Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
	)	

REPLY COMMENTS OF CENTURYLINK

on the

NOTICE OF INQUIRY

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I. INTRODUCTION AND SUMMARY

The Commission has embarked on an important and potentially transformational exercise through its implementation of the provisions in the National Recovery and Reinvestment Act of 2009 that require the Commission to develop a national broadband plan. Chairman Genachowski issued a strong call to action when he spoke about the National Broadband Plan at the Commission meeting on July 2, 2009:

> The statute is clear about what our goals must be. We must find ways to ensure that all people of the United States have access to broadband. We must devise a detailed strategy to ensure affordability of broadband. We must evaluate the nation's deployment of broadband, including via federal grants. And we must ensure that our broadband infrastructure and services advance national purposes, including job creation and economic growth -- whose importance was emphasized by today's new unemployment numbers -- education, health care, energy, public safety, civic participation and many others.[1]

The task of the National Broadband Plan, therefore, is to answer three core sets of questions:

(1) where do we need to place government support to achieve ubiquitous, high-quality broadband, and to what sort of networks should that support be provided;

(2) how should the Commission's rules be modified to achieve the core goals of the National Broadband Plan; and

(3) to what extent and in what way should the Commission facilitate increased broadband take rates and utilization in served and unserved areas?

The analysis in each of these core areas will cover many issues and yield many recommendations. If developed appropriately, the National Broadband Plan can be a roadmap for the evolution of the regulatory treatment of the Communications and Information Technology

[1] Chairman Julius Genachowski, *Prepared Remarks on National Broadband Plan Process*, FCC Open Meeting, Washington, D.C. July 2, 2009.

economic sector over the coming decade and beyond. This, in turn, could have a substantial and positive impact on our country and economy. On the other hand, if poor choices are made, the consequences could also be substantial but negative for our country and economy.

CenturyLink offers several observations and recommendations in these Reply Comments. First, the National Broadband Plan should address the question of how to produce ubiquitous deployment by identifying where the market has and will produce reasonable broadband deployment. The Plan should then and target support toward extending deployment beyond those areas, while avoiding providing support in areas where the market has produced broadband as doing so would interfere with and harm competition.

The Commission should rely on market forces in the first instance to produce broadband deployment and innovation. Then, following the approach to universal service for telecommunications services set out in the Communications Act, the National Broadband Plan should seek to make available to consumers in unserved areas substantially the same broadband services produced by the market, and at substantially the same rates.

When this approach is implemented, CenturyLink submits that wireline networks can offer the best solution for broadband in unserved areas and should not, therefore, be prevented or disadvantaged in seeking to be the provider in such areas. Nor should the National Broadband Plan not seek to support multiple broadband providers in any given area.

The National Broadband Plan should make necessary policy adjustments to existing telecommunications rules so as to further the aims and objectives of our national broadband policy while rejecting proposals that will not actually improve broadband deployment. Specifically, the Commission:

(a) must maintain adequate support for the public switched telephone network, even while developing a system of support for broadband for high-cost, rural areas;

(b) should improve the methodology for providing high-cost support in non-rural, price-cap areas;

(c) should stabilize intercarrier compensation to provide ongoing, necessary support for the carrier-of-last-resort networks in high-cost areas that are essential to rural broadband.

(d) conclude that special access price regulation would harm rather than promote rural broadband deployment;

(e) should continue to apply the broadband policy statement on a case-by-case basis, so as to promote reasonable network openness without stifling investment and innovation;

(f) should take affirmative steps to promote video competition in rural areas as this will improve broadband deployment; and

(g) should remove competitive disparities in pole attachment rates.

Finally, the commission should study consumer preferences and adopt carefully-fashioned demand-side measures to ensure that consumers are able to take advantage of available broadband and to support critical institutions. Specifically, the Commission may consider Lifeline and Linkup programs for broadband service and facilitate broadband network utilization in Smart Grid projects. The Commission may also want to evaluate whether more can be done to support broadband utilization in economically and socially beneficial ways through educational, health care and public safety institutions and facilities.

II. CENTURYLINK IS A LEADING PROVIDER OF BROADBAND IN RURAL AREAS AND IT WILL BE AN IMPORTANT CONTRIBUTOR TO THE DEPLOYMENT OF HIGH-SPEED BROADBAND IN UNSERVED AREAS.

CenturyLink was created on July 1, 2009 when Embarq Corporation became a wholly-owned subsidiary of CenturyTel, Inc. The combined company, which will be known as CenturyLink, serves more than 2.1 million broadband customers, more than 440,000 video subscribers and approximately 7.5 million access lines in 33 states, based on operating results as of March 31, 2009. While the company does serve the non-rural metropolitan area of Las Vegas, nearly all of the remaining service areas are classified as rural under the definition in the Communications Act. Although the company's corporate identity has changed to CenturyLink, customer-facing operations and communications will continue under the CenturyTel and EMBARQ brand names until a full brand conversion occurs later this year. The company intends to formally change its name to "CenturyLink, Inc." upon receipt of shareholder approval, which it expects to solicit in May 2010. The company's stock continues to trade on the New York Stock Exchange under the ticker symbol "CTL."

CenturyLink has invested heavily in broadband for many years, achieving impressive coverage levels for a predominately rural provider. CenturyTel and Embarq both provide broadband to 87% of their respective geographic territories today at speeds considered to be first generation data (or higher) in accordance with the Commission's *2008 Broadband Data Gathering Order*.[2]

[2] *See Applications Filed for the Transfer of Control of Embarq Corporation to CenturyTel, Inc.*, WC Docket No. 08-238, Memorandum Opinion & Order, __ FCC Rcd ____, FCC 09-54 ¶ 40 (June 25, 2009) (*CenturyTel-Embarq Merger Order*); *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, 9700–01,

CenturyLink made a significant commitment to increase the availability of its broadband service as part of the agency's review of the CenturyTel/Embarq merger, reflecting CenturyLink's determination to deploy industry-leading broadband services wherever they can be economically justified, including through support payments from state and national government actions. Specifically, CenturyLink will offer retail broadband Internet access to 100% of the merged company's retail single-line residential and single-line business access lines on or before July 1, 2012.[3] To meet this commitment, CenturyLink committed to make available retail broadband Internet access service with a download speed of 768 kbps to 90% of such lines within three years using wireline technologies. We will make available retail broadband Internet access service in accordance with the Commission's current definition of broadband to the remaining 10% of lines using alternative technologies and operating arrangements, including but not limited to satellite and terrestrial wireless broadband technologies. In addition, CenturyLink committed to make available retail broadband Internet access service with a download speed of 1.5 Mbps to 87% of the merged company's retail single-line residential and single-line business access lines within two years of the transaction closing date and 3 Mbps to 75% of such lines within one year of the transaction closing date, 78% of such lines within two years, and 80% within three years. CenturyLink's broadband commitment (and those of other carriers) should be incorporated into and supported by a National Broadband Plan. The areas covered by the commitments should not be seen as needing government support for deployment by another provider as this will only undermine our ability to fulfill the commitment and, ultimately, harm consumers in those areas.

¶¶ 20 & n.66 (2008) (*2008 Broadband Data Gathering Order*).

[3] *CenturyTel-Embarq Merger Order*, FCC 09-54 ¶ 40.

III. THE NATIONAL BROADBAND PLAN SHOULD ADDRESS DEPLOYMENT BY IDENTIFYING WHERE THE MARKET WILL PRODUCE REASONABLE BROADBAND DEPLOYMENT AND TARGETING SUPPORT TOWARD EXTENDING DEPLOYMENT BEYOND THOSE AREAS.

A. The Commission Should Rely on Market Forces in the First Instance to Produce Broadband Deployment and Innovation.

The task of building a nationwide broadband network of networks will be achievable only if private capital and industry are harnessed to the effort. This point is lost on a number of commenters who either call for government bodies to be selected to build and operate broadband networks or call for pervasive regulation and government control over broadband networks. The need for private investment and market forces does not appear to be lost on Chairman Genachowski, however. In his statement on the National Broadband Plan, Chairman Genachowski analogized the task of building a national broadband infrastructure to past tasks, "We as a nation have faced challenges like this before -- with the railroad, telephone, electricity, and other networks that connect Americans, serve as platforms for commerce, and improve the quality of American lives." He did not refer to a government project, such as the Interstate Highway System. Instead, he referred to the great network infrastructure accomplishments of American capitalism—railroad, telephone, electricity networks were all deployed by private industry with government support. This model should be followed again for broadband.

The distinction between government infrastructure projects of the past and the national broadband project upon which we are embarking is made clearer when one considers the need for innovation. Broadband networks are far from mature technologies; instead, there remains great potential for innovation in broadband. Although government is the best mechanism to accomplish many things, it is nearly universally recognized to be poor at innovation. This fact has been borne out by historical experience in telecommunications. In fact, the United States

was substantially more advanced than most of the world in telecommunications infrastructure by the 1990s precisely because it was nearly alone in choosing not to rely on a government-ownership model for telecommunications. In addition, there is also a significant risk that political forces would limit the use of and access to a government owned and/or operated national broadband network. It is no accident that the Internet took off first and most pervasively in the United States, which had a fully private network infrastructure. If the Commission mishandles this policy, the United States may replicate the mistake of Minitel (the nationwide computer network developed and deployed in France in the 1980s and 1990s), which offered significant utility for a short time, but was quickly made obsolete by the Internet.

B. The National Broadband Plan Should Seek to Make Available to Consumers in Unserved Areas Substantially the Same Broadband Services Produced by the Market, and at Substantially the Same Rates.

Just as the Commission should avoid relying on government provision when crafting the National Broadband Plan, so to should the Commission avoid specifically defining broadband as this too could frustrate the operation of markets. This is contrary to the many comments calling on the Commission to adopt a specific definition of broadband, whether defined in reference to a particular speed or capability. Instead, it is consistent with those comments calling for an evolving standard of broadband, while expanding on the approach. Varying definitions of broadband are critical to much of the Commission's work, and the Commission's current tiered approach to reporting is sensible. As the Commission noted in the most recent order regarding broadband reporting, what constitutes broadband varies depending on the purpose for which the

question is being asked.[4] Moreover, broadband itself is an evolving concept, with changing technology and customer expectations. It would be unfortunate and damaging to the Commission's work and the public interest were one specific definition of broadband to be locked into effect through the National Broadband Plan.

This best approach to defining "broadband" is to limit the definition to the narrow scope of fulfilling the purposes of the Recovery Act—in this case seeking to make a threshold level of broadband available everywhere. Therefore, the Commission should focus on the definition of unserved rather than attempting to define broadband per se. Indeed, it would be sensible for the Commission to avoid defining broadband in the context of the Recovery Act and, rather, define the level of service that should be made available in currently unserved areas. Similarly, it is important that any definition of broadband be defined in a technologically neutral manner. Unlike what was done in the Notice of Funds Availability for the Broadband Technologies Opportunities Program at the National Telecommunications and Information Administration (NTIA) and the Broadband Improvement Program at the Rural Utilities Service (RUS), the Commission should define the broadband to be deployed in unserved areas in a technologically neutral manner. Accordingly, the thresholds for "unserved" and "underserved" areas should be the same for all technologies and providers. This approach best serves the public interest as it focuses on the perspective of consumers, who surely value the quality of service over the identity of the provider or the technology employed.

The best methodology for adopting an evolving standard is to reference the operation of competitive markets. What is provided and generally purchased by consumers should be seen as

[4] *See, e.g.*, *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans*, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691 (2008)

the level of broadband that policy should aim to promote for unserved areas. This is consistent with the approach to universal service, which has effectively and efficiently provided a nearly ubiquitous telecommunications infrastructure. Specifically, the Commission should follow the language of Section 254 of the Communications Act and establish in the National Broadband Plan the objective that "consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to [broadband] services … that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charges for similar service in urban areas."[5] By looking to bring reasonably comparable broadband services to currently unserved areas and ensure that such services are available at rates that are reasonably comparable to rates in urban areas, the Commission will establish and enduring and successful approach National Broadband Plan.

The Commission can also limit the harm from government intervention by referring to the operation of broadband markets to establish the appropriate level of broadband to be supported in unserved areas and selecting a single provider to provide such capability. To do otherwise risks, for example, skewing competition, wastefully funding duplicative networks, or creating uncertainty that is particularly toxic to broadband investment in high cost, low-density areas. Establishing a process of using explicit support to extend the services provided through market forces to all consumers will also best preserve and promote innovation, which is key to ensuring that the National Broadband Network keeps pace with the nation's needs and allows us to achieve our potential.

[5] 47 U.S.C. § 254(b)(3).

C. Wireline Networks Can Offer the Best Solution for Broadband in Unserved Areas.

When the Commission looks to current broadband markets as a guide for what broadband should be provided in unserved areas, it will have to observe that most consumers choose wireline broadband services. They do so because wireline broadband networks offer significant consumer advantages over other technologies. First, wireline broadband networks are generally able to offer substantially higher speeds, which is essential to achieve the promise of ubiquitous broadband. Second, wireline networks can offer consumers additional advantages over other technologies. Finally, it is sensible to offer wireline networks a reasonable opportunity to provide supported broadband services in currently unserved areas because those wireline networks provide essential connectivity and transport for any broadband solution and substantial economies of scale and scope be realized if the same wireline networks were able to receive support for the "last mile" broadband that will fulfill the goal of a ubiquitous broadband network.

Wireline Broadband Generally Is Capable of Higher Speeds, Which Are Essential to Achieve the Promise of Ubiquitous Broadband. Wireless technology cannot deliver speeds comparable to wireline networks, despite the higher cost of wireless networks. Wireless providers themselves have acknowledged this point in their advocacy before NTIA and the RUS as they have sought to influence the criteria for distributing funds under the BTOP and BIP programs. Consumers need higher speeds, however, to meet their rising expectations for broadband and to fulfill the economic and social promise of broadband outlined in Chairman Genachowski's statement. In addition, the amount of support needed may actually be less for wireline networks that are capable of delivering additional services such as multichannel video programming. Video has been an important driver of broadband investment, as the Commission noted several years ago, because of the incremental revenue that can be generated.

Wireline Broadband Networks Offer Other Significant Consumer Advantages over Other Technologies. The wireline broadband services that CenturyLink and other telecommunications service providers typically deploy nearly always offers the same high service level where they are deployed and offered. Unlike wireless services, for example, CenturyLink's broadband services quality generally does not vary noticeably from one location to another within a service area depending on factors such as topography or the number of users at any given point in time. In addition, CenturyLink delivers broadband to the places within a home where the customer wants the capability without the cost and complexity or additional equipment. Such additional equipment is typically necessary for wireless and satellite broadband service, yet is omitted from cost estimates for those technologies.

Wireline Networks Provide Essential Connectivity and Transport for All Broadband Networks. All broadband networks necessarily rely on wireline infrastructure. Wireline networks provide the nation's Internet backbone and virtually all of the middle mile capacity, and they provide the foundation on which all other technologies rely. Therefore, the current wireline network, including the carrier-of-last-resort network in unserved areas, cannot be abandoned. Rather, it should be upgraded and incorporated into the national broadband infrastructure.

Wireline Networks Can Be Upgraded Feasibly to Provide Broadband in Unserved Areas. Whereas wireless networks are not deployed, or have at best a weak signal, in many areas currently unserved by broadband, there typically is a robust wireline telecommunications network in place already. Therefore, the cost of deploying broadband in unserved areas may be accomplished most feasibly through upgrades to existing wireline networks, and the Commission should explore this possibility through the workshop and ex parte process. Ultimately, wireline

network providers should have the opportunity to compete for funding to deploy broadband in unserved areas. The Commission should not, therefore, follow the urging of some commenters to select wireless technology. Instead, it should simply set a threshold consistent with the objectives of the Recovery Act and provide support to the network provider that is best able to meet those requirements.

D. The National Broadband Plan Should Not Seek to Support Multiple Broadband Providers in Any Given Area.

The Commission should focus support for broadband deployment on only those areas that where broadband is not currently available. The use of broadband support to generate a choice of providers in rural areas that cannot economically sustain a single provider runs would run counter to the core mission of providing support for ubiquitous broadband. In the context of Universal Service Support, the Commission and the Joint Board have clearly expressed their interest in ending the policy of providing High-Cost Support to manufacture duplicative providers in areas that require support. This diverts much needed support away from sustaining the first provider and extending broadband deployment

By funding broadband deployment only in those areas where the market will not provide it without support, the Commission will avoid the problems that arise from distorting or interfering with competition. Conversely, if the Commission were to fund multiple providers in unserved areas, the cost of supporting broadband will necessarily increase, so investment and deployment will inevitably be discouraged and, even where broadband has been deployed, consumers will necessarily pay more. Attempting to artificially create competition in currently unserved areas will also harm consumers by diverting market resources away from productive investments and toward gaming the broadband support mechanism.

IV. THE NATIONAL BROADBAND PLAN SHOULD MAKE NECESSARY POLICY ADJUSTMENTS TO EXISTING TELECOMMUNICATIONS RULES, BUT REJECT PROPOSALS THAT WILL NOT ACTUALLY IMPROVE BROADBAND DEPLOYMENT

A. The Commission Must Maintain Adequate Support for the Public Switched Telephone Network, Even While Developing a System of Support for Broadband for High-Cost, Rural Areas.

The existing telecommunications network remains vital for consumers in high-cost areas. Cable telephony is not present in low density areas, and wireless signals are often weak or non-existent there as well. The carrier-of-last-resort networks that provide service in high-cost rural areas are funded through implicit support, principally intercarrier compensation, and explicit support, particularly federal high-cost USF support. These mechanisms are becoming ever more essential as customers in towns and lower-cost areas switch to alternative providers. The cost of serving the carrier-of-last-resort areas has not declined. On the contrary, carriers providing such service have seen implicit support decline, and explicit support has not increased to offset it.

The existing telecommunications network needs ongoing investment and operational support to maintain the service on which the public relies, and which the public expects, even as broadband is deployed more widely. Moreover, the broadband network necessarily will depend on the existing telecommunications network. Maintaining support for the existing telecommunications network in rural areas actually will promote rather than impede ubiquitous broadband deployment.

A number of commenters suggested that federal high-cost support should transition to support broadband. CenturyLink agrees that USF support should promote broadband deployment. It already does provide such support because broadband is nearly always offered over networks that also provide other services. In high-cost areas, therefore, support for telecommunications services creates and maintains networks that will be better able to deliver

broadband. In addition, Embarq has proposed in its solution to reforming the Non-Rural High-Cost Support mechanism that USF support recipients could commit to broadband deployment in supported wire centers. While this commitment is not part of some of the other proposals in the docket addressing the remand of the Non-Rural High-Cost Support mechanism, such as the ITTA or Qwest proposals, they both suggest a separate broadband pilot program. AT&T would create two broadband programs, one for wireline service and one for wireless service, and transition all USF support to the new programs over time as state provide complete pricing deregulation for POTS service.

There are several important points the Commission should consider as it evaluates further use of USF support to promote broadband deployment. Services that are designated as "supported services" under section 254 must be provided throughout the area served by an Eligible Telecommunications Carrier pursuant to section 214(e)(1).[6] This is not possible currently for broadband over terrestrial facilities in most rural areas because of the large incremental investment needed to deploy broadband ubiquitously. This is particularly true with the higher-speed offerings, which cannot be feasibly offered with any technology throughout the low-density parts of the United States of America without tens or possibly hundreds of billions of dollars of additional investment. Therefore, the Commission would have to be careful with its deployment requirements if it were to designate broadband a supported service.

In addition, broadband is currently provided to most consumers as an information service rather than a telecommunications service, which facilitates innovation and investment. This has been borne out by the market evolution of broadband and deployment of higher-speed services after the Commission declared first cable modem, and then xDSL services to be information

[6] 47 U.S.C. § 214(e)(1).

services. Supported services for universal services purposes, however, are defined in the statute as telecommunications services. The better course would be to continue to provide support for networks that are capable of providing broadband as this accomplishes the same purpose without the legal and policy issues. In addition, the Commission may want to explore Verizon's proposal to support middle mile transport in low-density areas. This could help substantially to improve the economics for broadband deployment in remote, low-density areas.

B. The Commission Should Improve the Methodology for Providing High-Cost Support in Non-Rural, Price-Cap Areas.

As Embarq and CenturyTel explained in recent comments on the 10th Circuit Remand NOI, the current high-cost USF support system is broken with respect to non-rural areas. The CoLR obligation has been funded historically through a combination of implicit support (e.g., access charges for non-local traffic and averaged rates for service in lower-cost areas) and some explicit support. Supported services in high-cost areas have been averaged with those in low-cost areas so that subscribers in the low-cost areas provide support that permits subscribers in high-cost areas to receive the same service at the same rate despite the fact that the service is being provided below cost in the high-cost areas. With competition flourishing in most urban and suburban areas, and for most services, this implicit subsidy mechanism no longer works. Changes in technology and regulation have created substantial challenges to the CoLR and implicit support paradigm, and to the Commission's efforts at fulfilling its statutory mandate under section 254. Today, there is not sufficient implicit support to cover the cost of providing service at comparable rates in high-cost areas.

The Commission can quickly and easily accomplish significant reform consistent with *Qwest II*, by reducing reliance on statewide and study-area averaging for price cap carriers.

Embarq has submitted just such a proposal—the BCS Solution upon which comment is being sought. Not only will a targeted support proposal such as the BCS preserve and advance universal service, but it will also do so more equitably for consumers. The current practice of study-area averaging ensures that a large part of the cost of universal service is borne by their urban and suburban customers because these carriers are compelled to provide service in uneconomic areas and charge below-cost rates for such service. Customers and competition are harmed by perpetuating the old system of making only a subset of customers pay the cost of universal service through implicit subsidies. Therefore, the cost of paying for this obligation should belong to all of society and not just those people who choose to be customers of an ILEC in a particular study area. Failing to properly and intelligently reform of high-cost USF support in non-rural, price cap areas would undermine network and broadband investment. By denying many price cap carriers appropriate high-cost USF support, and by continuing uncertainty about that support, that failure inevitably would lead to lower investment in non-rural, high cost areas.

Embarq filed its USF reform proposal last fall. It was then, and still is, meant to be an easy-to-implement solution that would achieve substantial improvement in the distribution of high-cost support while facilitating rather than impeding other important objectives, such as transitioning support to broadband and maintaining control over fund size.

Without increasing the size of the fund, the Broadband and Carrier-of-Last-Resort Support (BCS) solution would create a new mechanism—the BCS—which would be capped at approximately $1 billion and replace support from the existing Non-Rural High-Cost Model support mechanism, as well as existing loop support for Rural, price-cap carriers. Because the BCS Solution does not increase fund size, it would not increase overall USF contributions, but would instead redistribute certain amounts from other mechanisms. The BCS Solution would

support the COLR obligation in price-cap study areas, with the initial amounts calculated based on relative loop costs. Support amounts could be re-visited after five years.

The BCS Solution would allocate support to price cap high-cost wire centers based on a proxy for household density in the wire center—HCPM estimated loop costs—which would be compared to a national benchmark selected to produce the desired fund size. BCS support recipients in price-cap areas would make three commitments:

- to make available broadband of at least 1.5 Mbps downstream to at least 85% of the customers in each wire center receiving support;
- to provide supported local service at rates that meet the statutory requirements of affordability and comparability; and
- to build-out and serve the entire wire center using only their own facilities within five years.

The specific elements of the BCS are not set in stone. The Commission can substantially advance the public interest if it follows the basic framework of the BCS and adopts a new methodology that calculates and distributes support on a more targeted basis for Non-Rural study areas and makes it available in price-cap Rural study areas. For example, the ITTA Proposal is a sensible alternative. The ITTA Proposal removes the broadband commitment from the BCS and, in its place, adopts the Qwest Broadband Pilot program. This approach would accomplish substantially all of the advantages of the BCS with no significant negative impacts. A number of other ILECs support the ITTA Proposal. In particular, by modifying the broadband component, the ITTA Proposal may be better suited than the BCS for customers in some parts of the country. This reflects the fact that the economics and incremental costs of broadband deployment vary widely from community to community.

Another Comparably Granular Geographic Unit May Be Substituted for Wire Center. The BCS proposed using wire centers as the granular geographic unit that would be used to calculate and distribute high-cost support. Other similarly-sized geographic units may work equally well and be used instead if there are significant issues involved with the use of wire centers. In practice, wire centers, exchanges, or perhaps census tracts or a census block groups would all be competitively neutral distribution methods in low-density areas as all networks are built out around the few towns and use the same backbone network to connect to the rest of the country.

The Commission Could Adopt a Different Estimate of Household Density. The BCS explicitly uses the Loop Cost output from the HCPM as a proxy for household density (in absolute terms). The core principle is that a community should receive support based on the number of customers that need to be served multiplied by the average amount of incremental support needed to make it economically feasible to provide the supported services in the community. Household density serves as a reasonable, and competitively neutral, variable for the amount of support per customer. Therefore, multiplying a factor for average household density by the number of customers in the community should yield a reasonable method for allocating high-cost support. The Loop Output in the HCPM should be a good proxy for this calculation, but other (and even more precise) calculations are surely feasible as well.

Rural Price-Cap Carriers May Be Given a One-Time Option to Convert to the Non-Rural Mechanism. The problem of averaging may not matter as much in areas served by rate-of-return carriers (at least where they are so regulated in both the federal and state jurisdictions) as the regulation applied to such carriers generally provides an opportunity to recover the cost of providing service. This is so because rate-of-return regulated carriers can increase rates to cover

lost contribution and, thereby, continue to recover the cost of providing the CoLR network as mandated by government.

For the customers of price-cap carriers, however, the problems caused by study-area averaging may be equally acute without regard to whether the customers are served by a Non-Rural or a Rural carrier. The two above-mentioned failures of the current support system—ignoring the competitive realities of the marketplace, and failing to align support with costs as closely as possible—are not limited to the non-rural mechanism. The use of study-area average costs (per the rural mechanism) or statewide-averages of study-area average costs (per the non-rural mechanism) both perpetuate the false assumption that revenues earned in low-cost areas can offset costs incurred in higher-cost areas. In fact, in the case of a state that contains a single non-rural study area (such as Mississippi or Colorado) the two approaches address the exact same geographic area.

Price-cap regulation has similar impacts on Non-Rural and Rural ILEC networks. Because of the need to improve efficiencies, maintenance and expansion of rural networks requires a carrier to make a careful economic analysis of the potential revenues that can be achieved from customers in particular territories. If customers cannot produce sustainable revenues, there is a disincentive to upgrade a network to accommodate advanced communications or to modernize facilities. This disincentive to investment in rural America by price cap companies must be addressed by the Commission to fulfill its National Broadband Plan mandate. Accordingly, Rural price-cap carriers should have the opportunity to convert, on a one-time basis, to the Non-Rural Program.

It may be more sensible to permit Rural price-cap carriers to elect conversion to the Non-Rural mechanism, however, rather than requiring such a move. The history of regulation and

USF support, particularly the length of time spent under price-cap regulation, may make it so the customers in a Rural price-cap study area may be better served by remaining in the Rural mechanism. To the extent the Commission is concerned about the potential for gaming, it can address the concern and limit any such behavior by making the opportunity to elect conversion to the Non-Rural program a one-time election and making it available only during a limited window of time.

C. The Commission Should Stabilize Intercarrier Compensation to Provide Ongoing, Necessary Support for the Carrier-of-Last-Resort Networks in High-Cost Areas that Are Essential to Rural Broadband

Nearly everyone in the industry agrees that intercarrier compensation and universal service need comprehensive reform. The Commission has long recognized that today's intercarrier compensation rules treat "identical uses of the network differently, even though such disparate treatment usually has no economic or technical basis."[7] That breeds "opportunities for regulatory arbitrage" and distorts "incentives for inefficient investment and deployment."[8]

Telecommunications markets are undergoing seismic changes through competition, technological substitution, and deregulation. Although these changes are generally quite positive for the nation, they have not been matched to date with necessary reforms to the access charge and universal service support structure that made high-quality, affordable telephone service to nearly all residents of the United States of America, no matter how remote their residence. A system of interstate and intrastate access charges remains the primary mechanism whereby universal service was established and has been maintained. Until it is replaced by a

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[7] *Developing a Unified Intercarrier Compensation Regime*, Further Notice of Proposed Rulemaking, 20 FCC Rcd 4685, ¶ 3 (2005) ("*Intercarrier Compensation Further Notice*").

[8] *Id.*

comprehensive new regime, the access charge system remains essential to economic stability and investment incentives in high-cost and rural service areas. Just as implicit subsidies were key to ensure investment in telephone networks in rural areas, switched access revenue is key to universal service—both in maintaining the highest level of service and reliability for all consumers and in making it possible to extend broadband availability outside of rural towns.

These problems are of particular concern for rural carriers like CenturyLink, which serves predominately low-density rural areas where the cost of providing service is higher generally than it is in more populated areas. Moreover, as competitors increasingly target and acquire the lower-cost service areas (the small cities and towns) in CenturyLink's service area (competition, in part, on the basis of having lower surcharges to support carrier-of-last-resort service), CenturyLink becomes ever more dependent on switched access revenue to meet its universal service obligations, to invest in its rural network, and to extend broadband deployment. At the same time it grows ever more vulnerable to the erosive effects of regulatory arbitrage and the unresolved disputes with carriers that take unfair advantage of purported regulatory "uncertainty."

Last fall, intercarrier compensation reform was debated extensively by the Commission and much of the telecommunications industry. Much of the telecommunications industry opposed Chairman Martin's flawed proposal, which was rejected by the other four commissioners. The Commission should undertake comprehensive intercarrier compensation reform along the lines suggested by those four commissioners, who issued a press release last December outlining the areas where they saw consensus emerging.

Two associations, representing a wide cross-section of ILECs, which are the telecommunications and broadband providers that must contend with COLR mandates, offered

proposals in response to the suggestions of the four commissioners. USTelecom and ITTA offered similar, effective answers to the biggest problems with Chairman Martin's proposals in the FNPRM. Both recognize the need for prompt Commission action given the growing pressure on the implicit support in access charges that often remains the principal method upon which the Commission relies to ensure that telecommunications services are available in rural areas at rates that are affordable and comparable to the rates in urban areas. The bankruptcy of Hawaiian Telecom has clarified for any that still doubted that the current regulatory paradigm is broken. One key point in both proposals is to avoid an unreasonably short transition to a unified, state-wide, carrier specific rate, which is essential given the extent to which intercarrier compensation remains inextricably linked to ongoing state and federal COLR mandates[9]

The two associations reached similar conclusions, and their respective proposals are similar in content. The two proposals address intercarrier compensation in a reasonable way, and are consistent with the four commissioners' Joint Statement, which they attached to the FNPRM. The two proposals share seven common elements, which the Commission should adopt as intercarrier compensation reform that will stabilize the industry and provide a stronger network platform upon which ubiquitous broadband can be deployed and supported. They include:

(1) reducing intrastate access rates to company-specific interstate rate levels over a three year period;

(2) allowing ILECs to increase residential subscriber line charges ("SLCs") by $1.50 and business SLCs by $2.30 over that period;

(3) allowing ILECs to recover access reductions (after SLC increases) through increased IAS or ICLS support;

[9] The federal COLR mandate comes from both historical universal service principles, codified in section 254, and the fact that at least 25% of the cost of complying with COLR mandates imposed by states is assigned to the federal jurisdiction, making the Commission a partner in the COLR mandate.

(4) commencing a further rulemaking and referral to the Federal-State Joint Board on Universal Service to determine next steps toward unifying rates for all terminating traffic, and providing adequate replacement mechanisms to offset reductions in access revenue);

(5) ensuring parity in treatment of voice traffic for access rate and jurisdiction, including IP/PSTN traffic;

(6) establishing clear signaling obligations and other measures to reduce phantom traffic, as proposed by USTelecom; and

(7) making high-cost USF distribution more granular, so support is targeted to truly high-cost areas, instead of requiring customers in low-cost areas to subsidize customers in high-cost areas.

The Commission should not strive for bill-and-keep or minimal intercarrier compensation rates, however. That would only increase pressure on USF for explicit support, which could be better used directly supporting or broadband deployment. Finally, the Commission also should adopt rules on phantom traffic to facilitate the collection of intercarrier compensation and to minimize abuses. Addressing phantom traffic will also reduce pressure on broadband support and will give carriers-of-last-resort a greater ability to invest in the last mile and middle mile facilities needed to support ubiquitous broadband.

D. Special Access Price Regulation Would Harm Rather than Promote Rural Broadband Deployment.

Contrary to some claims, special access returns are not a barrier to rural broadband deployment. Certainly, they are not a barrier in areas served by carriers like CenturyLink. Rural special access rates have typically remained regulated in unserved areas—there is little pricing flexibility in such areas. CenturyLink does not have any pricing flexibility outside of an MSA, and it committed not to seek pricing flexibility in the coming year. CenturyLink rates are reasonable and reflect the higher costs of providing essential connectivity in high-cost rural areas. For example, legacy CenturyTel special access rates have more often than not been under

rate-of-return regulation until now, are as low as $40 for a DS1 in rural areas. Legacy Embarq DS3 channel termination rates have generally declined in recent years and its DS1 channel termination rates are, on average, below forward-looking economic cost.

Rather than force special access rates below cost, the Commission should provide explicit support for middle mile infrastructure where needed to make it affordable for ubiquitous broadband. Forcing special access rates below cost will distort competition and serve only to discourage investment in high-cost and rural areas.

E. The Commission Should Continue to Apply the *Broadband Policy Statement* on a Case-By-Case Basis, so as to Promote Reasonable Network Openness Without Stifling Investment and Innovation.

The Commission should not recommend or adopt any new non-discrimination and/or network interconnection requirements, beyond existing statutory and regulatory obligations and principles. This is particularly important, given the rapid evolution of technology and markets. Their continued advance dramatically raises the costs and consequences of the inevitable regulatory mistakes that would result from attempting to redefine and cement obligations in the context of a National Broadband Plan. That plan must, of necessity, would be developed in advance of actual market developments, and is virtually certain to fail to anticipate them. Moreover, a primary purpose of the National Broadband Plan is to promote investment and job creation and preservation. Both goals would be needlessly undermined by excessive non-discrimination and/or network interconnection requirements.

The Commission's Broadband Policy Statement, issued on August 5, 2005 (also known as its "Net Neutrality Principles"), provides a reasonable standard and is protecting consumers effectively through case-by-case resolution. The Commission should extend this policy, including the case-by-case approach, as this will best protect consumers while minimizing harm

to broadband deployment and innovation. Maintaining the current Net Neutrality Principles will also avoid creating new regulatory uncertainties, and help ensure that rules do not become obsolete. In addition, the Commission can note that it retains Title I jurisdiction over broadband facilities and services, permitting case-by-case resolution of any potential public policy harms that conceivably could arise. This approach is especially important for rural areas, particularly the unserved places to which the National Broadband Plan must focus on delivering broadband and its benefits. The more tenuous economics of rural broadband, and the greater economic sensitivity of rural communities, mean the harms from premature and unnecessary additional obligations are greater in rural areas, further hampering broadband deployment and rural employment.

Congress acknowledged the importance of the Broadband Policy Statement, and recognized its efficacy for protecting consumers and facilitating broadband investment and innovation. For the same reasons, both NTIA and RUS have announced that all funding recipients under the BTOP and BIP must comply with the Broadband Policy Statement. Neither agency adopted substantially greater regulations, however. The Commission should continue this reasonable and successful approach, rather than attempt to define, with greater precision or reach, exactly how broadband providers manage their networks or interact with their customers. To do otherwise would frustrate the purposes of the Recovery Act and risk balkanizing broadband infrastructure in America through a patchwork of differing, inefficient, and, ultimately, unnecessary regulatory requirements.

F. The Commission Should Take Affirmative Steps to Promote Video Competition in Rural Areas as this Will Improve Broadband Deployment.

There are two clear reasons why adding video to the package of available services facilitates broadband deployment. First, video services add potential revenues[10] and therefore can result in a market structure that will support more facilities-based entry[11] and this, in turn, will reduce the amount of support that is needed to extend broadband into currently unserved areas. Video service revenues are an important part of consumers' communication spending. According to a Pew Internet & American Life Project survey from several years ago, the average household spent $51 per month on multichannel video programming services—a significant portion of their total communications (voice, video, Internet, wireless) spending (which averaged about $122 per month per household).[12] This trend has continued over the years so broadband network operators must be able to readily offer video is essential to its continued ability to build new fiber-rich broadband infrastructure.

Second, broadband entry is particularly likely where new technology permits owners of formerly "single use" networks, such as LECs to upgrade their networks into multi-service platforms that can simultaneously provide voice, data, and video services. This allows firms to leverage their assets to enter related markets by reducing entry costs, which can accelerate the pace and scale of deployment. When broadband entrants add video to their service mix, they

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[10] More precisely, video services offer contributions to investment in the form of incremental revenue (from all sources) that exceeds the incremental cost (from all sources) of providing the additional services.

[11] G.S. Ford, T.M. Koutsky and L.J. Spiwak, *Competition after Unbundling: Entry, Industry Structure and Convergence,* Phoenix Center Policy Paper No. 21, (http://www.phoenix-center.org/pcpp/PCPP21Final.pdf (July 2005) (*Phoenix Center Paper #21)*

[12] J.B. Horrigan, *Consumption of Information Goods and Services in the United States*, at 28 Pew Internet & American Life Project (2003), http://www.pewinternet.org/pdfs/PIP_Info_Consumption.pdf.

also reduce the risk to their investments, which promotes entry in at least two additional ways. Adding service offerings to the network increases the chance that customers will purchase at least one service from a network that passes their homes. Moreover, by offering multiple services, the provider faces less risk of being unable to recover its investment should customers cease to be interested in a particular service. Therefore, the Commission should ensure that all video providers are able to compete on an equal footing with respect to access to programming, for example.

G. The Commission Should Remove Competitive Disparities in Pole Attachment Rates.

Today, competing broadband providers face wildly different rates for broadband pole attachments. Cable companies pay a fraction of what incumbent local exchange carriers pay for their attachments. Competitive local exchange carriers typically pay a rate midway the two. This disparity distorts competition in areas with multiple broadband providers, and artificially inflates costs for ILECs to provide or extend broadband services. In effect, with their pole attachments nationwide, ILECs are forced to pay a subsidy to other service providers, especially to cable companies. This problem is particularly acute in low-density, rural areas. Artificially high pole attachment rates drive deployment and operation costs higher, especially in the rural, low-density areas that are most in need of broadband deployment. The Commission has an open proceeding to consider exercising its demonstrated authority over broadband to adopt a much-needed uniform rate system for broadband pole attachments.

V. THE COMMISSION SHOULD STUDY CONSUMER PREFERENCES AND ADOPT CAREFULLY-FASHIONED DEMAND-SIDE MEASURES TO ENSURE CONSUMERS ARE ABLE TO TAKE ADVANTAGE OF AVAILABLE BROADBAND AND TO SUPPORT CRITICAL INSTITUTIONS.

In addition to expanding the availability of broadband, the Commission should also develop in the National Broadband Plan an approach to ensuring that consumers are able to take advantage of the broadband that is available. The Commission also can play a role in helping critical institutions such as schools and health care facilities are able to use broadband in ways that promote economic growth and social well being.

Support for Low-Income Consumers. The Lifeline and Linkup programs have been effective, on balance, in promoting universal voice service. The Commission should evaluate whether reasonable programs can be developed and managed cost-effectively to promote for residential broadband for low-income households. Increasing overall broadband take rates would help promote broadband deployment in areas that would otherwise be borderline for investment.

Support for Energy Efficiency and Independence. Another way in which consumers can benefit from increased use of broadband is energy efficiency. Smart Grid technology promises to reduce energy consumption and improve overall electric service reliability. In many service areas, for example, their networks could relieve power companies of the need to invest in additional network capacity for the intercommunication required to operate a smart grid. Network operators like CenturyLink can be particularly beneficial contributors to Smart Grid in low-density areas, where power companies face their greatest challenges introducing Smart Grid capabilities. Telecommunications providers also have network capacity in place today that can support power companies, including local network, middle mile, and transport, each of which pay a role in Smart Grid systems. If rural broadband providers are able to participate in Smart

Grid, in addition to being efficient, experienced network providers, Smart Grid opportunities will improve the business case for broadband deployment in unserved areas. Accordingly, the National Broadband Plan should direct the Commission to work with other federal agencies to ensure that telecommunications network operators are able to compete effectively for Smart Grid grants.

Support for Education and Health Care. Education and health care institutions are essential to economic development and to investment in human capital. It is widely understood that the availability of broadband improves the quality, efficiency, and effectiveness of education and health care services. Rural areas typically lack the education and health care resources of higher-density areas, however, so the education and health benefits of broadband are, if anything, greater for rural America. Therefore, it is important that the National Broadband Plan address the deployment of broadband to educational and health care institutions. The E-Rate and Rural Healthcare programs have provided significant support for education and rural healthcare, but more can and should be done.

As the Commission considers how to ensure adequate broadband connectivity for rural educational and health-care facilities, it is important to remember that these facilities are important anchor institutions that can drive broadband deployment in sparsely populated areas—or hinder it. They provide comparatively large customers in small markets. At the same time, however, without schools and healthcare facilities as anchor tenants on a network, broadband service providers often will find deployment is uneconomic. To this end, support for broadband services to educational and health care facilities in unserved and rural areas should supplement and not detract from the funding that is being provided to bring broadband to these communities.

Support for Public Safety. Providing ubiquitous broadband helps promote public safety and homeland security. Rural areas deserve the same level of public safety technology and service that the rest of America has come to expect. Indeed, rural areas already face public safety challenges, including sparser resources, less advanced health and safety facilities, and longer response times. Broadband technology can help rural communities make the most of their limited public safety resources. The availability of broadband improves the quality and effectiveness of public safety responders. Police, fire, and rescue personnel all benefit from the ability to access information over the Internet, to transmit data files, and to manage resources with the latest information technologies. In addition to other policies intended to promote broadband deployment in rural areas, the Commission can help by engaging public safety providers and aggregating public safety network needs with other broadband demand to facilitate network deployment in unserved areas.

VI. CONCLUSION

CenturyLink submits that the National Broadband Plan should answer three core sets of questions: (1) where do we need to place government support to achieve ubiquitous, high-quality broadband, and to what sort of networks should that support be provided; (2) how should the Commission's rules be modified to achieve the core goals of the National Broadband Plan; and (3) to what extent and in what way should the Commission facilitate increased broadband take rates and utilization in served and unserved areas? The Commission's approach should be to identify where the market has and will produce reasonable broadband deployment and, then, to target support toward extending deployment beyond those areas, while avoiding providing support in areas where the market has produced broadband as doing so would interfere with and harm competition. The National Broadband Plan should make necessary policy adjustments to

existing telecommunications rules so as to further the aims and objectives of our national broadband policy while rejecting proposals that will not actually improve broadband deployment. Finally, the Commission should study consumer preferences and adopt carefully-fashioned demand-side measures to ensure that consumers are able to take advantage of available broadband and to support critical institutions.

Respectfully submitted,

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