


Figure 5.2. Small LECs Report Wide Variations in Overhead Expenses (Texas).

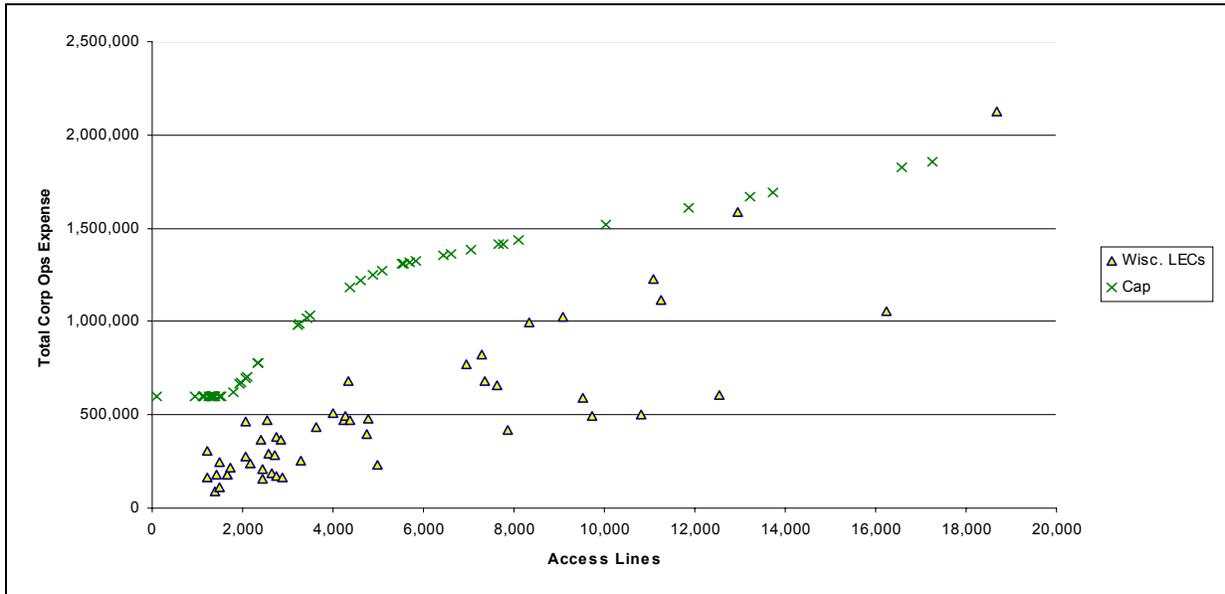


Figure 5.3. Small LECs Report Wide Variations in Overhead Expenses (Wisconsin).

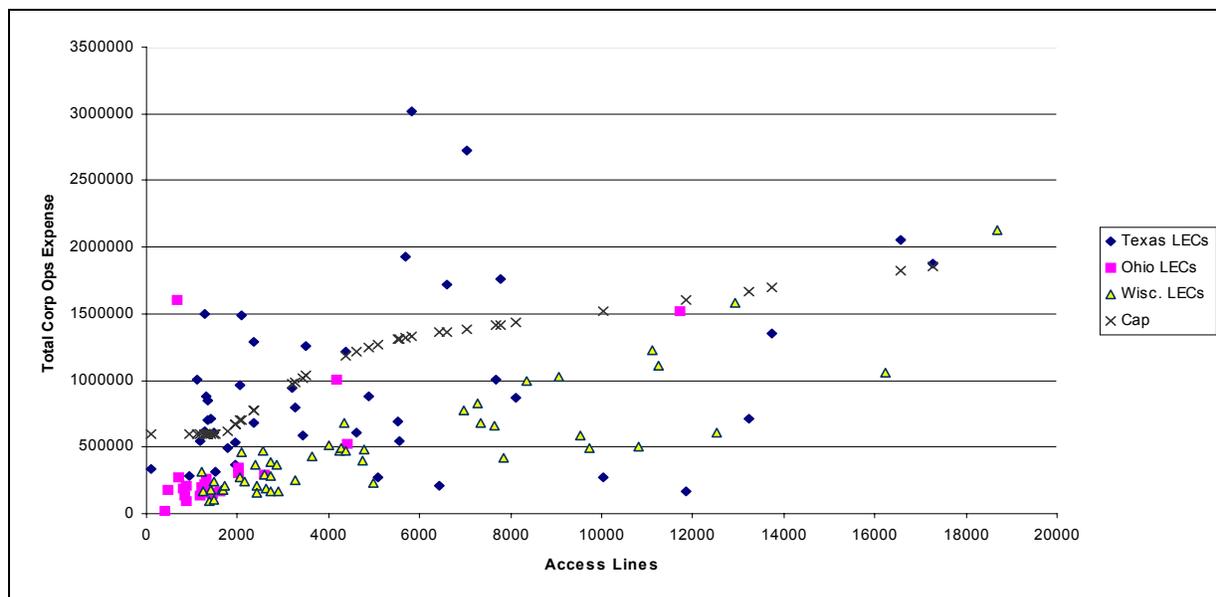


Figure 5.4. Small LECs Report Wide Variations in Overhead Expenses.

As an illustration of the first point, consider the average Corporate Operations expense for ILECs of various size ranges. For example, the ILECs sized between 2,000 and 4,000 lines report an average Corporate Operations expense level of \$505,000. This average grows to \$800,000 for ILECs in the 10,000 to 12,000 line range, and up to approximately \$1.7-million for ILECs sized 16,000 to 18,000 lines. Thus, the data generally confirms the relationship of Corporate Operations expense to size that we discussed earlier in this report.

Much more troubling is the variation in Corporate Operations expense for carriers of similar size. Using the same size ranges for illustrative purposes, we find that ILECs in the first category, 2000-4000 lines, report total Corporate Operations expenses between \$158,000 (Bayland Telephone, in Wisconsin) and \$1.49-million (West Texas Rural Coop), nearly a ten-fold range.⁹⁵ In the 10,000-12,000 lines category, those expenses range between \$168,000 (ENMR, in Texas) and \$1.5-million (Ottoville Telephone Company, in Ohio). Finally, ILECs in the 16,000-18,000 line category reported expense levels between \$1.1-million (CenturyTel of Northern Wisconsin) and \$2.1-million (Etex Telephone Coop, in Texas).

95. Stockbridge and Sherwood's much higher expense level is not explained by its size, since it serves *fewer* lines than United Telco of Ohio (i.e., 2093 vs. 2430). See companies 2002 Annual Reports filed with the Ohio PUC. Moreover, two other ILECs in that size category, Mid-Plains Rural Tel Coop and Poka Lambro (both operating in Texas) have claimed Corporate Operations expenses in excess of \$1-million. See Rural ILECs, 2002 Annual Earnings Reports, filed with the Texas PUC, year ending December 31, 2002.

Wide Variations In RLEC Overheads Expenses Point to Inefficiencies

Equally striking is that the ILECs in the middle of Figure 5.4 have claimed the highest levels of Corporate Operations expense, which are substantially higher than carriers three times their size. The Valley Telephone Cooperative (“Valley Telephone”), a Texas ILEC located in southeast Texas (Raymondville), serves 7,042 lines but claimed \$2.7-million in Corporate Operations expenses in 2002. The Big Bend Telephone Company, serving even fewer lines (5,835) in southwest Texas, claimed an even higher \$3.0-million. In contrast, the three largest ILECs appearing on the right side of the graph, Etex Telephone Coop (Texas), Hill Country (Texas), and Utelco (Wisconsin), managed to serve customer bases of 16,000 to 19,000 lines while incurring nearly \$1-million less in Corporate Operations expenses. Moreover, numerous other ILECs of similar size to Valley Telephone and Big Bend were able to operate with far less overhead.⁹⁶ As we explained earlier, there is no reason to believe that similarly-sized firms should incur such widely varying levels of overhead expenses.

Moreover, it is illuminating to consider overhead expenses in relation to other types of expenses that are incurred directly as a result of operating a network. For example, Cable and Wire Facilities (“CWF”) Expense (Acct 6124) represents the expenses associated with maintenance and repair of a LEC’s cable and wire facilities. Figure 5.5 presents a comparison of CWF expense and corporate operations expense for the Wisconsin ILECs, with both data series expressed as a percentage of total operating expense. As Figure 5.5 illustrates, the corporate overheads tend to vary much more than does CWF expense; for the Wisconsin ILECs, the standard deviation of the corporate overheads is more than twice that for the CWF expense (0.064 vs. 0.0268). This supports the conclusion that corporate overheads are less driven by requirements of the business than CWF expenses presumably are, and thus may be more susceptible to waste and manipulation.

96. These include the Southwest Arkansas Telephone Cooperative, operating in Texas (6,445 lines, but only \$209,000 in Corporate Operations expense); Wisconsin ILECs Vernon Telephone Cooperative (7,642 lines and \$659,000 in expenses); and Farmers Telephone Company (7,356 lines and \$683,000). See Southwest Arkansas Telephone Cooperative, 2002 Earnings Report to the Texas PUC, year ending December 31, 2002; 2001 data from the Wisconsin database provided by the Wisconsin PUC.

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It is also revealing to calculate corporate overhead expenses on a per-line, per-month basis, which allows them to be considered in relation to what telephone subscribers typically pay for basic local telephone service (i.e., in the range of \$15-30 for residence service, and up to twice that range for business service). Table 5.1 below presents the ten worst-performing Texas Rural ILECs on that measure, together with five carriers reporting low overheads and the average for our Texas dataset.

Table 5.1				
Texas Rural ILECs				
Carriers claiming the highest overheads and comparison data				
Company	Access Lines	Corporate Operations Expense per line, per month	Corp Operations Expense / Total Operating Expense	Reported ROR
Carriers claiming the highest overheads:				
Border to Border	102	278.12	41.2%	26.7%
Riviera Telco	1,270	98.28	42.3%	4.2%
Lake Livingston Telco	1,120	74.55	46.8%	11.9%
West Texas Rural Coop	2,093	59.19	30.9%	2.5%
Brazos Tel Coop	1,323	55.51	39.7%	13.7%
Dell Telephone Coop	1,356	52.43	27.4%	12.3%
Industry Tel Company	2,348	45.67	37.3%	5.6%
Big Bend Tel Company	5,835	43.05	22.5%	16.6%
Five Area Telco	1,400	42.72	27.6%	5.6%
La Ward Telephone	1,294	39.65	40.7%	8.8%
Carriers reporting low overheads:				
West Plains	5,570	\$8.18	16.3%	17.1%
People Telephone Coop	13,737	\$8.18	13.7%	9.2%
Centel of TX	233,504	\$3.71	11.6%	18.4%
Cameron Tel Company	10,031	\$2.25	16.1%	13.1%
ENMR	11,862	\$1.18	40.7%	8.8%
Average for entire sample	22,694	28.67	33.9%	
Source: Texas PUC 2002 Earnings Reports				
Note: Average includes 48 rural companies for which 2002 reports were available.				

Table 5.1 implies that larger LECs enjoy some scale economies in relation to overheads, as per-line corporate operations expense levels generally rise as the company size is reduced. Whereas Sprint/Central Telephone (Centel) of Texas, serving over 233,000 lines, has a monthly per-line value of \$3.71, the People's Telephone Cooperative, serving about 14,000 lines, reports corporate overheads of \$8.18 per line per month, and the level increases quickly for smaller carriers – up to the extraordinary situation of the Border to Border company, which only serves 102 lines and claims overheads of \$278 per line per month. While Border to Border may be an unfortunate anomaly, Table 5.1 raises a more general question. At least ten Rural ILECs in Texas are incurring overhead expenses that are some \$40 or more per line per month; even if these Rural ILECs had *zero* plant-related operating costs, in the absence of universal service support, those costs would be difficult or impossible to recover from the ILECs' customers without causing their basic telephone rates to be unaffordable. In that context, why should universal service support mechanisms allow those Rural ILECs to continue to operate at a manifestly inefficient scale? As we discussed in Chapter 3, non-rural carriers have undergone much more consolidation over the past decade than rural carriers, in part because they have not been insulated from economic forces to the extent that the smaller Rural ILECs have.

To the extent that overhead costs are excessive, they have a direct impact on a Rural ILECs' eligibility for and receipt of federal USF support under the existing mechanisms, because the need for support is based on the Rural ILECs' reported embedded cost per loop, including Corporate Operations expenses and other overheads. While the FCC-imposed cap on allowable corporate operations expense for HCL support has moderated the most egregious excesses (see Chapter 4), it has not eliminated the incentive to increase those costs at least to the cap level in order to obtain more universal service support. Moreover, the continuing high levels of overhead costs for rural LECs that we have documented (i.e., the year 2002 expense levels shown in Figures 5.1-4 and Table 5.1) indicate that the FCC cap has had little effect in actually changing rural LECs' behavior in this area.

One reason for this may be that carriers that would otherwise be overearning can pad their overhead expenses in order to keep nominal earnings sufficiently low to avoid regulatory scrutiny (e.g., by state PUCs). This point is illustrated by Table 5.2 below. This table identifies certain Texas rural LECs that claim high corporate operations expenses, and presents their nominal earnings (as measured by return on rate base) on a total company basis.⁹⁷ In addition, we have calculated an adjusted rate of return for each company, assuming that its corporate operations expenses were held to the FCC cap level for purposes of evaluating its earnings. If this adjustment were in fact made, each of the LECs in Table 5.2 would show significantly higher earnings levels. Most importantly, two would change from an apparent underearnings condition to overearnings, including the West Texas Rural Coop (rising from a 2.5% to 12.5% RORB) and the Riviera Telephone Company (from 4.2% to 13.8%), while three more would show earnings in the 20% range (Big Bend, Valley Telephone, and Brazos). In fact, these estimates are quite conservative, because as we demonstrated in Chapter 4, the FCC cap is set

97. We have used the total company basis calculation for illustrative purposes because it avoids complications arising from the jurisdictional separations process, e.g. the fact that HCL support is jurisdictionally intrastate.

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considerably higher than the expense level that efficient Rural ILECs incur (see Figure 4-4), showing the FCC cap to be well above our efficiency benchmark line). If their corporate overheads were held down to efficient performance levels, these Rural ILECs' earnings would be even higher.⁹⁸

Company	Corporate Ops Expense per line, per month	Excess Corporate Ops Expense	Reported ROR (Total Company)	Adjusted ROR (Total Company)	Federal USF support
Big Bend Telephone Company	\$ 43.05	\$ 1,663,402.68	16.6%	19.5%	\$ 8,923,349.00
Valley Telephone Cooperative	\$ 32.22	\$ 1,313,055.97	16.3%	19.5%	\$ 5,690,768.00
Riviera Telephone Company	\$ 98.28	\$ 887,026.00	4.2%	13.8%	\$ 792,353.00
West Texas Rural Coop	\$ 59.19	\$ 766,681.11	2.5%	12.5%	\$ 1,336,207.00
Industry Telephone Company	\$ 45.67	\$ 497,139.87	5.6%	10.3%	\$ 542,711.00
Lake Livingston Telco	\$ 74.55	\$ 391,154.00	11.9%	18.9%	\$ 886,025.00
Brazoria Telephone Company	\$ 21.66	\$ 328,025.98	14.3%	15.5%	\$ 1,631,250.00
Central TX Cooperative	\$ 18.87	\$ 315,462.44	9.5%	10.1%	\$ 4,234,389.00
Brazos Telephone Cooperative	\$ 55.51	\$ 270,421.00	13.7%	22.7%	\$ 718,299.00

Source: Rural ILECs, 2002 Earnings Reports to the Texas PUC, Year Ending December 31, 2002.

Excessive levels of overhead costs may also suggest the presence of inefficiencies in other areas of a LEC's operations. For example, Valley Telephone not only claims unusually high overhead expenses, but also an extraordinary level of Total Plant in Service ("TPIS") per access line, \$11,197 in 2002. This is 95% higher than the average among all Texas RLECs in our sample, and places it sixth highest of that sample. It is not surprising, therefore, to find that Valley Telephone and Big Bend are among the largest recipients of federal USF money in Texas, ranking 5th and 12th, respectively, for total annualized federal USF payments to Texas ILECs in 2002.⁹⁹ While it is difficult to draw firm

98. We did not perform the latter calculation because reducing Corporate Operations expense to a level below the FCC cap could also trigger changes in the carriers' HCL payments, and thus their overall revenues. This complication is avoided in our calculation.

99. Universal Service Administrative Company, Fourth Quarter 2002 Filing to the FCC, Appendix HC01 ("High Cost Support Projected by State by Study Area – 4Q2002") ("*USAC Fourth Quarter 2002 Appendix HC01*"), available at <http://www.universalservice.org/overview/filings/> (Accessed February 4, 2004). On an annualized basis, Valley Telephone received \$8.6-million and Big Bend received \$5.4-million in federal High Cost support. These companies also receive additional USF support from the state of Texas' separate Texas USF fund, which in 2002 amounted to \$5.3-million and \$3.3-million, respectively (See Rural ILECs, 2002 Annual Earnings Reports to the Texas (continued...))

Wide Variations In RLEC Overheads Expenses Point to Inefficiencies

conclusions without much more detailed analysis and auditing of these companies, this evidence certainly suggests that a high degree of scrutiny is needed to ensure that carriers claiming such high costs warrant the large USF payments they are receiving.

99. (...continued)
PUC, year ending December 31, 2002, Schedule I, line 6).

6 | RLEC MANAGEMENT WORKFORCE LEVELS CORROBORATE RORR-INDUCED INEFFICIENCIES

Another tool to evaluate the degree to which Rural ILECs are operating efficiently is to examine their workforce levels. In this chapter, we review the workforce levels maintained by a subset of Rural ILECs operating in Texas for which detailed workforce information is publically available. In general, we find that there is general consistency in workforce size to the company size for overall numbers of employees, and for sub-categories such as network-related employees and clerical staff. However, the numbers of telephone company officials and managers show little relationship to company size, and instead show wide variations among similarly-sized companies. While the sample size is too small to be definitive, it corroborates our earlier findings that corporate overheads are highly discretionary and subject to inflation and potential abuse.

The PUC of Texas requires ILECs to file detailed “Annual Progress Reports on the implementation of the Five-Year-Plan to Enhance Supplier and Workforce Diversity.” These reports, similar to the Earnings reports must be filed with the Texas PUC on an annual basis. The progress reports include a mandatory “Workforce and Supplier Diversity” form. This form breaks down each ILECs’ workforce by race, gender and job category. The Texas PUC supplies nine generic job categories into which all employees must be placed, namely Officials and Managers, Professionals, Technicians, Sales, Office and Clerical, Craftworkers (skilled), Operatives (semi-skilled), Laborers (unskilled), and Service Workers. Officials and Managers include a company president or CEO, vice presidents, and other managers. Professionals include staff attorneys, for example. The Technician category includes network engineers and others involved in planning and provisioning service. The Sales category include salespeople and customer service representatives. The Office and Clerical category includes secretarial staff and other administrative functions. The final four categories, Craftworkers, Operatives, Laborers, and Service Workers, include varying degrees of skilled and unskilled laborers. From this data, we can get a sense, not just of workforce size, but also of the allocation of employees in the firm.

Some ILECs out-source certain administrative and/or management functions to an affiliate, in which case its direct employee count would be understated relative to the total workforce level it would

require were it to perform those functions internally. In order to avoid potential distortions caused by affiliate transactions, we have screened out from our data set all of the Texas ILECs that reported making payments to an affiliate for any Corporate Operations function.

Table 6.1 presents some key workforce statistics for Texas rural ILECs based on our analysis. One basic measure of carrier performance is the number of employees per access line (which for convenience is expressed in Table 6.1 as Employees per Hundred Access Lines). As Table 6.1 demonstrates, while the sample average value is 0.834, one ILEC, the Five Area Telephone Company, has a value nearly four times higher (3.071), and several other companies have levels about double the sample average. This data reinforces the perception that there is a wide range in performance among these carriers, and that certain carriers are lagging behind in the efficiency of their operations.

Company	Access Lines	Total Employees	Employees/100 Access Lines	Officials/Managers	Officials % of employees	Office/Clerical	O/C % of employees
Five Area telco	1400	43	3.071	8	19%	15	35%
West Texas Rural Tel Co	2093	34	1.624	3	9%	10	29%
Valley Tel Coop	7042	112	1.590	17	15%	26	23%
Dell Telephone Coop	1356	21	1.549	4	19%	6	29%
Poka-Lambro	3486	47	1.348	10	21%	14	30%
Industry Tel Co	2348	23	0.980	5	22%	5	22%
Riviera telco	1270	12	0.945	5	42%	4	33%
Cap Rock Tel Coop	5035	42	0.834	4	10%	12	29%
Big Bend Tel Company	5835	41	0.703	10	24%	11	27%
La Ward Tel	1,294	9	0.696	3	33%	2	22%
State Sample Average	22,694	189	0.834				

Source: Rural ILECs, 2002 Workforce and Supplier Diversity Forms to the Texas PUC, Year Ending December 31, 2002.
Note: Average 48 includes rural companies for which 2002 reports were available.

Figures 6.1-4 below present graphs based on the Texas ILEC data. One would expect there to be a general relationship between the size of an ILEC and the size of its workforce. As an ILEC grows (as gauged by access lines), it needs more sales staff and customer service representatives, more craft workers to install and repair facilities, more office and clerical staff to provide administrative support, and more officers and managers for organization and leadership.

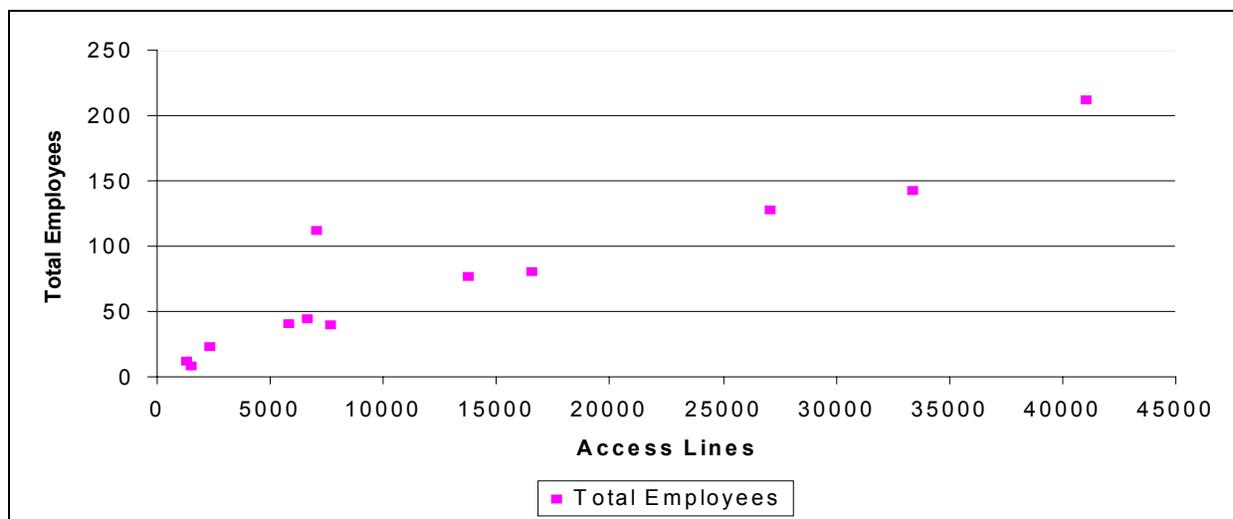


Figure 6.1. Total Employees vs. Access Lines (Texas Rural LECs).

Indeed, an analysis of the Texas workforce data reveals this relationship. Figure 6.1 (Total Workforce) shows that workforce on the whole increases with firm size. Given this general relationship, we would expect to find similar relationships between each category of employee and firm size. Although we expect individual firms to vary somewhat according to their own unique circumstances, in most instances the general relationship should stand. Figure 6.2 (Clerical) shows a clear trend that as firm size increases, the clerical staff also increases.

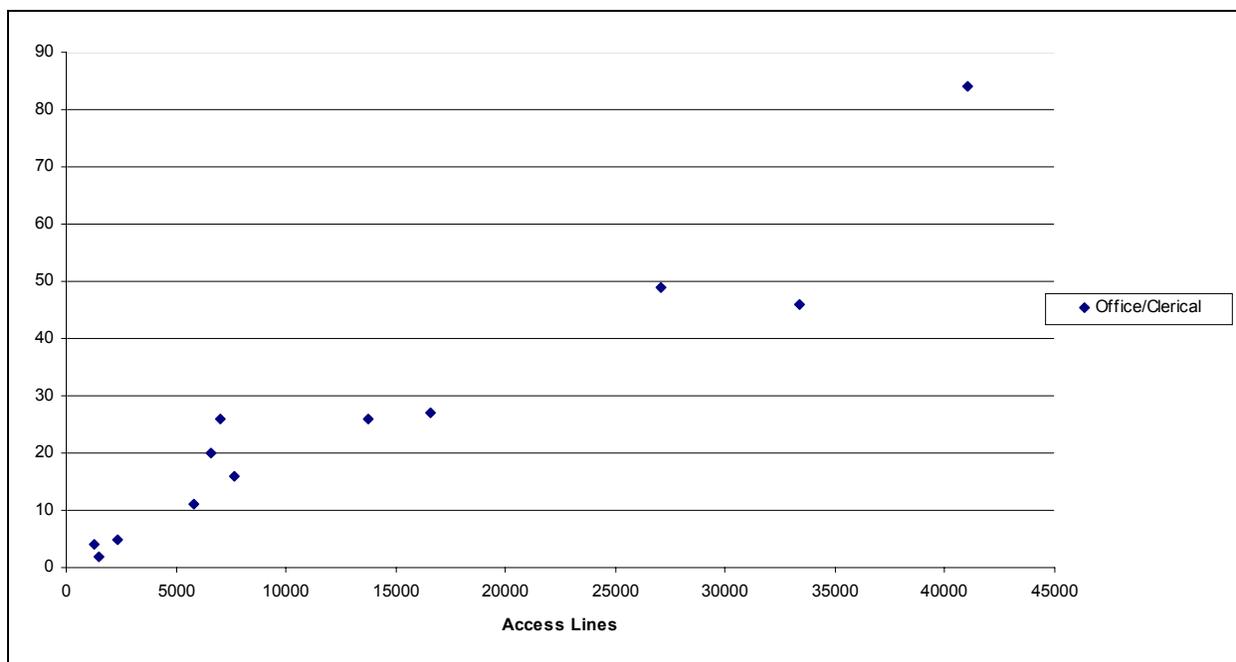


Figure 6.2. Office/Clerical Employees vs. Access Lines (Texas Rural LECs).

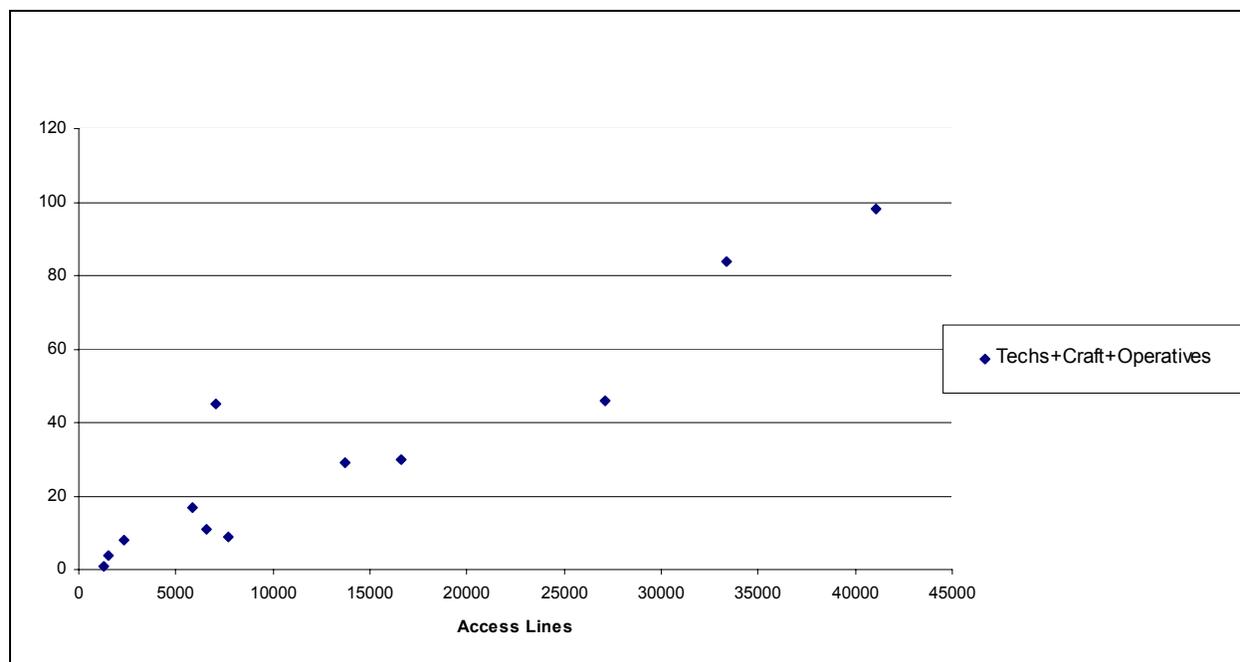


Figure 6.3. Network Personnel vs. Access Lines.

This affirms the assumption of the relationship between firm and workforce size. Figure 6.3 shows this trend. All of these Figures show both a relationship with firm size and also a similarity between firms of similar size.

Figure 6.4 (Officials/Management) however, shows a very different picture. The Officials/Management employees graph is a veritable scattershot of points, with some of the smallest firms having the highest number of officials and management personnel. There is very little similarity between firms of similar size and there is no recognizable relationship with firm size. This finding should stand out as a red flag for potential inflation of Corporate Operations expense. Moreover, company officials and managers tend to be some of the highest salaried employees of ILECs, so that an increase in their numbers can have a disproportionate impact on the total level of Corporate Operations expenses.

This may partially explain, and in any event corroborates, the excessive Corporate Operations expenses reported by the Big Bend and Valley Telephone companies, as they also show anomalously high numbers of Official/Management employees. Big Bend reported ten officials and managers, while Valley Telephone claims to have seventeen, the highest number of any company in our data set, including companies six times its size (e.g, the Guadalupe Valley Telephone Cooperative, with twelve). There is no reason to believe that exogenous factors could be responsible for these companies' enormous management overheads. The dataset that we have been examining is too small to afford definitive conclusions. Nonetheless, this evidence appears to corroborate our earlier findings that rural ILECs

could be operating much more efficiently than they are, and that they likely need substantially less USF funding than they have been receiving.

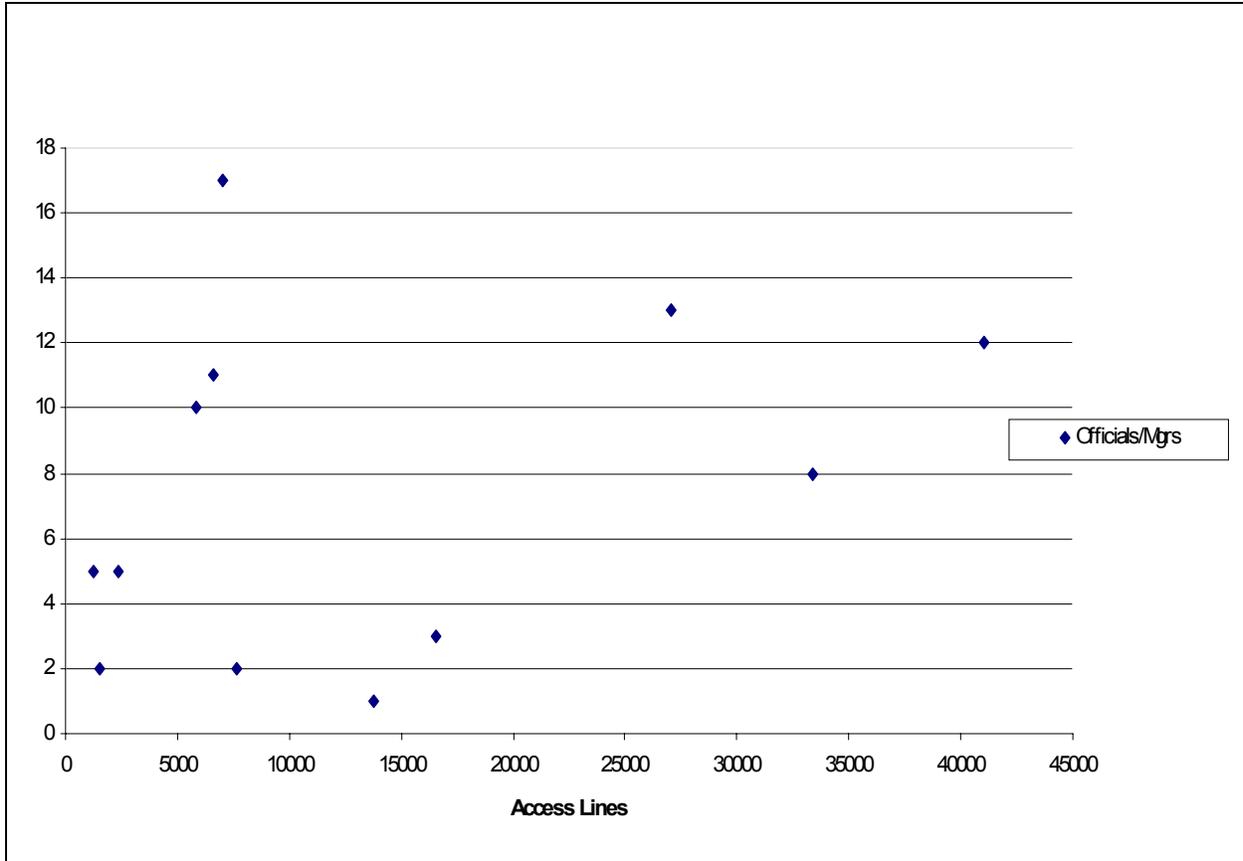


Figure 6.4 Officials/Management Employees vs. Access Lines (Texas Rural LECs).

7

CASE STUDY PROFILES: OPPORTUNITIES FOR INEFFICIENCIES IN PRESENT RORR-BASED USF SYSTEM

As noted earlier in this report (Chapter 2), state and federal regulators generally have been unable to monitor, let alone meaningfully regulate, the conduct of the approximately 1350 Rural ILEC study areas in the U.S. Similarly, the sheer number and diversity of these companies limits the prospects for definitively analyzing how the Rural ILECs have been performing under the FCC’s existing cost-plus based universal service support mechanisms. Thus far in this report, we have undertaken a detailed case study of one particular Rural ILEC, the Electra Telephone Company (see Chapter 2), analyzed the most recent NECA USF submission encompassing 874 rural ILEC study areas, and provided a series of analyses of over one hundred Rural ILECs operating in Ohio, Texas, and Wisconsin (see Chapters 3-6). This chapter supplements that work by profiling several more Rural ILECs in detail. While not intended to be systematic or exhaustive, these profiles help to illustrate the major performance differences that exist between the best-performing and the worst-performing rural companies, and underscores the key role that the RORR-based USF system plays in sustaining those companies with the worst performance. Based on our review of financial and operating data, certain Rural ILECs stand out as appearing to perform far less efficiently than their peers. Four of these companies are profiled below. They are: Valley Telephone Cooperative (Texas), Big Bend Telephone Company (Texas), Union Telephone Company (Wyoming), and Doylestown Telephone Company (Ohio).

Valley Telephone Cooperative (“Valley Telephone”)

This rural cooperative is located in southeast Texas (Raymondville) and served 7,042 access lines in 2002.¹⁰⁰ Following are some key observations concerning Valley Telephone’s workforce levels,

100. Valley Telephone Cooperative, Inc., 2002 Earnings Report to the Texas PUC, year ending December 31, 2002 (“*Valley Telephone 2002 Earnings Report*”), at 3.

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Corporate Operations expense and overheads, plant-related expenses, overall earnings level, and current level of USF support.

Workforce levels

Valley Telephone claimed to have seventeen Official/Management employees in 2002, the highest number of any company in our Texas data set,¹⁰¹ including companies six times its size (e.g. the Guadalupe Valley Telephone Cooperative, with twelve). Valley Telephone's total employee count in 2002 was 112,¹⁰² approximately three times the staffing level reported by other similarly-sized Texas RLECs.¹⁰³

Corporate Operations and overheads

The company also claimed \$2.7-million in Corporate Operations expenses in 2002.¹⁰⁴ In contrast, numerous other ILECs of similar size to Valley Telephone have been able to operate with far less overhead expense.¹⁰⁵

101. Although data is available for 56 companies, our analysis is comprised of 21 companies.

102. Valley Telephone Cooperative, Inc., 2002 Workforce and Supplier Diversity Form to the Texas PUC, at Exhibit 1 (2002 Employee Breakdown).

103. Compare to Brazoria Telephone Company (6,609 access lines, 44 total employees) and Taylor Telephone Cooperative (7,662 access lines, 40 total employees). See, Brazoria Telephone Company, 2002 Earnings Reports and Workforce and Supplier Diversity Forms to the Texas PUC; and Taylor Telephone Cooperative, 2002 Earnings Reports and Workforce and Supplier Diversity Forms to the Texas PUC.

104. The company's claimed Corporate Operations expenses were even higher in 2001, at \$3.1-million. See, Valley Telephone Cooperative, Inc., 2001 Earnings Report to the Texas PUC, year ending December 31, 2001 ("*Valley Telephone 2001 Earnings Report*") at 3; and *Valley Telephone 2002 Earnings Report*, at 3.

105. These include the Southwest Arkansas Telephone Cooperative, operating in Texas (6,445 lines, but only \$209,000 in Corporate Operations expense); Wisconsin ILECs Vernon Telephone Cooperative (7,642 lines and \$659,000 in expenses); and Farmers Telephone Company (7,356 lines and \$683,000). Southwest Arkansas Telephone Cooperative, 2002 Earnings Report to the Texas PUC, year ending December 2002; and Wisconsin PSC database, 2001 values (for Wisconsin companies).

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Plant-related expenses

Valley Telephone claims an extraordinary level of Total Plant in Service (“TPIS”) per access line, \$11,197 in 2002. Valley Telephone’s rate base (which includes the annual revenue requirement for its net plant, plus operating expenses) on an unseparated, total company basis is \$5219 per access line. This figure is 95% higher than the average rate base for all Texas RLECs in our sample

Overall earnings level

Perhaps most striking is the fact that Valley Telephone has been able to remain profitable despite these very high expense levels. Measured on an unseparated, total company basis, Valley Telephone reported an overall rate of return on rate base (“RoRB”) of 17.1% in 2001, and 16.3% in 2002.¹⁰⁶ When the company’s rate base is adjusted to remove Corporate Operations expenses above the level permitted by the FCC in the computation of access line expenses for the HCL support mechanism, the 2002 earnings level increases to 19.5%.¹⁰⁷

Current level of USF support

The primary reason that Valley Telephone is able to remain profitable, despite its unusually high levels of claimed costs, is because it receives a substantial portion of its revenues from universal service support mechanisms. In year 2002, its explicit USF subsidies totaled \$13.96-million, from its combined state and federal USF support.¹⁰⁸ Valley received \$5.35-million from the Texas Universal Service Fund and \$8.6-million in Federal USF support. In total, these direct USF payments account for 68% of Valley Telephone’s annual revenues (\$20.3-million in 2002). Additionally, Valley reports Network Access Revenues (“NAR”) of \$4.2-million.¹⁰⁹ In combination with USF support, this leaves only \$2-million (10%) of revenues being paid directly by end users for local and toll service.

106. *Valley Telephone 2001 Earnings Report*, at Schedule 2, line 73; and *Valley Telephone 2002 Earnings Report*, at Schedule 2, line 73.

107. See Table 5.2, reporting adjusted Rate-of>Returns for selected companies.

108. See, *Valley Telephone 2002 Earnings Report*, at Schedule 1, line 6; and *USAC Fourth Quarter 2002 Appendix HC01*.

109. *Valley Telephone 2002 Earnings Report*, at Schedule I. NAR is calculated by subtracting Federal High Cost Support (HCL, LSS, LTS, ICLS, and SV) from the reported NAR. The remainder reflects the actual interstate and intrastate network access revenues collected by the company.

Big Bend Telephone Company of Texas (“Big Bend”)

Big Bend is located in Alpine, a small town in western Texas. Big Bend served 5,835 access lines in 2002.¹¹⁰

Workforce Levels

Big Bend reports having 10 Officials/Managers in its employ during 2002.¹¹¹ Although this is not the largest count of Officials in our sample, it is strikingly large in proportion to the rest of the firm. Big Bend reports its total 2002 workforce as being 41, suggesting that more than 24% of its staff are Officials or Managers. An additional quarter of the Big Bend staff is made up of Office/Clerical workers.¹¹²

Corporate Operations Expense

Big Bend has the largest reported Corporate Operations Expense of any company in our Texas sample. The Big Bend earnings report reports \$3.01-million in COE in 2002.¹¹³ This reflects an astounding 50% increase from their reported COE in 2001.¹¹⁴ Again, this is significantly higher than many similar firms.¹¹⁵

110. Big Bend Telephone Company of Texas, 2002 Earnings Report to the Texas PUC, year ending December 31, 2002 (“*Big Bend 2002 Earnings Report*”), at 3.

111. Big Bend Telephone Company of Texas, 2002 Workforce and Supplier Diversity Form to the Texas PUC, at Exhibit 1 (2002 Employee Breakdown).

112. *Id.*

113. *Big Bend 2002 Earnings Report*, at Schedule I.

114. *Big Bend 2001 Earnings Report*, at Schedule I.

115. See footnote 105 supra.

Plant-related expenses

Big Bend also has extremely high levels of TPIS per access line. As calculated from its 2002 report, Big Bend has \$14,201 of plant in service per access line.¹¹⁶ The reported rate base, on an unseparated, total company basis is \$6791 per access line.¹¹⁷ More than Valley Telephone, this rate base is dramatically higher than its peers.

Overall Earnings Level

Also similar to Valley Telephone, Big Bend has remained surprisingly profitable given its high expense levels. Big Bend reports its overall RoRB for 2002 at 16.6%,¹¹⁸ just a few basis points higher than Valley. After adjusting the rate base to remove Corporate Operations expenses above the level permitted by the FCC, the 2002 earning level increases to 19.5%.

Current level of USF support

The primary reason that Big Bend is able to remain profitable, despite its unusually high levels of claimed costs, is because it receives a substantial portion of its revenues from universal service support mechanisms. In year 2002, its explicit USF subsidies totaled \$8.7-million, from its combined state and federal USF support.¹¹⁹ Valley received \$3.3-million from the Texas Universal Service Fund and \$5.4-million in Federal USF support.¹²⁰ In total, these direct USF payments account for 37% of Big Bend's annual revenues (\$23.2-million in 2002) although this is likely an understatement.¹²¹ Big Bend's

116. *Big Bend 2002 Earnings Report*, at Schedule II.

117. *Id.*

118. *Id.*

119. *Id.*, at Schedule I.

120. Federal support is drawn from *USAC 2002 Fourth Quarter Appendix HC01*.

121. *Big Bend's 2002 Earnings Report* is a good example of how difficult it can be to closely examine these companies for purposes of USF assessment. The *Big Bend's 2002 Earnings Report*, at line 22, claims interstate USF support of \$8.9-million. This number is a far cry from actual Federal support (\$5.4-million). Additionally, most carriers appear to report only HCL support on this line. It appears that Big Bend has reported its total USF support (i.e., all Federal and State support) here. If this is the case, other portions of the report are essentially invalid. Line 6 shows the Texas USF support, but for intrastate operations, if they have indeed treated the state USF funding as an expense, Big Bend is double counting its Texas support. Additional questions are raised about the NAR reporting. It seems unlikely that Big Bend is earning \$13-million in actual NAR
(continued...)

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reported NAR for 2002 was 13.4-million (57.8%).¹²² This means that only 4.6% of its revenues are generated from services sold to its customers.

Union Telephone Company (“Union Telephone”)

This Rural ILEC is located in south-central Wyoming and served 6,874 access lines in 2002.¹²³ Following are some key observations concerning Union Telephone’s workforce levels, Corporate Operations expense and overheads, plant-related expenses, overall earnings level, and current level of USF support.

Workforce levels

Union Telephone reported a total employee count in 2002 of 153: 75 full-time, 69 part-time, and 9 contract employees.¹²⁴ This is approximately three and a half times the staffing level reported by similarly-sized Rural ILECs operating in Texas.¹²⁵

121. (...continued)

(line 3 minus Federal USF support) on 5,835 lines. Thus, it would appear that funds have been double counted here as well, which would inflate total operating revenues, and thus decrease the apparent USF as a percentage of revenues calculation. A look at the 2001 report shows interstate USF revenues to be, \$3.3-million. If both reports are correct, this would imply that Big Bend received almost a one-year, 170% increase in interstate USF support. There are many possible scenarios as to why the 2002 report is incorrect; it could be an honest mistake in calculations or maybe a typo. The fact and point remains that, not only is it impossible to gauge Big Bends performance using its own report, but it appears that gross errors are passing unchecked by regulators.

122. *Big Bend 2002 Earnings Report*, at Schedule I.

123. Utilities Annual Report of Union Telephone Company to the Wyoming Public Service Commission, Year ending December 31, 2002 (“*Union Telephone 2002 Report*”), at 15. The carrier serves customers in Albany, Carbon, Fremont, Lincoln, Sublette, Sweetwater, Teton, and Uinta counties. *Id.* at 3.

124. *Union Telephone 2002 Report*, at 5.

125. Compare to Brazoria Telephone Company (6,609 access lines, 44 total employees) and Taylor Telephone Cooperative (7,662 access lines, 40 total employees). See, Brazoria Telephone Company, 2002 Earnings Reports and Workforce and Supplier Diversity Forms to the Texas PUC; and Taylor Telephone Cooperative, 2002 Earnings Reports and Workforce and Supplier Diversity Forms to the Texas PUC.

Corporate Operations and Overheads

The company also claimed \$3.62-million in Corporate Operations expenses in 2002.¹²⁶ These costs accounted for 14.8% of the company's total 2002 operating expenses.¹²⁷ In contrast, numerous other ILECs of similar size to Union Telephone have been able to operate with far less overhead expense.¹²⁸

Plant-related expenses

Union Telephone claims an extraordinary level of Total Plant in Service ("TPIS") per access line, \$13,083 in 2002. Union Telephone's rate base (which includes the annual revenue requirement for its net plant, plus operating expenses) on an unseparated, total company basis is \$7547 per access line.

Overall earnings level

Perhaps most striking is the fact that Union Telephone has been able to remain profitable despite these very high expense levels. Measured on an unseparated, total company basis, Union Telephone reported an overall rate of return on rate base ("RoRB") of 20.0% in 2002.¹²⁹ This is a substantial overearning condition, considering that the company's last authorized rate of return was 10.0%.¹³⁰

Current level of USF support

The primary reason that Union Telephone is able to remain profitable, despite its unusually high levels of claimed costs, is because it receives a substantial portion of its revenues from universal service support mechanisms. In year 2002, its explicit USF subsidies were likely greater than \$5.77-million.¹³¹ Wyoming offers \$2,461,303 in annual state USF support, but does not disclose a per-company

126. *Union Telephone 2002 Report*, at 12 (sum of Total Wyoming balance for Accounts 6710 and 6720).

127. *Id.* (total operating expense equals \$24.48-million).

128. These include the Southwest Arkansas Telephone Cooperative, operating in Texas (6,445 lines, but only \$209,000 in Corporate Operations expense); Wisconsin ILECs Vernon Telephone Cooperative (7,642 lines and \$659,000 in expenses); and Farmers Telephone Company (7,356 lines and \$683,000).

129. *Union Telephone 2002 Report*, as calculated.

130. *Union Telephone 2002 Report*, at 14 (citing decision of 6/3/1998).

131. *USAC Fourth Quarter 2002 Appendix HCO1*.

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distribution breakdown.¹³² In total, Union's Federal USF payments account for 14.6% of Union Telephone's annual revenues (\$39.6-million in 2002). Union's reported level of NAR for 2002 was \$12.8-million. This means that only 46.9% of its revenues are generated from services sold to its customers.

The Doylestown Telephone Company ("Doylestown")

Doylestown is located in Doylestown, OH a small town in the northern part of the state. Doylestown served 4,159 access lines in 2002.¹³³

Workforce Levels

Doylestown reports employing 22 full time workers during 2002.¹³⁴ Although this total count is available, the category break-down that is present in the Texas reports is not available in Ohio.

Corporate Operations Expense

Doylestown reports just over \$1-million in Corporate Operations Expense in its 2002 annual report.¹³⁵ This represents 29% of their total reported operating revenue.¹³⁶ Again, this is significantly higher than many similar firms.¹³⁷

132. Email from Barbara Iverson, WUSF Specialist, Wyoming Universal Service Fund, to Colin B. Weir, Analyst, Economics and Technology, Inc. (February 12, 2004). Ms. Iverson offers WUSF total monthly support of \$205,108.58, but suggests that the company specific breakdown is proprietary information. Although Union's WUSF support is unknown, this figure would be added to the Federal support as noted above.

133. Annual Report of The Doylestown Telephone Company to the Public Utility Commission of Ohio, Year ending December 31, 2002 ("*Doylestown 2002 Annual Report*"), at 52.

134. *Id.*, at 49.

135. *Id.*, at 21.

136. *Id.*, at 17.

137. See footnote 105 supra.

Plant-related expenses

Doylestown has high levels of TPIS per access line. As calculated from its 2002 report, Doylestown has \$1,903 of plant in service per access line.¹³⁸ The reported rate base, on an unseparated, total company basis is \$812 per access line.¹³⁹

Overall Earnings Level

Doylestown reports a high RoRB, which seems surprising given its high expense levels. Doylestown reports its overall RoRB for 2002 at 23.3%.¹⁴⁰

Current level of USF support

The primary reason that The Doylestown Telephone Company is able to remain profitable, despite its unusually high levels of claimed costs, is because it receives a substantial portion of its revenues from universal service support mechanisms. In year 2002, its explicit USF subsidies totaled \$437,546 in Federal USF support.¹⁴¹ This represents 12.5% of 2002 revenues (\$3.5-million). In addition it reports \$2.2-million in NAR for 2002. This suggests that only 26% of its revenues are generated from services sold to its customers.

138. *Id.*, at 10.

139. *Id.*, at 11.

140. *Id.*, at 11, 24.

141. *USAC Fourth Quarter 2002 Appendix HC01*. Note that there is typically a two-year lag between projections and actual disbursements to carriers.



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