
EPI Issue Brief

Issue Brief #199

Economic Policy Institute

September 20, 2004

THE URGENT NEED FOR REFORM OF WHOLESALE TELECOMMUNICATIONS REGULATION IN CALIFORNIA

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The Federal Telecommunications Act of 1996 was intended to set a national “pro-competitive deregulatory” policy for the telecommunications industry in the United States in order to “accelerate rapidly private-sector deployment of advanced telecommunications and information technologies and services to all Americans.”¹ As industry analyst Stephen Pociask has documented in his book *A Failure to Communicate*, job loss in the telecommunications sector and the lack of industry investment are indicators that the Act has failed in some important aspects of its mission to increase competition, improve service quality, and roll out high-tech networks (Pociask 2004).

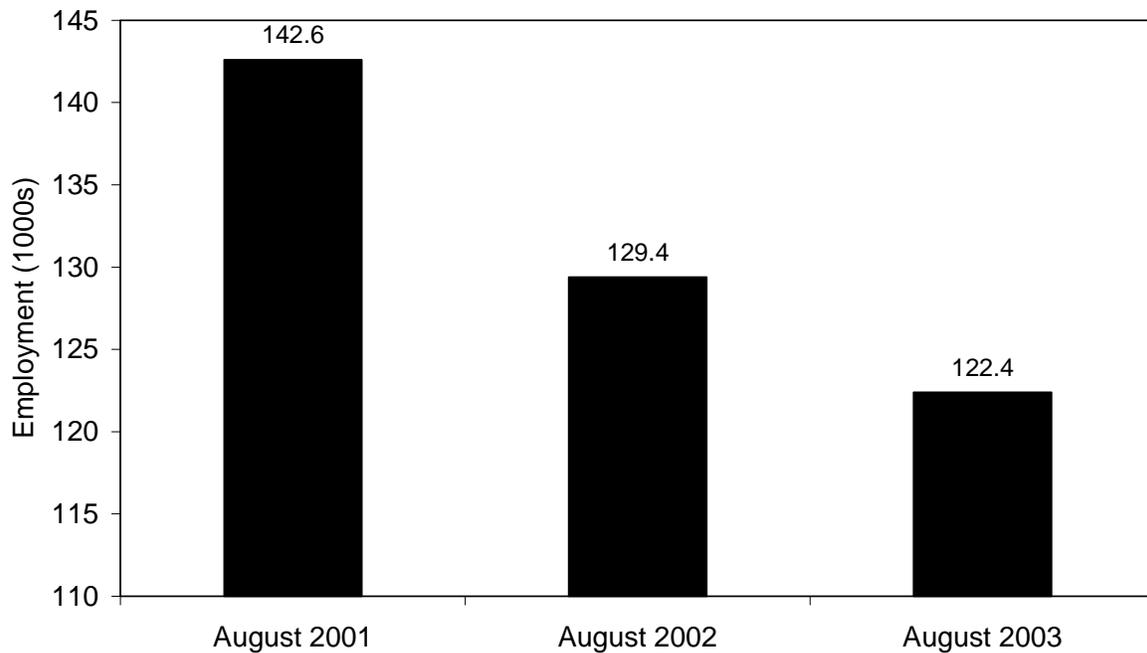
A particularly problematic aspect of the Act is the below-cost pricing of unbundled network elements (UNEs), which has specific implications for the state of California. Under the Act’s UNE policy, federal and state regulators have required existing telephone companies (known as incumbent local exchange carriers, or ILECs) to lease portions of their telephone networks to new competitors (competitive local exchange companies, or CLECs) at sharply discounted prices. The competitors then turn around and use the ILECs’ own networks against them to provide the same customers with the same local services as the ILECs. Unfortunately, the UNE policy—as interpreted by the FCC,² and as implemented by the states—makes it cheaper to rent existing lines rather than build new telephone facilities, deterring communications investment and modernization rather than creating it, and depressing the industry and its employment.

California, in particular, faces key concerns related to UNE rules and pricing:

- **The telecommunications industry in California has suffered significant employment losses.** From August 2001 to August 2003, California lost 20,000 jobs in telecommunications services—nearly a 15% decline (see **Figure A**).

FIGURE A

Rapidly declining employment in telecommunications

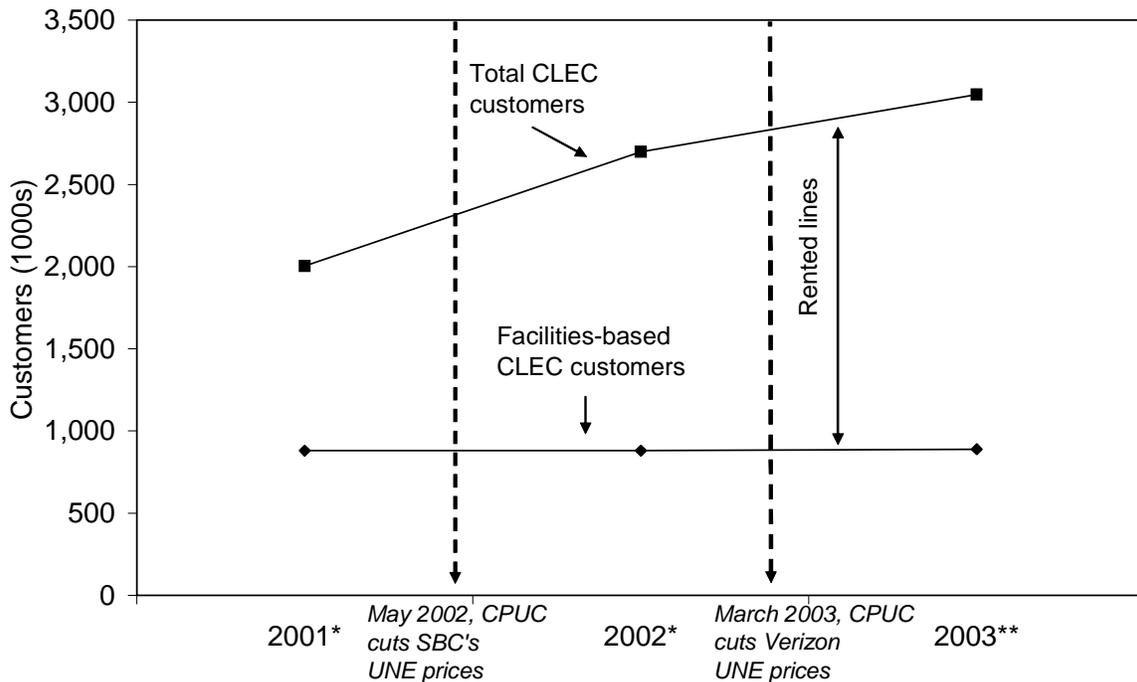


Sources: Pociask, Steve, *A Failure to Communicate*; California Public Utilities Commission.

- **The California Public Utilities Commission (CPUC) dramatically reduced the prices that ILECs could charge for UNEs.** These price reductions coincided with the state’s severe job losses, with price cuts going into effect in May 2002 (for SBC California³) and March 2003 (for Verizon⁴).
- **In response to these UNE price cuts, competitive telephone providers have dramatically shifted away from using new infrastructure to serve customers in California.** Since the CPUC actions, all the growth in the CLEC customer base has come from the resale of existing ILEC telephone networks (as shown in **Figure B**) (FCC 2002, 2003).⁵ Indeed, the number of customers CLECs serve over their networks has actually *declined*, despite a 50% growth in the CLECs’ California customer base.
- **Capital investment in telecommunications has dropped, contributing to employment losses.** Nationwide, capital investment by CLECs and ILECs combined fell about 50% between 2001 and 2003, while these firms took on hundreds of billions in debt and lost even more in market capitalization. Over 150,000 workers lost their jobs as a result of this reorganization (Pociask 2004, 11).
- **UNE reform could help reinvigorate California’s telecommunications industry.** On a national basis, Pociask estimates that UNE reform could ultimately add 1.2 million jobs and \$500 billion to the national economy (Pociask 2004, 10). Other analyses suggests “conservative” ranges of \$71.5 to

FIGURE B

California UNE pricing decisions



* December ** June

Sources: Pociask, Steve, *A Failure to Communicate*; California Public Utilities Commission.

\$169.5 billion in added gross domestic product (GDP) along with 470,000 to 1.115 million new jobs (Eisenach and Lenard 2003). If reform creates even a portion of these benefits and California gets its share, then the state's weakened economy would gain tens of thousands of jobs and billions of dollars in much-needed economic activity.

- **California has an immediate opportunity to improve its UNE pricing.** Federal policy may soon improve following the Bush Administration's acceptance of the D.C. Circuit Court of Appeals order that rejected many aspects of the current UNE regulatory framework.⁶ The CPUC also has proposals before it to recalculate UNE prices for SBC California⁷ and Verizon California. At a minimum, the CPUC should sharply raise its existing UNE prices to reflect the true economic cost of these un-bundled network elements. This matter is ripe for decision and the CPUC should act now.

The large nationwide reductions in telecommunications investment and employment documented by Pociask have occurred despite a continuing increase in the market share of retail customers served through UNEs. While other pressures have also affected this industry during the past several years, it is striking how "success" in regulatory UNE policies (as measured by customers lost by the ILECs, theoretically the result of increased competition) has coincided so clearly with the industry's financial and employment hardship.

Outdated UNE policies have hurt the telecom industry

UNE policies, as implemented by the FCC and state regulatory agencies, envision an odd telecommunications market that does not exist today, if it ever did. UNE regulations are based on a number of mistaken propositions regarding the telecommunications industry:

- Re-use of the existing low-bandwidth wired telephone network is the only way to achieve mass-market competition, or alternatives to existing services or providers;
- Competitors will voluntarily abandon facilities leased at below-cost prices to sink capital into their own lines to customers;
- A sustainable, beneficial wholesale market for the use of the loop⁸ can be founded on win-lose deals imposed on competitors by regulatory agencies;
- Network providers will continue to invest in facilities for which they bear the financial risks of failure, but which competitors have a right to purchase for resale (at below-cost prices) when innovations succeed.

Each of these propositions is essential to justify current UNE policies—and all of these propositions are ill-conceived or outdated. Enlightened policy should recognize current realities. Mass-market alternatives to wired phone service now abound, as Pociask documented, and new technologies (such as Voice-over-Internet Protocol, or VoIP) are now commercially available. Twenty-first century telecommunications policy should not be based on a 19th century loop technology that new network providers have already abandoned. Instead of building new networks to homes and businesses, artificial regulatory price-setting exercises will encourage UNE competitors to pursue their own economic self-interest simply by permanent leasing of facilities. A sustainable wholesale market requires prices and terms that both parties find advantageous, not the unique (and detrimental) telecommunications approach of regulatory compulsion enforcing win-lose arbitration “agreements.”⁹ A mandatory UNE mispricing policy (such as the one in California) is a disaster for investment decisions in which the risk of loss is borne by the builder of infrastructure, but competitors can take any resulting gains through mandatory unbundling at low prices.

By contrast, recent FCC efforts to promote truly voluntarily negotiated UNE leasing arrangements are consistent with an economically sensible UNE policy.¹⁰ Mutually satisfactory leasing arrangements cannot depend on regulatory fiat, and they are likely to create genuine cost savings or added value for customers. These arrangements will also provide CLECs with an opportunity for profit where they can serve as effective or efficient distributors of ILEC network services. However, mandated low UNE prices help deter the mutually beneficial wholesale deals that are typical in other industries but now impaired by problematic federal and state UNE pricing mandates.

Examining UNE policy failures

The Pociask analysis has also helped to disprove some of the justifications offered by proponents of the current UNE policy direction. For example, the notion that unbundled network elements would

“jumpstart” investment by competitors in their own network facilities (through the use of UNEs to develop a customer base, which competitors asserted was necessary for this purpose) has been repudiated by the behavior of the competitors themselves. Instead, not only are customers not being transitioned from UNEs to new networks, but the opposite is occurring: competitors are foregoing building their own facilities in favor of renting networks at mandated low UNE prices that are too attractive to ignore. Truly innovative competitors are also finding no need for the UNE “halfway houses” (where customers might be kept until some unspecified new network is built later), and instead are taking customers directly away from ILEC service.

ILEC financial losses resulting from the sale of UNEs at current prices are staggering, a fact confirmed by regulatory agencies themselves. Resale discounts (which reflect the break-even point regulators calculated to encompass all cost savings that ILECs receive from turning retail functions over to competitors) are typically 20%, versus the steeper 50% discounts now typical for UNE-P.¹¹ It is not surprising, then, that both ILECs and CLECs have cut their capital spending in half; the same low UNE prices that make investment unprofitable for ILECs also encourage CLECs to rent existing lines rather than build their own facilities. Contrary to the assertions of UNE proponents, low wholesale prices harm rather than encourage investment.

Moving away from the narrow perspective of UNE proponents—namely, that existing ILEC wired networks are the only game in town—there are, as Pociask documents, any number of innovative alternatives (e.g., wireless, satellite, and cable telephony alternatives, as well as the promise of VoIP) that have rapidly brought choice to customers in ways the failed UNE policies could not. The intense focus of regulators on divvying up the existing ILEC wireline network for the benefit of certain competitors has missed the real story unfolding through the extensive use customers are now making of other technologies.

Current UNE policies are certainly a national concern and a weight on investment in the telecommunications infrastructure. But this problem also resonates at the state level, where so many consequential decisions about UNE pricing are made. As unfortunate as such impacts may be for any state, they are especially unwelcome in California—currently the nation’s largest state, and one facing unique ongoing financial challenges.

The need for UNE reform in California

Federal Communication Commission’s Total Element Long Run Incremental Cost (TELRIC) rules have added to California’s burdens, which California has compounded through a failed policy of low UNE prices that reduces investment in vital infrastructure and contributes to the state’s job losses. The adverse effects of UNE policies on the telecommunications industry are especially harmful to a state whose own economic problems (for example, with regard to education and transportation) could be directly improved through technology-based solutions.

However, California can act now to mitigate some of this harm by raising UNE prices immediately to more realistic and sustainable levels. While not as positive as abandoning price controls for UNEs altogether (an option that will require further progress at the federal level), such remedial action will send a strong signal in favor of the modern telecommunications infrastructure investment that the nation’s high-tech hub should favor.

Looking further ahead, current UNE policies are the product of a regulatory mindset that focuses on the past, and on its own prerogatives of price-setting to try to determine winners and losers in the industry. The problems of government intervention in this industry also extend to a host of other regulatory practices that are rooted in history and ignore the realities of current technologies and their use by real-world customers. Many other traditional regulatory interventions, such as California's recent proposal to consider public utility regulation of VoIP,¹² stem from the same mindset that must be overcome if this industry is to contribute fully to California's recovery and future prosperity.

However, some steps can be taken to reverse the destructive course pursued by the Telecommunications Act of 1996. It is time not just to uphold the limited broadband reforms the FCC has recently embraced, but to go much further and rescind nearly a decade of harmful UNE policies to stop the damage to America's telecommunications infrastructure and economy, and provide genuine opportunities for consumer choice. The D.C. Circuit's recent order was a welcome step in this direction. California should now begin its own reform process by embracing the Court's order and sharply raising its own UNE prices to reflect the reality of their economic cost.

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Endnotes

1. U.S. Congress Conference Report to accompany S.652 ("Telecommunications Act of 1996"), January 31, 1996, p. 1.
2. Through a methodology known as TELRIC (total element long-run incremental cost), the FCC determined that UNE prices should reflect the hypothetical costs of an idealized telephone network constructed all at once using the most advanced available technology. Many economists have criticized this approach as unrealistic (e.g., Kahn, Alfred E. (1998, 89-103).
3. CPUC Decision 02-05-042 (May 16, 2002) reduced SBC's wholesale prices for the telephone local loop by 15.1%, and for two forms of telephone switching by 69-79% (D.02-05-042, p. 1). These particular "network elements" are among the most significant of the UNEs that ILECs are required by regulators to provide to their competitors.
4. CPUC Decision 03-03-033 (March 13, 2003) reduced Verizon wholesale prices for numerous UNEs with the effect of reducing the most common "UNE-P" rate (the combined price for all the components that make up local telephone service) by about 45% (D.03-03-033, Appendix A, former GTE zone 1 UNE-P composite rates).
5. From December 31, 2001 to June 30, 2003, CLECs added just over a million customer lines in California (1,043,555). During that same period, the number of lines CLECs served by UNES grew by nearly as much (952,289), along with over 100,000 additional lines served through other forms of resale of the ILEC network (112,782). Despite this growth in the CLEC customer base, the number of customers served by CLECs' own facilities fell by 21,515.
6. Order dated March 2, 2004 in *United States Telecom Association v. Federal Communications Commission and United States of America*, no. 00-1012.
7. The proceedings are CPUC A.01-02-024 for SBC; R.93-04-003 for Verizon. Draft decisions have been circulated from the assigned administrative law judge, and at the Commissioner level; the matter is ripe for decision under the CPUC's procedures.
8. The existing telephone network connects each subscriber to the network through a twisted pair of copper wires known as the "loop," a technology originally patented by Alexander Graham Bell.
9. Without compulsion from regulators, participating firms will not renew wholesale agreements with competitors on terms they regard as harmful. Therefore, the competition promoted by the current UNE policy can continue only if regulation continues, also. This is hardly a prescription for a robust, competitive wholesale market and is contrary to the Telecom Act's goal of promoting competition *and* deregulation.
10. Federal Communications Commission. "Press Statement of Chairman Michael K. Powell and Commissioners Kathleen Q. Abernathy, Michael J. Copps, Kevin J. Martin and Jonathan S. Adelstein On Triennial Review Next Steps," March 31, 2004.
11. UNE-P ("UNE-Platform") refers to the practice of competitors purchasing, as individual network elements, all the components of standard telephone service. This approach permits a larger wholesale discount than available through total service resale.

Based on the CPUC's calculation, a typical UNE-P bundle of wholesale services from SBC California is priced at \$13.93 *per month* ("Revised Proposed Decision of ALJ Duda," CPUC A.01-02-024 (August 12, 2004), page 7). FCC data indicates that the average residential customer spends \$36 *per month* for local service. (FCC *Trends in Telephone Service Report*,

May 6, 2004, Table 3.2 (2002 data)). While a precise calculation would have to be adjusted for factors such as California-specific retail rates, usage patterns, and optional services, inter-carrier access charges and the tendency of CLECs to offer retail packages attractive only to higher-bill customers, this data offers an approximate comparison of retail and mandated wholesale rates.

12. CPUC I.02-04-007, initiated February 11, 2004.