VIA ECFS

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th St., SW
Washington, D.C. 20554

Re: RM-11358

PLEADING CYCLE ESTABLISHED FOR COMMENTS ON PETITIONS FOR RULEMAKING AND CLARIFICATION REGARDING THE COMMISSION’S RULES APPLICABLE TO RETIREMENT OF COPPER LOOPS AND COPPER SUBLOOPS.

Dear Ms. Dortch:

My comments regarding the above-referenced petitions follow.

I. Unnecessary dismantle of copper wireline POTS emergency communication infrastructure.

I am a NJ Professional Engineer with specialty in Communication, Electronics, and Control. I have 30 years experience in the research and development of Dialup, DSL, Cable, HDTV, and Wireless modem products for the telecommunication and semiconductor industries.

I am a strong proponent of Verizon's FiOS service offerings, but Verizon and similar ILECs must not be allowed to take away a person's emergency POTS communication capability without his consent, unless or until, such ILECs offer a fiber-based POTS service alternative that MAINTAINS or EXCEEDS the survivability of the present copper wireline POTS implementation. Verizon currently chooses not to offer a fiber-based POTS implementation
which redeploy its existing copper wireline backup power infrastructure to supply needed emergency power to its FiOS ONT (Optical Network Termination) interface at homes during power company outages.

I can see why Verizon hesitates to do this, as it requires that Verizon

1. keep copper wireline plant in place (which opens the door to competition that otherwise is eliminated), and

2. halt its systematic transfer of burden and cost of maintaining critical POTS communications during power outages from itself to its customers. This transfer of power backup responsibility to FiOS customer imposes upon him an oftentimes out-of-reach cost to install emergency generator backup or other system at home, capable of powering an ONT interface throughout multi-day power outages. In contrast, present copper wireline POTS service fully functions throughout such power outages, without customer action, as it has been so designed that ILECs provide needed loop power by means of centralized batteries and generators. The resultant cost to customer for this centralized approach as passed on to him within state-approved tariffed service rates is much less.

I note the ongoing progress is being made to provide E911 outgoing emergency communication service to all U.S. citizens. It is important to remember, however, that present copper wireline POTS service provides a more critical ability to maintain COMPLETE outgoing and incoming communication to whatever parties are needed during times of emergency.
I also note that many towns are now busy implementing reverse 911 capabilities that involve automatic call-out to residents who have been identified for alert as to a particular emergency situation. Such systems require the ability to reach residents, even multiple days into a power outage event. Copper wireline POTS service provides this connectivity; Verizon's present FiOS-based POTS implementation does not.

If the FCC allows ILECs to continue to dismantle and replace copper wireline POTS service with an inferior fiber-based POTS replacement that fails to maintain or exceed present POTS wireline communication survivability, then the FCC has passed over its longstanding commitment to meet the needs of public safety by promoting robust, reliable, and resilient communications services in times of emergency". as professed on Sept 26, 2006, when launching its FCC Public Safety and Homeland Security Bureau.

XO Communications, et al.'s in its Petition for Rulemaking states:

"The elimination of copper network facilities inhibits network competition and the deployment of competitive and innovative broadband services to millions of consumers over alternative networks. This practice runs counter to the letter and spirit of the Telecommunications Act of 1996. Copper loop and subloop retirement also eliminates network alternatives that might otherwise prove essential for network redundancy in times of homeland security crises, natural disasters, and the recovery periods that follow such events."
I wish to expand upon the last sentence above.

Verizon's unnecessary copper loop and subloop retirement in New Jersey while installing other FiOS services actually eliminates the ONLY emergency communication capability of many NJ residents during homeland security crises, natural disasters, and recovery periods accompanied by regional power outages lasting longer than 4 to 8 hours. A resident using Verizon's substitute FiOS-based fiber circuit POTS service WILL LOSE communications once battery backup power is exhausted at his home. In contrast, a resident who retains his copper loop-based POTS phone service WILL NOT LOSE communications capability throughout the duration of the community power outage event.

Marcus Maher of the FCC Wireline Competition Bureau has referred me to the appropriate paragraphs of current FCC regulations which cover retirement of copper plant. Unfortunately, these paragraphs, as written, DO NOT IMPOSE ANY REQUIREMENT UPON AN ILEC to preserve the emergency communication capability of the present copper wireline POTS service that is unnecessarily being replaced by inferior fiber-based POTS substitute. Specifically, Regulation Title 47, Part 51, Section 51.33, which governs objections to replacement of copper loops and copper subloops with fiber-to-the-home loops or fiber-to-the-curb loops, contains no provision that recognizes the legitimacy of objections to copper loop retirement, which are based upon claims of loss of wireline emergency communication capability. This regulation further automatically rules in favor of the ILEC removing copper loops, 90 days after such objection, unless the Commission rules otherwise within that time. But, because there is no current provision allowing such an objection,
the Commission cannot rule in favor of critical infrastructure objection.

I do not believe that it is the intent of the Public Safety and Homeland Security Bureau, or the FCC Commissioners, to automatically disallow opposition to copper plant retirement based upon concern over resulting loss of existing wireline emergency communication capability.

II. Present/Future Communication Service Value of Copper Loops and Subloops

In Section I. I chose to discuss the impact of dismantling copper wireline POTS service upon the public safety of many US citizens.

There are, however, other strong economic-based reasons as to why the copper wireline plant should remain intact. As a communications research & development engineer with many years experience, I can assure you that the present copper plant has tremendous future value if redeployed to provide new communication services to the public. I personally have worked many years with Bell Labs and Lucent Communications researchers to develop such wireline communication technologies which extend the profitable life of past copper plant investment. Fiber-based communication solutions are not always cost-effective or better substitutes for existing copper-based communication technology offerings.

I am sure that the copper wireline plant has been paid for multiple times over by the public, and has been heavily depreciated by the ILECs. This is why, I believe, that ILECs do not mind discarding copper loops, and by doing so, coincidentally eliminating future sources of communication service competition.
I urge the FCC to not let ILECs discard billions of dollars of communication assets, substantially paid for by the general public. Just as State Boards of Public Utilities seek out other companies to take over utility businesses being abandoned or exited by incumbent companies, ILECs should be encouraged to sell, rather than discard, copper wire assets that definitely can serve the public good.

III. Final Comments

The push by ILECs to retire copper plant relates to other important issues such as network neutrality, and the desire of ILECs to operate as unregulated "competitive information services", as opposed to regulated "telecommunication services".

From when I first participated years ago in the development of DSL communication technology at Bell Laboratories, I have observed a clash between two opposing philosophical camps regarding broadband deployment:

1. Those entities, such as current ILECs, who view broadband networks as being comprised of MANY information CONSUMERS and FEWER information PRODUCERS. ILECs sell PRODUCERS broadband connections optimized to feed information at high rates to CONSUMERS; CONSUMERS are sold connections optimized for submitting lower data rate requests to these PRODUCERS and consuming the higher data rate information which they provide. Infrastructure owners typically charge businesses higher fees to serve information, and residences lower fees to primarily consume information. CONSUMERS are restricted (contractually, and
physically) from producing information. Using current Internet jargon,

"residential service subscribers are not allowed to run servers, personal or otherwise, on broadband connections which they have been provided."

Asymmetric rate modems are best suited for broadband networks deployed according to this Asymmetric PRODUCER/CONSUMER network model.

2. The second philosophical camp regarding broadband network deployment views the Internet as an advanced N-WAY communication channel, that connects parties who exchange information amongst each other at similar rates. Traditional POTS phone service conforms to this model - connected parties are equally likely to speak, as to listen.

Symmetric upstream/downstream rate DSL modems are best suited for an Internet deployed to support this view, where connected parties are equally likely to produce and consume data.

I strongly support the N-way communication channel view of the Internet, as it offers best opportunities to all citizens and businesses to innovate and to economically compete. A broadband infrastructure designed according to this model, promotes the Internet as originally developed. Contrast this vision of the Internet against the "Walled Garden" Internet redefinition, being promoted and embraced by many incumbent broadband infrastructure owners. The redefined "Walled Garden" Internet, allows broadband infrastructure owners to decide what data will be
allowed to pass over their networks, and at what content-dependent pricing.

With the FCC having declared DSL, FiOS, and other Cable Internet services to be unregulated "information services", infrastructure owners can now discard communication data packets and limit connectivity with impunity over their networks, whenever such action will profit the infrastructure owner. Such unregulated control of broadband network services has already chilled Internet innovation these past several years, with my company being just one example. No prudent individual or business will risk development of new product and services if a broadband infrastructure provider can unilaterally and at any time redefine what packet types will be allowed to pass over its networks, and at what increased cost to individuals or businesses needing such data content.

I attend city council meetings regularly, and note that Building departments in every municipality regulate and monitor the types of buildings and physical structures being constructed within their communities. However, town officials have not yet exhibited the same vigilence when it comes to specifying and monitoring the data content neutrality and connectivity of communication networks constructed within their communities. This situation is slowly changing, as municipal officials begin to realize the importance of having open, data content neutral networks that can maximize the economic competitiveness of all town businesses and residents.

The present scarcity of Professional Communication Engineers to assist in the oversight of communication infrastructure deployment within towns has allowed present infrastructure owners to promote an intentionally-crippled category of Internet connection as the
standard residential broadband service offering to many towns. Uncrippling of these connections can sometimes be purchased by residents (but not always) from infrastructure owner for added monthly charge.

It is naive to believe that telco and cable broadband infrastructure providers will self-regulate service offerings for the benefit of the towns which they serve, without need for federal standards or municipal oversight, just as it is naive to believe that builders will construct safe and suitable buildings within towns without need for national construction codes and compliance monitoring.

I strongly urge the FCC to grant the petition for rulemaking change and clarification regarding rules applicable to retirement of copper loops and copper subloops as proposed in RM-11358, and as discussed above. Do not allow billions of dollars worth of critical copper wireline communication infrastructure to be dismantled without suitable replacement. Likewise, do not allow billions of dollars worth of copper wireline assets to be discarded without the opportunity for purchase by parties interested in their redeployment within current and future advanced communications service offerings.
Sincerely,

[Signature]

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