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**SHUGHART THOMSON & KILROY'S TELECOMMUNICATIONS AND NEW TECHNOLOGIES PRACTICE GROUP TELECOM REPORT**

Shughart Thomson & Kilroy, P.C.'s Telecommunications and New Technologies Law Practice is pleased to provide you with its Telecom News Report, a periodic report in which we inform you of recent legal and regulatory developments in the telecommunications industry of importance to telecommunications providers, users, consultants, and others with a significant interest in the industry, and give you some insight to such developments.

**ABOUT US**

Shughart Thomson & Kilroy, P.C. is a full service law firm with its principal office in Kansas City, Missouri, with branch offices located in Springfield and St. Joseph, Missouri, and Overland Park, Kansas, Denver, Colorado and Phoenix, Arizona. Shughart Thomson & Kilroy's Telecommunications and New Technologies Practice Group is located in Denver, Colorado.

Our Telecommunications and New Technologies Law Practice provides comprehensive legal and regulatory services for the telecommunications industry, including inter-exchange carriers, competitive local exchange carriers, ILECs, internet service and voice over internet protocol ("VoIP") providers, mass media operators and program providers, telecommunications construction companies, telecommunications site owners, telecommunications consultants, real estate developers with interest in telecommunications, and investors in the telecommunications industry.

This practice group represents clients developing, marketing, deploying and investing in new and emerging technologies applicable to telecommunications services and information processing.

Our services include litigation in federal and state courts and before federal and state administrative agencies, regulatory services before federal and state regulatory agencies, and transactional, including corporate and securities, mergers and acquisitions, and entity formation.

For a complete description of our Telecommunications and New Technologies Law Practice, please refer to [www.telecommunicationattorneys.com](http://www.telecommunicationattorneys.com). For a complete description of Shughart Thomson & Kilroy, P.C., refer to [www.stklaw.com](http://www.stklaw.com).

## RECENT LEGAL AND REGULATORY DEVELOPMENTS IN THE TELECOMMUNICATIONS INDUSTRY

### Fiber to the Curb (“FTTC”) and Fiber to the Home (“FTTH”) Network Facilities

On October 14, 2004, the Federal Communications Commission (“FCC”) ruled that incumbent local exchange carriers (“ILECs”) are not required to unbundle FTTC local loops, where the fiber is extended within 500 feet of a customer’s premises. The FCC determined that FTTC networks can deliver many of the same benefits as FTTH local loops, and that FTTC networks offer enhanced capability for providing advanced telecommunications services, including the ability to offer voice, multi channel video, and high speed data services, or so called “triple play” services. FTTH and FTTC networks offer the ability to provide voice, video and data services as an alternative to cable television’s broadband facilities.

The FCC previously decided that ILECs are not obligated to lease FTTH network facilities to competitors at a regulated, cost-based, because such obligations would discourage ILECs’ investments in FTTH facilities.

In its October 14 ruling, the FCC also determined that ILECs are not obligated to build time division multiplexing (“TDM”) capability into their new packet based networks, including FTTC or FTTH, or into existing packetized transmission facilities, including copper loops that previously did not have TDM capability.

The FCC's purpose in extending its previous ruling that relieved ILECs of most of their obligations to lease advanced FTTH network facilities to competitors at a regulated, cost-based price is to spur more investment, not just by ILECs, but telecom communications providers in general, in facilities that will enable consumers to utilize information speeds for telecommunications services in excess of the current limitations of digital subscriber loop ("DSL") or cable modem services.

The most significant aspect of this October 14 ruling requires that ILECs deploy FTTC within 500 feet of a customer's home, in order to be relieved of their obligations to provide these facilities to competitors at a regulated price.

There are many potential consequences to the telecommunications industry flowing from this FCC ruling. In theory, it should spur ILECs to invest in FTTC and FTTH networks which should benefit the consumer. Likewise, it should force competitive providers to invest in the same facilities if they wish to compete with ILECs for advanced telecommunications services.

Perhaps the most important consequence is that competitive providers may decide to reposition themselves with new and different facilities for competing with the ILECs in providing voice, video and data services to consumers. For example, such providers may decide not to invest in FTTC or FTTH network facilities, and instead, employ end-to-end wireless facilities using licensed and unlicensed radio frequencies incorporating the latest technologies such as voice over internet protocol ("VoIP") for voice service, for high speed internet service, and for delivery of video signals originating from satellite providers.

### **Broadband Over Power Lines**

On October 14, 2004, the FCC adopted changes to Part 15 of its Rules, 47 CFR Part 15, allowing for the development of broadband communications over power line ("BPL"). BPL is a new technology that permits access to high speed broadband services using the communications capability of the electric power grid in the United States.

Part 15 of the FCC Rules relates to radio frequency devices. In adopting changes to Part 15 of its Rules, the FCC (i) set forth rules imposing new technical requirements on BPL devices, such as the requirement to avoid using any specific radio frequency with BPL devices, and to remotely adjust or shut down any BPL device; (ii) established “excluded frequency bands” within which BPL devices must avoid operating entirely to protect aeronautical and aircraft radio frequency receivers, and established “exclusion zones” in locations that are close to sensitive operations such as United States Coast Guard or Radio Astronomy Stations, within which BPL devices must avoid operating on certain frequencies; (iii) established consultation requirements with public safety agencies, federal government sensitive stations, and aeronautical stations; (iv) established a publicly available BPL device notification database to facilitate an organized approach to identification and resolution of destructive electrical caused by operation of BPL devices to existing radio frequency users; (v) changed the equipment authorization for BPL devices from the verification process to certification process, which lessens the burdens for obtaining permission to use BPL devices; and (vi) improved measurement procedures for all equipment that uses radio frequency energy to communicate over power lines.

BPL will allow broadband deployment using electric poles and electric power lines. Moreover, electric utilities may now deploy BPL technology in order to provide not only high speed communications services, but provide additional power supply system communications and control capabilities to improve reliability and efficiency of their electric service.

Until the FCC publicly issues its Report and its Order on BPL, it is not clear whether non-electric utilities will have access to electric utilities electric networks to deploy BPL, or whether electric utilities will be the only providers of BPL devices.

## Facilities Available for Voice, Video and Data Services

With the FCC's action in amending its rules to allow BPL, there are now four types of facilities available to telecommunications service providers to deliver voice, video and data services to consumers. These four types of facilities are:

**Wireline.** ILECs and competitive providers will continue to use wireline facilities consisting of copper loops and fiber to deliver voice, video and data services to consumers. For the most part, competitive providers, however, must either invest in their own wireline facilities, or continue to purchase copper local loops from ILECs at significantly increased prices beginning in early 2005.

**Wireless.** There are a number of wireless type facilities which may be used to deliver voice, video and data services to consumers. These include (i) licensed radio frequencies such as terrestrial wireless (cellular, personal communications service and microwave frequencies), (ii) such additional radio frequencies as the FCC may allocate, whether on a licensed or unlicensed basis for such purposes, (iii) certain broadcast frequencies, (iv) satellite radio frequencies in the allocated satellite radio frequency bands allowed for such purposes, or (v) a combination of licensed and unlicensed frequencies in the microwave band, or other radio frequency bands which the FCC allocates for such purposes. Wireless facilities can employ voiceover transmission capability including VoIP.

**Cable Modem Services.** Cable providers will continue to develop and use cable modem services for delivery of the voice, video and data services to consumers. The issue of whether third parties may purchase and resell broadband cable modem services for the delivery of voice, video and data services has not been settled. As of this time, cable providers are not required to make their facilities available to third parties for such resale. AT&T Corp. ("AT&T") however, has a "branding" agreement with certain cable telecommunications companies which enables AT&T to "sell" cable modem services under AT&T's name.

**BPL.** With the advent of BPL, electric utilities and possibly third parties may utilize the electric power grid for broadband communications services through the offering of devices that plug into electrical outlets in businesses and residences to originate and terminate high-speed telecommunications services.

These four types of available facilities present ample opportunity for entrepreneurs to establish new telecommunications companies to compete in the industry, which is poised to make a huge comeback after the financial decline that began in 2001.

**NEW REVENUE OPPORTUNITIES FOR  
RESIDENTIAL REAL ESTATE DEVELOPERS  
FROM TELECOMMUNICATIONS INFRASTRUCTURE AND SERVICES**

The advances in new technologies utilized to deliver telecommunications services and the demand for new telecommunications services have created new revenue opportunities for new home residential real estate developers from telecommunication's infrastructure and services. These opportunities are stronger when developers ensure "last mile" telecommunications services in their planned residential communities through owning telecommunications infrastructure and investing in a telecommunications provider to serve their residential communities. Residential land developers have long ignored these opportunities, and left them to either incumbent local exchange carriers ("ILECs") or new local exchange competitive carriers ("CLECs") to profit from telecommunications infrastructure and services in large planned residential communities.

We have outlined a business model, however, under which residential land developers can leverage major advances in telecommunications technology to provide amenities attractive to new home buyers in the form of advanced and traditional telecommunication services that add significant value to their planned community developments. This model is particularly attractive now because of the recent failure of many CLECs and recent FCC rulings under which competition from CLECs will likely diminish resulting in a lack of real and significant competition in the local exchange

telecommunications markets nationwide. The model is described in detail on our website, [www.telecomattorneys.com](http://www.telecomattorneys.com).

### **OUTLINE OF IMPLEMENT TELECOMMUNICATIONS SERVICE BUSINESS MODEL FOR RESIDENTIAL REAL ESTATE DEVELOPERS**

As we stated above, significant technological advances in the telecommunications industry continue to be made and used to deliver new telecommunications to services consumers. These advances offer new revenue opportunities for non-traditional service providers such as residential real estate developers. Residential real estate developers can gain previously untapped revenue streams from the construction and installation of telecommunications infrastructure and provision of telecommunications services, either directly as a service provider or through leasing telecommunications infrastructure to an existing service provider. The opportunity is enhanced by new technologies in telecommunications such as fiber optics facilities employing VoIP. Residential developers can invest in the installation of telecommunications infrastructure at the same time they are installing sewer, water and other utilities in new subdivisions or in larger scale multi-family developments. They can offer services on their own, or lease the infrastructures to other providers. The argument for such investment is particularly compelling where real estate developers can ensure “last mile” telecommunications services in their planned residential communities. Residential land developers have long ignored this revenue opportunity by leaving it to incumbent local exchange carriers (“ILECs”) or competitive local exchange carriers (“CLECs”), cable television companies and satellite providers.

We have developed an eight-step outline which residential developers or others interested in establishing a competitive telecommunications company to provide voice, video and data services to consumers. The outline may be found on our website at [www.telecomattorneys.com](http://www.telecomattorneys.com).

## CARRIER ACCESS CHARGES FOR CERTAIN LONG DISTANCE SERVICES

We are currently reviewing the rates and practices of interexchange carriers ("IXC") that charge a carrier access charge ("CAC") for certain interexchange or long distance services. We would be pleased to discuss our review with you or answer any questions you may have about CACs or whether IXCs are engaging a in practice of applying for an unwarranted CAC charge to a long distance service, thus constituting an overcharge.

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Please do not hesitate to contact us if you have any questions about any of these services, or any item in this Report, or the recent FCC actions, please contact us. You may reach the Shughart Thomson & Kilroy, P.C. Telecommunications and New Technology Law Practice as follows:

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