EXHIBIT 7

GENERAL AGREEMENT FOR THE JOINT USE OF POLES

THIS AGREEMENT, Made and effective this _____ day of _____, 1970, by and between CONSUMERS POWER COMPANY, a Michigan corporation, having its principal office therein in the City of Jackson, Michigan, hereinafter referred to as "Consumers Power," as first party, and , a corporation, , , hereinafter referred to as the "Telephone Company," as second party,

W I T N E S S E T H:

WHEREAS, Consumers Power and the Telephone Company desire to cooperate in the joint use of their respective poles when and where such joint use shall be of mutual advantage; and

WHEREAS, the desirability of joint use is determined by the service requirements of each of the parties, including considerations of safety and economy, and each party should be the judge of what the character of its circuits should be to meet its own service requirements and as to whether or not these service requirements can be properly met by the joint use of poles,

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, the parties hereto, for themselves, their successors, heirs and assigns, do hereby covenant and agree as follows:

ARTICLE I

Definitions

For the purpose of this agreement including the Administrative Practices, the following terms, when used herein, shall have the following meanings:

EXHIBIT 8

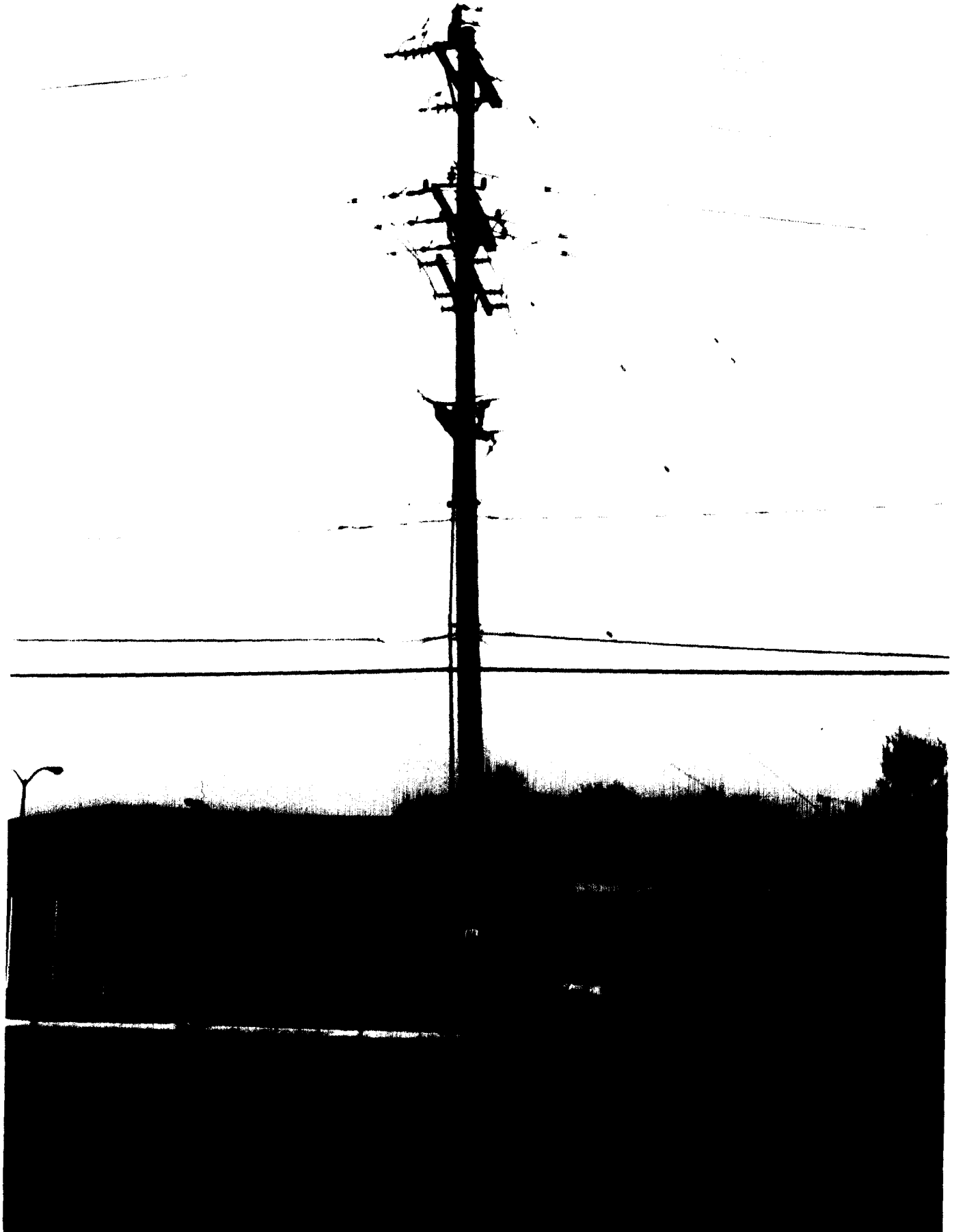

EXHIBIT 9

29TH STORY of Level 1 printed in FULL format.

Copyright 1996 Information Access Company, a Thomson Corporation Company;
IAC(SM) Industry Express(SM);
Copyright 1996 EDGE Publishing
EDGE, on & about AT&T

June 17, 1996

LENGTH: 744 words

HEADLINE: WIRELESS: KANSAS CITY POWER & LIGHT & CELLNET'S WIRELESS NETWORK CONNECT OVER 200,000 CUSTOMERS; SCALABLE DEPLOYMENT CAPABILITIES ALLOW NATION'S LARGEST NETWORK METER READING PROJECT TO GROW BY THOUSANDS A DAY

Outsourced Telco. meter reading

BODY:

CellNet Data Systems, the leading provider of Network Meter Reading (NMR) services to the utility industry Monday announced that more than 200,000 meters have been deployed on-time as part of the company's wireless network installation project for Kansas City Power & Light.CellNet's installation of the Kansas City Power & Light (KCPL) network has reached this key milestone on schedule.

The CellNet-designed KCPL network is currently the largest existing fixed-point, two-way wireless network in the world, and is the only network of its kind to be custom-designed for Network Meter Reading. The CellNet network in Kansas City has more than doubled in size over the past four months.

The success of the KCPL installation is a result of CellNet's scalable, repeatable deployment process. This process allows CellNet to guarantee efficient, large-scale network deployment, and to meet the capacity and service needs of utilities across the nation.

"We are pleased with CellNet's performance in the deployment process," said Charles R. Cole, vice president of customer services and purchasing at KCPL. "As the first utility in the nation to deploy Network Meter Reading, we look forward to the end of 1996 when we anticipate maximizing the opportunity to develop and provide enhanced customer service options through the CellNet system."

In its 30,000-square-foot retrofit facility, located in suburban Kansas City, CellNet prepares the utility's existing meters to become part of the company's wireless network, then sends these meters back into the field to be installed on KCPL customers' homes. The process is totally paperless and allows KCPL to update their meter asset database daily.

The CellNet retrofit center has the maximum capacity to retrofit and send into the field as many as 100,000 meters per month.

At the retrofit center, CellNet cleans and recalibrates existing meters that have been removed from homes already outfitted with CellNet meters. After the cleaning and recalibration, the meters are equipped with CellNet's radio technology.

It is by way of these radio transmitters that the meter communicates over the network, enabling utilities, through the use of CellNet's innovative network management software, to collect and manage customers' power usage data.

"We are excited to have reached yet another promised milestone on the road to providing utilities with the most reliable and advanced method to deliver customer usage information," said Philip H. Mallory, vice president and general manager of CellNet Data Services.

"By choosing to deploy CellNet's network today, KCPL will be poised and ready to provide the products and services that customers will demand as the utility industry deregulates and utilities begin competing for customer attention."

Using the CellNet network, KCPL has the option to provide an expanded line of products and services to customers in most of its service territory. For residential customers, these services may include, flexible rates and billing options such as time-of-use rates, move-in and move-out services, and elimination of estimated bills.

Commercial and industrial customers can enjoy access to services such as consolidated billing for store chains or multiple locations.

CellNet has also contracted with nearby Union Electric Company in St. Louis, where the network deployment is underway for Network Meter Reading of more than 720,000 meters.

Kansas City Power & Light Company provides electric power to a growing and diversified service territory encompassing metropolitan Kansas City and parts of eastern Kansas and Western Missouri. KCPL is a low-cost producer and leader in fuel procurement and plant technology.

CellNet Data Systems Inc., with headquarters in San Carlos, markets a flexible, cost-effective, wireless data communications system to the utility industry. CellNet's network collects timely sales and usage data and delivers information to utilities, enabling them to create a strategic competitive advantage.

The network can also be used for other commercial wireless data applications such as monitoring widely distributed, low-cost assets where the cost of communications must be commensurate with asset value. Status monitoring of vending machines, home security systems, office machines, traffic light and personal safety devices are examples of such applications. CellNet employs more than 450 people worldwide. FMI: http://www.cellnet.com.

LANGUAGE: ENGLISH

IAC-NUMBER: IAC 06114777

LOAD-DATE: June 19, 1996

EXHIBIT 10

34TH STORY of Level 1 printed in FULL format.

Copyright 1996 PennWell Publishing Company
Electric Light & Power

June, 1996

SECTION: FOCUS REPORT; On Communications Technology; Pg. 15

LENGTH: 3151 words

HEADLINE: Two-Way communications promote value-added services

BYLINE: Teresa Hansen, Associate Editor

BODY:

Advanced communications technology will play an important role in the success of competitive utilities. Utilities need two-way communication with customers to develop products and services that fit each customer's specific needs. This idea has been discussed in detail at most every electric utility conference held in recent months. As the industry rapidly evolves, utilities must plan for the future and determine which technology will meet their future needs.

Many electric utilities have already invested heavily in internal communications networks commonly used for supervisory control and data acquisition (SCADA), distribution automation and automatic meter reading. Now they must expand these operations-focused systems to customer-focused systems. "Linking utilities and their customers through two-way communications will be one of the keys to offering the kinds of services and products that will differentiate utilities and satisfy customers," James Andrus, Itron Inc.'s senior marketing manager said. "Today's utility goals are fairly universal and easy to summarize -- cut costs while enhancing product delivery and customer service."

At the last DA/DSM <TM> DistribuTECH <TM> Conference, Dave Kerry, Louisville Gas and Electric, said communications technology decisions will be easier than strategy decisions. Don't let this statement fool you. Technology decisions won't be a piece of cake. Utilities are facing an array of technology, including broadband, radio frequency (RF), cellular, satellite, dial inbound and power-line carrier. To some extent, all of these alternatives can be used for both operations-focused services and customer-focused services (Figure 1).

Many utilities are already planning for future services and developing the technology necessary to provide those services. Some are currently piloting projects involving value-added customer services and advanced communication systems (Figure 2). Much of the decision about which technology to use will be based on the services the utility chooses to offer and the investments they have already made in internal information networks.

Broadband

Broadband, such as coaxial cable and fiber optics, is the most capable communications system available (Figure 1). Essentially, broadband is the delivery of information across a shared network. It is capable of carrying

large quantities of information (voice, data and video) simultaneously to and from many users.

Utilities considering using broadband services as their major communications infrastructure can either build their own system or lease space from another network owner. Constructing and operating a system connected to a large number of customers can be quite expensive, and utilities should carefully weigh network costs against expected benefits. In almost every case, a modern broadband network's capacity will far exceed a utility's needs. Any utility that decides to invest in its own broadband system should probably plan on marketing its excess capacity.

Cable television companies and telephone companies are emerging as potential full-service providers to utilities. According to Anderson Consulting -- a San Francisco, Calif-based consulting firm serving utilities, communications companies and other industries -- cable television companies currently have the most extensive broadband networks. These networks are already connected to a large number of utility end-customers. Many cable television companies, hoping to provide services to electric utilities, are taking steps to address utilities' concerns such as reliability, security and complete service territory coverage. Four of the five largest cable companies in the United States -- Comcast Corp., Continental Cablevision, Cox Communications Inc., and Tele-Communications Inc. (TCI) -- have formed a consortium called CableUCS. CableUCS was formed to foster, build and manage strategic relationships between cable operators and utilities.

Pacific Gas and Electric Co. (PG&E) is taking advantage of the cable television company's existing system in its service territory. It has partnered with TCI and Microsoft Corp. (Landis & Gyr as associate member) to test residential energy information services and technologies using the cable television network. The team developed the system to help utility customers manage their energy consumption and costs. The system links PG & E's energy information software with a wireless remote control, a TCI-provided digital set-top box and Microsoft's interactive television operating system to a television interface for the user. Landis & Gyr provides residential energy control expertise about meters, thermostats, and other products and services.

The trial is called Energy Information Services (EIS); and Phase I, bench testing, was completed in 1995. Phase II of the trial provides services to 100 test homes in Walnut Creek and Sunnyvale, Calif. It is nearing completion. Phase III, scheduled to begin later this year, will expand services to 1,000 customers at various locations within PG&E's territory.

"To date, the reaction of customers to these new services has been excellent, which is very encouraging," said Steve Phillips, PG&E project director. If the trial is successful, PG&E, TCI and Microsoft plan to market EIS on a national basis.

Southern California Edison has taken a different approach and built its own extensive fiber-optic network (1,200 route-miles throughout its 50,000 square-mile service territory). It is using the network, in combination with local cable or phone lines, to test a new program called Advanced Energy Management System (AEMS). AEMS is designed to give residential customers more information about their energy use and more control over their energy costs. AEMS will establish a direct communication link with customers and allow an

on-line exchange of information between Edison and the customer. With AEMS, Edison will be able to automate some of its systems, such as data collection, outage and theft detection, meter reading, and turning services on and off. As the system improves over time, customers will be able to choose features such as energy management, electronic bill payment, direct billing and more.

In addition to using its fiber-optic network as a link to its customers. Edison is also leasing part of its capacity to ICG Access Service Inc. Edison recently announced a 25-year agreement allowing ICG to use its fiber-optic network to offer a full range of local telephone services to customers in Southern California. According to Steve Frank, Edison's president and chief operating officer, the agreement emphasizes the importance Edison is placing on optimizing its communications infrastructure.

Radio frequency

The use of RF technology to send and receive voice and data is increasing Advances in wireless communications software combined with RF modems are making it possible to create an office almost anywhere, including a utility truck.

"Wireless voice communications evolved from novelty to necessity in less than fifty years," said David Nairn, Motorola's Data Systems business director. "Wireless data is following suit at many times that pace, putting us on the verge of a world where an infinite amount of information will be available anywhere, anytime." Many utilities are taking advantage of this technology by providing field personnel with hand-held or truck-mounted mobile computers.

These computers allow field personnel to access mainframes, enabling them to retrieve information like updated schedules and work orders without going into the office. Not only can field personnel access information, but they can also update mainframe information while still in the field. This mobile, wireless technology has allowed utilities to improve efficiency and customer service.

Another RF technology commonly used by utilities is fixed network technology. The components of this wireless communications system can vary greatly. However, it typically consists of remote terminal units (RTUs) placed throughout the coverage area. These RTUs receive information from devices installed at the user's electric meter.

The RTUs convert the information for transmission and relay it via RF to devices that communicate with the utility's information system. The RTUs also receive information from the utility and transmit it to the user's premises.

Utilities are investing in fixed networks for both operations-focused communications and customer-focused communication. RF has been used frequently for SCADA and distribution automation. It is less expensive to install and deploy than broadband technology and has many of the capabilities utilities are looking for (Figure 1).

Public Service Company of Colorado (PSC) is one utility that has opted to invest heavily in RF technology. The utility recently announced plans to expand its automatic meter-reading (AMR) system by adding 1 million encoder/receiver/transmitter (ERT) radio meter modules. When completed, the system will be the largest AMR installation in the world, with more than 1.3

million meters.

The modules will be read remotely by van-based mobile computers. The ERTs are also compatible with PSC's fixed network. According to Wayne Brunetti. PSC's president and chief operating officer, the utility plans to use the mobile AMR system and fixed-network system for other applications that will offer customers a wide array of services in the future.

Another utility, Portland General Electric (PCE) has not only decided to invest in RF technology, but also to promote the technology to other utilities. The formation of an information services company -- jointly owned by Portland General Corp., a holding company for PGE, and Genesis Services, a division of Itron Inc. -- was recently announced.

The new company, $ 13, will offer utilities throughout the nation a range of services using Itron's mobile RF and fixed-network technology. Services to be offered include AMR outsourcing and network-based information services. $ 13 will also offer meter and network installation, retrofitting meters with radio-based AMR modules and meter shop services. The company plans to create new services and products such as home automation and security monitoring. $ 13 will initially support PGE's AMR pilot programs in the Portland metropolitan area.

Baltimore Gas and Electric (BG&E) has also invested heavily in RF technology. BG&E began a pilot project last year using Motorola's EnerConnect technology, a complete wireless communications and information network. Kansas City Power & Light (KCP&L) and Union Electric have both invested heavily in CellNet Data Systems' RF technology. KCP&L has already deployed more than 100,000 meters in its service territory.

One of the choices facing utilities that invest in RF technology is whether to use licensed or unlicensed spectrum, or a technology that relies on a combination of the two.

Licensed vs. unlicensed spectrum

Sean Stokes, UTC's (The Telecommunications Association) senior staff attorney discussed the issues surrounding licensed vs. unlicensed spectrum at the 1996 DA/DSM DistribuTECH Conference. He said the benefit of licensed operations is that it is usually protected from interference. However, licenses are subject to availability and, according to Stokes, it has become increasingly difficult to find available channels in certain bands (most notably the 800-to-900-MHz private, land-mobile bands). Licensed bands are also subject to auctions and "refarming."

Stokes said unlicensed bands are easier to deploy, and there is no administrative delay. However, the user also has no interference protection. Systems operating in the unlicensed areas must accept interference from other unlicensed devices and from licensed operations. They must also avoid interference to licensed operators, Stokes said.

Cellular

Cellular technology is a mobile telephone technology designed primarily for

voice communications, which can also be used to transmit very short data messages. Cellular systems divide a service area into "cells." Each cell is two to 10 miles in diameter and each is served by multiple, low-power transmitters.

BellSouth has developed a new technology, Cellemetry, that uses existing cellular networks for remote utility meter reading, alarm monitoring and other telemetry services. BellSouth claims that cellular carriers can offer Cellemetry at competitive prices with few changes to their existing analog networks.

According to BellSouth, Cellemetry is based on a fairly simple technology that already exists. When a cellular customer roams today, his phone sends a very short registration message -- including a mobile identification number and electronic serial number -- over the control channel to the nearest cellular switch. Cellemetry uses the same control channel, automatically inserting a meter reading, alarm status report or other short message in place of the registration message. "Paired with remote-control devices, Cellemetry can easily become the wireless communications channel to turn power on or off to equipment and appliances in the field, reroute power in the event of outages and help selectively shed loads at peak times," said Stan Hamm, BellSouth's mobile systems group president.

A cellular AMR trial was conducted in cooperation with CINergy, which has a subsidiary, PSI Energy, that supplies power in outlying areas surrounding Indianapolis. According to Kevin Doyle, BellSouth Wireless Inc., the trial was successfully completed in late 1995. BellSouth is currently working with various cellular carriers and expects Cellemetry to be available to utilities and other commercial industries later this year.

Satellites

On Oct. 27, 1995, the Federal Communications Commission (FCC) licensed the world's first commercial low-Earth orbiting (LEO), satellite-based data communications and messaging service. According to Donald Thoma of ORBCOMM, a Virginia-based satellite communications company, the network of small LEO satellites will provide two-way data-only communications, having unlimited geographic coverage capability. 3 MHz of VHF spectrum (148.00-150.50 MHz uplink, 137.00 -138.00 MHz and 400.00-400.15 MHz downlink) has been allocated for LEO data communications use.

Thoma discussed LEO technology at the '95 UTC annual conference. He said, LEO satellite communications networks offer several key benefits to utilities. The network provides 100-percent geographic coverage. This is important to utilities whose service territories include remote areas which are not covered by cellular service and where it is not economically feasible to install RF equipment or broadband technologies.

Another advantage, according to Thoma, is that users do not have to obtain FCC licensing. The FCC issues the license to the LEO service provider, which then provides the communications services to users. Other benefits include the ability to use low-power communications equipment and LEO's ability to connect to other data networks. Thoma said.

As with any communications system, there are some trade-offs that must be made. LEO systems have limited bandwidth and therefore cannot transmit large

amounts of data. Also, LEO systems may experience short, infrequent communications outages which result in small delays in message delivery.

Thoma said that LEOs can fill a void in the overall communications strategy of energy companies by providing a cost-effective method for transmitting data in geographically dispersed and remote areas.

Dial inbound/dial outbound

Dial-inbound and dial-outbound technologies use the existing telephone lines to transmit data. Both technologies are used primarily for AMR. "Telephone lines make good sense for meter reading because they are a communications tool that is already installed," said Wade White, Bell South, at the 1995 National Meter Reading Conference, White explained that with out-bound technology, the utility initiates the meter read when needed. With inbound technology, software is set up to take the readings at certain intervals. The technology can also be used for outage notification and tamper detection, he said.

Virginia Power piloted a project using existing telephone lines. According to John Donelson, Virginia Power's distribution operations staff engineer, the dial-inbound technology appeared promising but proved difficult to implement. Of 69 sites initially chosen for automation, only 32 installations were obtained. Virginia Power also found that the inbound system was not reliable. It experienced equipment failures, as well as instances where phones were disconnected, cutting off the source of the AMR transmission.

Power-line carrier

Power-line carrier uses utilities' distribution systems to bring meter readings back to the substation. Another method, such as telephone line, cellular phone or SCADA system is then used to send the information to the utilities' master computer.

While Virginia Power was piloting its inbound AMR system, it was also piloting a power-line communications (PLC) system. It used leased telephone lines to relay information to its master computer. According to Donelson, the PLC system performed very well. A few minor problems were experienced initially, but once they were corrected, there were no problems with obtaining meter readings. Virginia Power also found that the meters themselves were very reliable.

Virginia Power did not study using this AMR technology as a gateway to other customers services. It only investigated the cost effectiveness of using the technology to get monthly meter reads. It found the technology to be a cost-effective tool for solving the most difficult meter-reading problems. Donelson said, however, the utility determined that AMR technology is still too expensive for existing routes to be automated in a cost-effective manner.

More than 60 electric cooperatives have invested in a PLC technology developed by Hunt Technologies Inc. This technology uses very low frequency to send signals through capacitor banks, transformers and down long distribution lines. It is reliable and accurate for meter reading and can also be used for peak demand and time-of-peak reporting, power-outage detection, tamper detection, power-failure counts and load profiling.

With mounting pressure to increase value-added services, communications technology decisions are becoming more and more complex. The array of technology available gives utilities the opportunity to vastly increase, as well as improve, customer service. However, the variety also complicates the decision-making process. To service their customers adequately, utilities will most likely use a variety of technologies (Figure 3).

GRAPHIC: Figure 1, Capability of communications alternatives for operations-focused service delivery, Capability of communications alternatives for customer-focused service delivery, Source: Andersen Consulting; Figure 2, Utility industry use of communications-enabled services, Source: Andersen Consulting; Figure 3, Utility's typical communication infrastructure in the future, Source: "Looking over your neighbor's fence -- is the grass greener?", Kinsman et al. 1996 DA/DSM <TM> DistribuTECH <TM>; Picture 1, Line specialist uses vehicle-mounted grid computer to communicate, via wireless system with dispatchers; Picture 2, A field serviceman uses a remote computer to access mainframe information. The computer accesses the mainframe via an 800-MHz radio system.

LANGUAGE: ENGLISH

LOAD-DATE: June 18, 1996

EXHIBIT 11

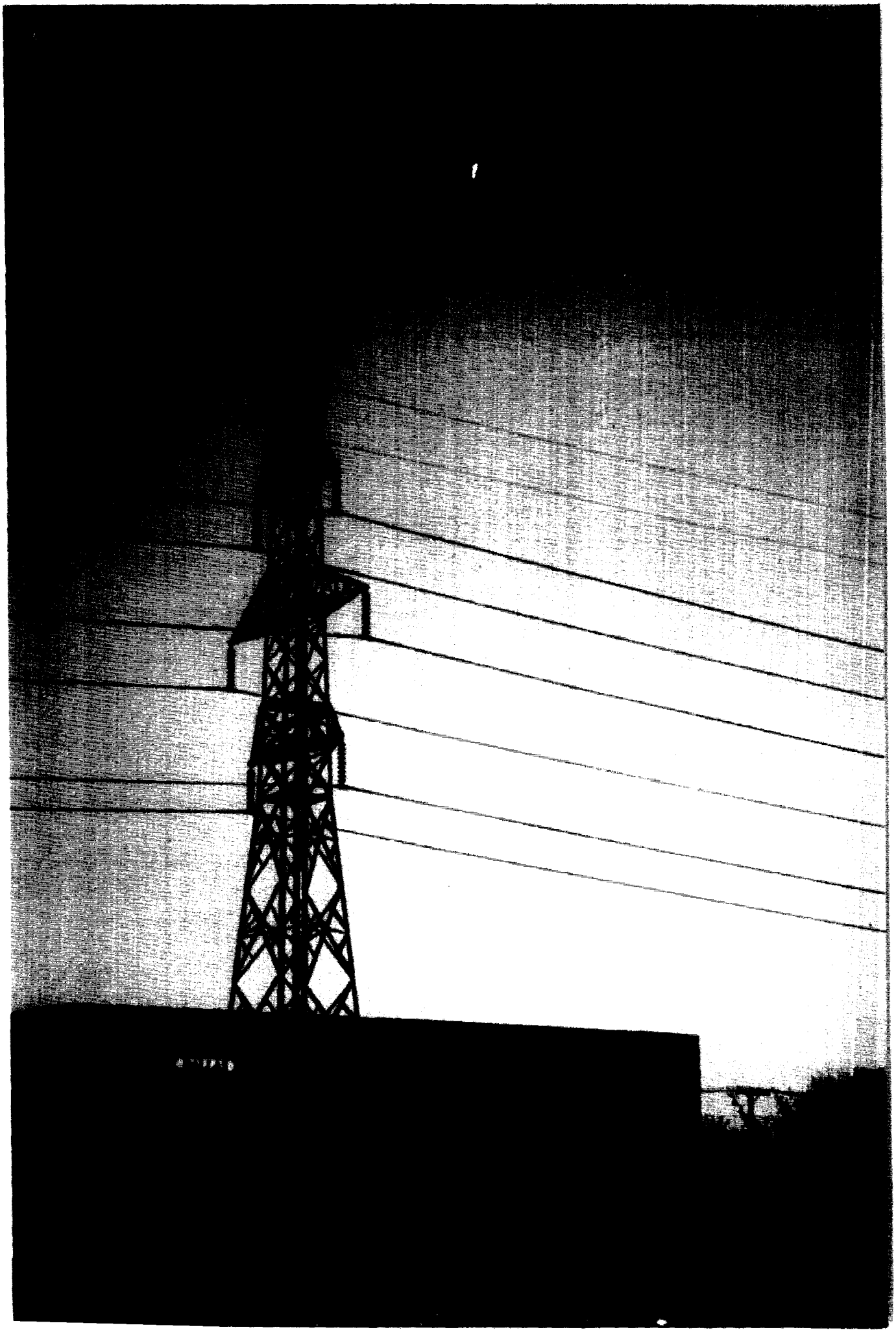

EXHIBIT 12

EXHIBIT 13

Broadband Extra

Architectural Advances Prompt Cable's Renewed PCS Interest

BY VINCE VITTORE

Cable operators' renewed interest in PCS reflects advancements in their networks' architecture.

And considering that the cable-backed Sprint Spectrum alliance is obligated under FCC rules to have its networks — covering more than 163 million people — built out within a decade, using cable plant makes economic sense.

Over the last year, several vendors have developed commercially viable systems that allow cable operators to use their upstream coax or fiber paths to carry PCS signals in much the same way they can transmit telephony.

In most cases, cable operators will hang microcells or cable microcell integrators (CMIs) on their existing aerial plant. However, some vendors are working on units that can sit underground with an extended antenna.

TECH 101

From a network architecture standpoint, PCS over cable looks very similar to a traditional wireless network. The biggest difference, however, is the backhaul portion or section of the network that transmits signals from the cell sites to the central office/headend. Cellular carriers typically use microwave links or lease a T1 (1.54 mbps) line from the local telco. Cable operators can use coax or fiber to backhaul signals.

Most PCS-over-cable architectures send signals downstream in the 750-MHz range. Upstream signals travel in the same 5- to 42-MHz band that telephony signals use. Each CMI provides coverage for a radius of about 0.5 miles, although each one is optimized for its particular location.

In congested areas, CMIs may cover only a few hundred feet since most of the mobile traffic will be pedestrians walking with phones. In some cases, vendors can get coverage up to about two miles, although most carriers won't risk covering an area so thinly.

If a cable operator commits to offering PCS, it's unlikely the system would have enough bandwidth to offer other telephony services, such as plain local telephone service.

"From a network perspective, CMIs look just like another macrocell," says Bruce Crair, VP-GM of Cox California PCS, which is part of the Sprint Spectrum alliance rolling out nationwide wireless service. "It gets optimized the same way the rest of the network is optimized."

Between the cell site or CMI and users, cable operators experimenting with PCS, as well as Sprint Spectrum, apparently have decided on the code division multiple access (CDMA) air interface standard instead of one based on time division multiple access (TDMA). Vendors marketing to cable operators also have focused on CDMA-based systems.

"We believe CDMA is inherently superior for the cable plant," says Chris Cole, the business development manager at Sanders, which is supplying Cox California PCS with microcells through a contract with Lucent Technologies.

Among the reasons for using CDMA:

- It handles ingress noise inherent in the cable plant better than TDMA-based interfaces can.
- It handles time delays in the cable plant caused by the distances between headends and coverage areas.
- Using CDMA, cable operators can tap the portion of spectrum below 18 MHz, which often contains the most ingress.

From the user's phone, CDMA-encoded signals are received at the CMI, converted to RF, and sent upstream over coax. If the cable operator has dark or lit fiber on that portion of the network, a card within the fiber node then converts the RF to optical waves and the signal is sent to a headend integrator, which passes it to a mobile switch and out to the public network.

Signals coming downstream go through the same process in reverse order. To support PCS service, cable operators don't necessarily need to have their plants upgraded to 750-MHz, two-way systems, as many believe.

"What we're requiring is 450 MHz, which isn't a lot," Crair says. "It does have to be two-way capable for at least the fiber section."

Also, fiber nodes generally should handle fewer than 2,000 homes and downstream lasers should not be split.

See **Cable** *on page 48*

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Broadband Extra

Architectural Advances Prompt Cable's PCS Interest

Cable *from page 47*

However, Sprint Spectrum is looking at each operator's plant individually. In some areas where the reverse path hasn't been activated, Cox will overlash coax on top of existing coax.

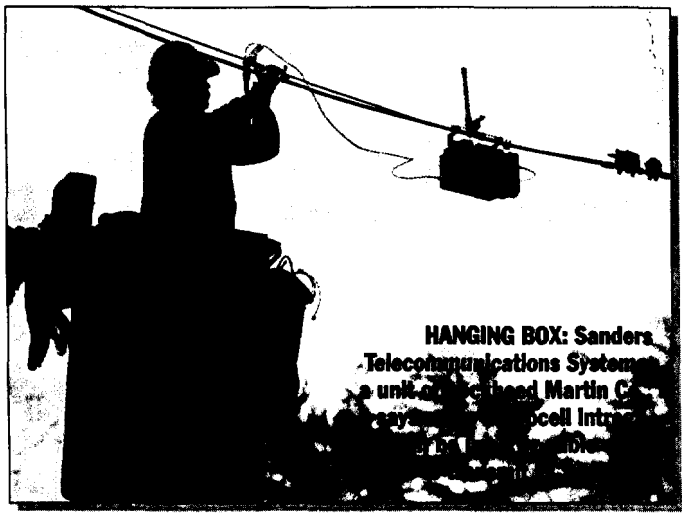
"[The cost] actually is pretty small compared to full upgrades," Crair says.

In some cases in which operators have pushed fiber far into the network, CMIs can be deployed directly onto fiber. Indeed, there are several advantages to doing that vs. hanging CMIs on coax.

Ortel, which has been making linear fiber lasers for telco vendors, was one of the first companies to introduce a CDMA-based CMI — they call it a MirrorCell — that can be hung on fiber.

While there are some technical benefits to hanging CMIs on fiber, the real advantage comes down to cost, says Larry Stark, the VP-new business development at Ortel.

"[Cable operators'] upstream bandwidth is very limited," he says. "It's a precious asset."



HANGING BOX: Sanders Telecommunications System a unit of Lockheed Martin C... cell Int...

By using fiber, PCS uses significantly less of those resources and frees up the coax portion of networks to handle other revenue-generating services, he adds.

Additionally, the lack of an RF front end cuts costs quite a bit at the cell site. Even Sanders, which has pushed coax-based solutions for the last year, has a prototype fiber-based CMI in the lab now, Cole says. CMIs hung on fiber also can be higher powered, providing a larger coverage area.

"Going with fiber CMIs, you can put them at a higher elevation so you can go back to a macrocell architecture," he says.

Operators also can centralize their base stations with fiber, allowing them to allocate capacity only where its needed.

Some vendors also are looking at microwave links between cell sites and central office/headends.

"That would have an application in rural areas where you might not have cable plant to take advantage of," Cole says. CW

Wireless Local Loops Coming Home to the U.S.

Wireless *from page 42*

user walks outside, the phone automatically detects the need for greater power and then steps up output. It also signals the carrier's billing system to begin to charge mobile rates.

The problem with such systems, according to Marsh, is that carriers must buy two sets of infrastructure: one for in-building coverage and a second for outdoor service. The only winners, then, are the vendors, he says.

Still, quite a few industry observers believe that unless wireless local loop providers undercut wireline carriers, the technology won't win a domestic application, regardless of how well it works — a message that vendors apparently are getting.

Nortel, for one, says its Proximity system can be deployed for about 30% less than wireline networks, depending on terrain and application.

Motorola's system also costs less than wired networks, but the company isn't going into any more detail just yet.

Perhaps the biggest cause for concern stems from users' current mindset, according to several experts. Current cellular users often don't give out their phone numbers because they must pay for incoming calls.

■

In order for wireless local loops to succeed, users must stop thinking of mobile wireless as a premium service.

■

Thus, cellular networks traditionally have had a significantly higher number of originating minutes than terminating minutes.

In order for wireless local loops to succeed, users must stop thinking of mobile wireless as a premium service.

"There's a paradigm shift that has to occur," Crair says. "In order for that to happen, they [users] have to think a little bit differently about how they are contacted and how they contact others."

Sprint Spectrum's first commercial network in Washington, D.C., may be a step in that direction. One of the MSO-backed company's most highly touted features that's expected to be implemented nationwide is the fact that the first minute of an inbound call is free.

The result is that users are beginning to give out their telephone numbers more often and using more minutes.

And while most industry observers say it'll take several decades to turn things around, many also say that wireless local loops will become the dominant architecture because capacity on the wired network will be reserved for high-bandwidth applications like video and high-speed data.

As one industry observers says, "Voice takes up so little space in terms of bandwidth, and it works nicely over air." CW

EXHIBIT 14

POLE ATTACHMENT AGREEMENT FOR
COMMUNITY ANTENNA TELEVISION SYSTEM

THIS AGREEMENT is made this 1st day of June, 1983, between KANSAS CITY POWER & LIGHT COMPANY, a Missouri corporation, with its principal office at 1330 Baltimore Avenue, Kansas City, Missouri, hereinafter called "Licensor", and FAYETTE CABLEVISION, INC., a Missouri corporation, with its principal office at P. O. Box 171, Princeton, Missouri, hereinafter called "Licensee."

Certain words and terms, as used in this Agreement, shall have the following meanings:

"Joint User" - mean any person, firm or corporation which owns utility poles and anchor rods, and shares the use of those poles and anchor rods with Licensor in return for having the right to share with Licensor the use of Licensor's poles and anchor rods.

"Other User" - shall mean any person, firm or corporation, other than Licensor or Licensee, which has one or more items of property attached to a utility pole or anchor rod owned by Licensor.

"Equipment" - shall mean brackets, crossarms, cables, wires, guywires, amplifiers and other similar items of property which may be attached to a utility pole or an anchor rod.

"Attachment" - shall mean an installation of equipment upon a utility pole or anchor rod.

Licensee has been granted a franchise by the City of Armstrong, Missouri (hereinafter sometimes called Armstrong) for the construction, operation and maintenance of a community antenna television system within the corporate limits of Armstrong, and for use and occupancy of streets, alleys and other public places of Armstrong for said purposes.

Licensor is authorized to do business in the State of Missouri, and has been granted a franchise as a public utility by Armstrong for the operation of an electric transmission and distribution system throughout Armstrong and for the use of streets, alleys and other public places of Armstrong for said purposes.

Licensor owns certain utility poles and anchor rods in Armstrong and in other locations in the States of Kansas and Missouri, hereinafter called "Licensor's poles and anchor rods," and, in addition, Licensor owns certain equipment attached to utility poles and anchor rods owned by Joint Users, located in Armstrong, and other areas of the State of Kansas, and in the State of Missouri.

Licensee desires to attach and maintain its equipment upon and to certain of Licensor's poles and anchor rods from time to time, and by separate agreements with Joint Users desires to obtain similar rights in connection with Joint Users' poles and anchor rods.

Licensor desires to grant to Licensee, under the conditions provided hereinafter, a non-exclusive license to permit the attachment by Licensee of Licensee's equipment to Licensor's poles and anchor rods, together with certain rights to cause relocation of Licensor's equipment attached to any Joint User's pole to which Licensee may from time to time desire to attach Licensee's equipment.

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions herein contained and other good and valuable consideration, Licensor and Licensee hereby agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

1. Licensee shall have the right to attach Licensee's equipment to such of Licensor's poles and anchor rods as are, in the sole judgment of Licensor, suitable and available for such attachment.

2. Licensee shall secure at Licensee's cost any and all consents, permits or licenses from governmental authorities, property owners or any person, firm or corporation, that may be required of Licensee by reason of operations of Licensee hereunder.

3. Licensee shall assist in and shall bear the expense of Licensor securing any such consents, permits or licenses that may be required of Licensor by reason of this Agreement.

4. In the event any attachment by Licensee of its equipment to any Licensor pole or anchor rod, or to any Joint User pole or anchor rod to which is attached Licensor's equipment, will require alteration or relocation of any equipment of Licensor or of any Other User, Licensee shall reimburse Licensor and any said Other User, respectively for the cost of said alteration or relocation.

5. In the event any said attachment by Licensee will require replacement by Licensor of any of Licensor's poles with a larger or taller pole, or with a pole at another location, Licensee shall reimburse Licensor for the value of the unexpired service life of said replaced pole, plus cost of removing the same less the salvage value thereof, if any, together with the cost of removal of Licensor's equipment from said replaced pole and installing the same on the new pole. Cost of installing the new pole will be borne by Licensor. The above costs shall include all costs incurred by Licensor in connection with said work, as determined by Licensor, irrespective of whether such costs normally would be charged to capital accounts, retirement accounts, or maintenance or operating expense, but shall not include system betterments by Licensor. Where said replaced pole also is being used by one or more Other Users, Licensee agrees to reimburse each such Other User for its cost of transferring its equipment from the replaced pole to the new pole.

ARTICLE II

SPECIFICATIONS

Licensee, at Licensee's cost and expense, shall make any said attachment of its equipment, and maintain and replace the same, in accordance with (i) such requirements and specification as Licensor shall from time to time prescribe, (ii) the requirements and specifications of the National Electrical Safety Code, 1981 Edition, and any amendments or revisions thereto, and (iii) any rules or orders now in effect or that hereafter may be issued by any authority having jurisdiction.

ARTICLE III

APPLICATION FOR PERMISSION TO ATTACH

1. At such time as Licensee desires to make any said attachment of its equipment to any Licensor pole or anchor rod, or to any Joint User pole or anchor rod to which is attached Licensor's equipment, Licensee shall make written application therefor to Licensor on such application and permit form as Licensor shall provide Licensee from time to time for said purpose. Approval or disapproval of said application shall be made by an authorized representative of Licensor signing the permit portion of said form and returning it to Licensee. Licensor shall approve or disapprove each application as soon as practical, and all applications shall be approved or disapproved within thirty (30) days after receipt thereof unless an extension of time is mutually agreed upon by Licensor and Licensee. At such time as Licensee desires to remove any of Licensee's said attached equipment, Licensee shall give written notice thereof to Licensor on such notice of removal form as Licensor shall provide