

APPENDIX B.

Telecommunications Glossary

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3G	<i>Third Generation:</i> Intended to be the next great wireless technology, wideband mobile services and applications offering users faster access to the Web.
Access Revenues	Revenues from Access services.
ADSL	<i>Asymmetric Digital Subscriber Line.</i> DSL service with a larger portion of the capacity devoted to downstream communications, less to upstream. Typically thought of as a residential service.
Advanced Services	Advanced services enable users to send and receive large amounts of information. The FCC defines advanced services as “high-speed, switched, broadband telecommunications that enable users to originate and receive high-quality voice, data, graphics, and video using any technology.”
Bandwidth	The amount of data transmitted in a given amount of time; usually measured in bits per second, kilobits per second, and megabits per second.
Bit	A single unit of data, either a one or a zero. In the world of broadband, bits are used to refer to the amount of transmitted data. A kilobit (kb) is approximately 1000 bits. A megabit (Mb) is approximately 1,000,000 bits.
Broadband	A descriptive term for evolving digital technologies that provide consumers with integrated access to voice, high-speed data service, video-demand services, and interactive delivery services. (e.g. DSL, Cable Internet)
Business Access Line	Telephone line from business customer premise to central office. Commonly referred to as local loop.
Cable Modem	A cable modem is a device that enables a user to connect a personal computer to a local cable television line and receive data at a speed of up to 1.5 Mbps and above depending on the cable provider. Cable modem Internet access is shared with other users in the same neighborhood, which reduces the speed as the number of users increases. Cable modem service is offered on the same basic infrastructure as multi-channel video service but it requires equipment upgrades to support broadband connections.
Category 1	Category 1 consists of those services deemed to be basic monopoly services. Prices and charges for services are set or changed only upon Commission approval.

Category 2	Includes discretionary or partially competitive services for which the local exchange carrier retains significant, though declining, market power. Prices and charges for services are set only upon Commission approval.
Category 3	Category 3 consists of fully competitive services. The Commission determines that no Commission oversight of pricing is needed to protect consumers of these competitive services because market forces give rise to pricing efficiency. Upward and downward price flexibility exists, provided certain notice requirements are met.
Cellular	A mobile communications system that uses a combination of radio transmission and conventional telephone switching to permit telephone communication to and from mobile users within a specified area.
Central Office	A circuit switch where the phone lines in a geographical area come together, usually housed in a small building.
CLEC	<i>Competitive Local Exchange Carrier:</i> Wireline service provider that is authorized under state and federal rules to compete with ILECs to provide local telephone service. CLECs provide telephone services in one of three ways or a combination thereof: a) by building or rebuilding telecommunications facilities of their own, b) by leasing capacity from another local telephone company (typically an ILEC) and reselling it and c) by leasing discrete parts of the ILEC network referred to as UNEs.
Coaxial Cable	A type of cable that can carry large amounts of bandwidth over long distances. Cable TV and cable modem service both utilize this cable
Competitive Access Provider (CAP)	(CAP, or "Bypass Carrier") A company that provides network links between the customer and the Inter-Exchange Carrier or even directly to the Internet Service Provider. CAPs operate private networks independent of Local Exchange Carriers.
CPCN	<i>Certificate of Public Convenience and Necessity:</i> Authorization given by the CPUC to telecommunications carriers in order to provide service in the state of California.
CPUC	<i>California Public Utilities Commission</i>
Customer Share	Customer share is the portion of all customers a company has. It is measured by subscribership, lines and/or telephone numbers.
DLEC	<i>Data Local Exchange Carrier.</i> DLECs deliver high-speed access to the Internet, not voice. DLECs include Covad, NorthPoint and Rhythms.
Downstream	Data flowing from the Internet to a computer (Surfing the net, getting E-mail, downloading a file).
DSL	<i>Digital Subscriber Line:</i> DSL delivers data at high speeds over ordinary copper telephone lines. DSL can carry both voice and data signals. DSL is distance-restricted, capable of providing services to customers up to 18,000

distance-restricted, capable of providing services to customers up to 18,000 feet away.

DSL lite	Also known as G.lite, this is a version of ADSL that uploads and downloads at speeds that are among the slower of the implementations.
FCC	<i>Federal Communications Commission</i>
Fixed Wireless	Fixed wireless broadband technology uses an antenna placed on or in a building to send and receive data. The data is transmitted to and from the building via a city's wireless network, which consists of antenna towers placed three to five miles apart. If a home or building isn't in a city with wireless service, the occupants won't be able to get fixed wireless broadband. Wireless speeds are currently comparable to ADSL; however, the theoretical maximum is much higher. Wireless is also an always-on connection that doesn't tie up the phone line. Wireless is a little more expensive than ADSL or cable.
GSM	Global System for Mobile Communication. This is the current radiotelephone standard in Europe and many other countries except Japan and the United States.
IEC	<i>Inter-Exchange Carrier</i> : Typically defined as a long-distance telephone company. IECs provide long distance services to customers between LATAs by using their own facilities or by reselling to their customers the long distance services they have purchased from another carrier.
ILEC	<i>Incumbent Local Exchange Carrier</i> : The traditional wireline telephone service providers within defined geographic areas. Prior to 1996, ILECs operated as monopolies having the exclusive right and responsibility for providing local and local toll telephone service within LATAs. ILECs include regional Bell operating companies such as Pacific Bell/ SBC and non-Bell affiliated companies such as Roseville Telephone Company, both in California.
InterLATA	Between local access and transport areas (LATAs). Services, revenues, and functions associated with telecommunications that originate in one LATA and that terminate in another one or that terminate outside of that LATA. InterLATA services are often thought of as long distance services.
InterLATA Toll Revenues	Revenues attributable to interstate service charges from end-user customers, including presubscribed customers.
IntraLATA	Within the boundaries of a local access and transport area (LATA). IntraLATA services typically include local and local toll services.
IntraLATA Toll Revenues	Revenues attributable to intrastate service charges including presubscribed customers.

Revenues	customers.
IP Telephony	Evolving, packet-based systems that can more efficiently move voice and data traffic simultaneously via the Internet. IP telephony technology represents a lower cost alternative to circuit-switches for providing (mostly residential) local service.
ISDN	<i>Integrated Services Digital Network</i> : An alternative method to simultaneously carry voice, data and other traffic, using the switched telephone network.
ISP	<i>Internet Service Provider</i> : A company providing Internet access to consumers and businesses, acting as a bridge between customer (end-user) and infrastructure owners for dial-up, cable modem and DSL services.
kbps	<i>Kilobits per second</i> : 1000 bits per second. A measure of how fast data can be transmitted.
LATA	<i>Local Access and Transport Area</i> : A geographical area within which a divested Regional Bell Operating Company (RBOC) is permitted to offer exchange telecommunications and exchange access services.
Local Loop	A generic term for the connection between the customer's premises (home, office, etc.) and the provider's serving central office. Historically, this has been a wire connection; however, wireless options are increasingly available for local loop capacity.
Local Residential & Business Revenues	Revenues from basic service, directory assistance, customer calling features, and vertical services.
Market Share of California	Market share for California is the total lines and revenues of 162 carriers comprised of 22 ILECs and 140 CLECs.
Market Share within ILEC's franchise area	Both Pacific and Verizon were compared to CLECs. For this purpose, all 140 CLECs' data was aggregated and compared to the ILECs'. To calculate this percentage the assumption used here was that all the CLECs' revenues and lines are in that one ILECs region, e.g. all 140 CLECs' access lines are within Pacific's territory. This percentage over estimates the amount of CLEC competition but is consistent between Pacific and Verizon.
Mbps	<i>Megabits per second</i> : 1,000,000 bits per second. . A measure of how fast data can be transmitted.
NRF	Adopted in 1989, the New Regulatory Framework (NRF) is the Commission's designation for a price cap form of regulation that is used to regulate California's four largest ILECs (Pacific Bell, Verizon California, Roseville Telephone Company, and Citizens Telephone Company of

California). Previously, these ILECs were regulated under traditional cost of service rate of return regulation, which required substantial Commission oversight.

The NRF relies on a profit incentive to motivate utilities to operate in the most efficient way possible in order to maximize revenues. Under price caps, the price of utility services are delinked from costs. The utility is allowed to earn a higher rate of return than under rate of return regulation to provide the profit incentive.

- Number Porting** Number porting allows customers to switch between telephone service providers while retaining their original telephone number. Also called Local Number Portability (LNP).
- Other Access Line** Facilities used to provide wireline telecommunications service that are neither residential nor business access lines. Example: Coin lines and non-switched access lines.
- Other Revenues** Revenue which are neither local, intraLATA toll, interLATA toll, access, nor UNE. Example of other revenues are: Billing and Collection, COPT, COIN, Customer Premise Equipment, Directory, Regulatory and Settlements, Resale, Uncollectables, CHCF-A&B, Universal Service Payments.
- Paging** A one-way communications service from a base station to mobile or fixed receivers that provide signaling or information transfer by such means as tone, tone-voice, tactile, and optical readout. Two-way paging allows the user to send data as well as receive it. In some cases, a two-way pager can serve as an alternative to a cellular telephone.
- PCS** *Personal Communications Service:* A low-powered, high frequency (1.9 GHz) alternative to traditional cellular service, including CDMA and GSM.
- PDA** *Personal Digital Assistant:* A handheld device that combines computing, telephone/fax, Internet and networking features. A typical PDA can function as a cellular phone, fax sender, Web browser and personal organizer. <http://www.webopedia.com/TERM/P/PDA.html>
- POTS** *“Plain Old Telephone Service:”* Basic telephone service, including dial tone, the ability to place and receive voice/data calls over the same basic lines.
- PSTN** *Public Switched Telephone Network:* See "Switched Network"
- RBOC** *Regional Bell Operating Company:* A telecommunications carrier created to provide local service after the divestiture of AT&T in 1984. While there were initially 7 RBOCs created 1984, due to mergers there are now four:

BellSouth, SBC, US West/Qwest, Verizon.

- Resale** The practice of carriers purchasing of telecommunications services from another carrier at wholesale rates and, then, reselling those services to their own customers at retail rates.
- Residential Access Line** Telephone line from residential customer premise to central office. Commonly referred to as local loop.
- RTU** *Remote Terminal Unit*: The location at which there is a transition between a telecommunications carrier facility and the local lines serving the individual customers
- Satellite Broadband** Satellite broadband uses a 24"x36" dish mounted on or near a house or building to send and receive data from satellites orbiting 22,300 miles above the Earth. The dish must have a clear, unobstructed view of the southern sky. Two standard coaxial cables connect the satellite dish antenna to a PC or a StarBand satellite modem. The antenna both sends requests to the Internet and receives Internet content via the satellite. Because this service is available immediately in most location, satellite broadband is a good option in places where cable modem and DSL connections are not available, particularly rural areas.
- Section 271** Section 271 of the 1996 Telecommunications Act allows certain Regional Bell Operating Companies (RBOCs[1]) to enter the long distance market after they each prove that they have opened their respective local markets to competition.

Subscribership	Subscribership is how many customers have subscribed for a particular telecommunications service.
Switched Network	A domestic telecommunications network usually accessed by telephones, key telephone systems, private branch exchange trunks, and data arrangements. (Also PSTN – Public Switched Telephone Network)
TA '96	<i>The Telecommunications Act of 1996</i> : TA '96 gives the FCC general rulemaking authority to set the ground rules and policies for local competition. It also assigns states the responsibility for implementing many of the statutory and federal regulatory requirements of the Act, either jointly with the FCC or on their own.
TD	The <i>Telecommunications Division</i> of the California Public Utilities Commission
Total # of Access Lines	Sum of Residential + Business + Other Access lines.
Total Operating Revenues	Sum of Local, IntraLATA toll, InterLATA toll, UNE, and Other revenues.
Unbundling	The term used to describe the access provided by local exchange carriers so that other service providers can buy or lease portions of its network elements, such as interconnection loops, to serve subscribers.
UNE	<i>Unbundled Network Elements</i> : Leased portions of a carrier's (typically an ILEC's) network used by another carrier to provide service to customers.
UNE Revenues	Revenues received from carriers for unbundled network elements.
UNE-P	<i>Unbundled Network Element Platform</i> , or UNE-P, refers to the combination of infrastructure elements - including unbundled loops, switches, and transport elements - that CLECs must acquire to provide local telephone service to customers. By reducing the cost and time of provisioning service, UNE-P enables CLECs to provide local service in regions normally serviced by ILECs. A CLEC utilizing a UNE-P does not have to lease space in the ILEC central office but instead leases the network elements necessary to provide service from the ILEC. The UNE-P CLEC usually leases a copper loop, a port on the ILEC switch, and a connection to the CLEC's point-of-presence.(FCC 01-361a1 1st Triennial Review, mimeo p22.).
Upstream	Data flowing from your computer to the Internet (sending E-mail, uploading a file).

- Wireless** Telephone service transmitted via cellular, PCS, satellite, or other technologies that do not require the telephone to be connected to a land-based line.
- Wireless Internet** 1) Internet applications and access using mobile devices such as cell phones and palm devices.
2) Broadband Internet service provided via wireless connection, such as satellite or tower transmitters. (Also Wireless Broadband)
- Wireline** Service based on infrastructure on or near the ground, such as copper telephone wires or coaxial cable underground or on telephone poles.