

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
Establishing Just and Reasonable Rates for Local Exchange Carriers)	WC Docket No. 07-135
)	
High-Cost Universal Service Support)	WC Docket No. 05-337
)	
Developing a Unified Intercarrier Compensation Regime)	CC Docket No. 01-92
)	
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
)	
Lifeline and Link-Up)	WC Docket No. 03-109
)	
Universal Service Reform — Mobility Fund)	WT Docket No. 10-208
)	

PETITION FOR WAIVER

Melissa E. Newman
Jeffrey S. Lanning
1099 New York Avenue, NW
Suite 250
Washington, DC 20001
(202) 429-3120

Craig J. Brown
Tiffany W. Smink
1801 California Street
10th Floor
Denver, CO 80202
(303) 992-2503

Attorneys for

CENTURYLINK

June 26, 2012

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EXECUTIVE SUMMARY

In this waiver petition, CenturyLink seeks authority to use CAF Phase I funds to deploy broadband to areas that, according to the National Broadband Map (“NBM”), are served by certain Wireless Internet Service Providers (“WISPs”) but that, according to CenturyLink’s data, those WISPs cannot fully serve.¹ In some cases, the WISP coverage areas shown on the NBM are facially implausible, and the communities that CenturyLink wishes to serve may receive no WISP service at all. In other cases, the listed WISPs share many or all of the same core attributes that led the FCC to exclude satellite broadband service from identification of areas as “unserved” for CAF Phase I purposes. Specifically, they—

- confront *capacity* constraints that limit widespread simultaneous use of their spectrum at the speeds necessary to run bandwidth-intensive applications;
- suffer from *line-of-sight* restrictions that keep these WISPs from providing any service at all to countless locations even within their actual coverage areas;
- charge *higher monthly rates* than wireline broadband providers, even though their service is slower and less reliable;
- charge high up-front *installation and equipment fees*; and/or
- subject users to far more stringent *data caps* than wireline broadband providers do, allocating to each user only a tiny fraction of the usage bucket provided under a typical wireline broadband plan.

Waiver is “appropriate if special circumstances warrant a deviation from the general rule, and such deviation will serve the public interest.”² The waiver requested here—a narrow exemption from the rigid ban on accepting funds for areas that the NBM shows as “served” by

¹ Specifically, CenturyLink requests a limited waiver of 47 C.F.R. § 54.312(b), which requires CAF I recipients to deploy broadband service to locations “shown as unserved by fixed broadband on the then-current version of the National Broadband Map.”

² Report and Order and Memorandum Opinion and Order, *Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements et al.*, 22 FCC Rcd 16440, 16484 ¶ 88 n.256 (2007); *see generally* 47 C.F.R. § 1.3.

the WISPs in question—easily satisfies that standard. Although the general service limitations noted above would justify a much broader waiver request, CenturyLink has narrowly confined this petition to the WISPs whose services most obviously fall far short of the wireline broadband that CenturyLink seeks to provide to the communities in question. In particular, CenturyLink seeks a waiver that would permit it to spend CAF I funds on any community that, according to the NBM, is “served” only by a WISP, and at least one of the following two conditions applies—

- the community lies within a state that has not independently verified WISP coverage areas shown in the NBM, and objective indicia demonstrate that the WISP could not plausibly serve the areas that the NBM shows it to cover; or
- the WISP, like satellite broadband providers, imposes unusually high retail prices (\$720 or more for the first year of service) or unusually stringent data caps (25 GB per month or below), even though its services, also like satellite broadband services, are technologically inferior to wireline broadband.³

The WISPs (and associated service areas) captured by this waiver test are set forth in Exhibits B, C, and D.

Granting this waiver will help achieve the basic objectives of the CAF Phase I program. The Commission deliberately set aside \$300 million in one-time funding to “expand voice and broadband availability as much and as quickly as possible” and help “clos[e] the rural-rural divide”—the regulatory anomaly that has denied broadband to millions of Americans who live

³ CenturyLink also seeks a waiver with respect to six additional WISPs that serve only business customers. *See, e.g.*, Southwestern Wireless, “MOTOw4 Wireless Broadband Portfolio,” <http://southwesternwireless.com/index.htm> (offering “high-speed solutions purpose-built to help enterprises, service providers and governments connect anywhere and everywhere — indoors, outdoors, or on the move”); Airband, “Customers,” <http://www.airband.com/about-us/customers/> (“Airband provides services to thousands of businesses nationwide, across multiple industry verticals such as healthcare, education, hospitality, construction, financial services, manufacturing, information technology, non-profit, consumer goods, legal, and professional services.”).

within the footprint of carriers subject to price-cap regulation.⁴ Since every provider must serve at least one otherwise unserved location for every \$775 it receives,⁵ this \$300 million figure translates into more than 387,000 housing units that stand to benefit from CAF Phase I. In April, the Wireline Competition Bureau announced that, because CenturyLink serves the largest number of high-cost wire centers, it is entitled to approximately 30 percent of the overall CAF Phase I budget—more than 116,000 of those otherwise unserved locations.⁶ But under the one-location-per-\$775 requirement, CenturyLink could feasibly accept funding to serve only a small fraction of those 116,000 locations if it could not spend CAF I funds to deploy broadband to the areas nominally “served” by the WISPs in question.

In other words, rote adherence to the NBM would deprive tens of thousands of households the opportunity to order quality broadband services. That outcome would suppress investment, perpetuate the rural-rural divide, and subvert the Commission’s wider broadband deployment initiatives. And it would disproportionately harm consumers across large swaths of states like Arizona, Colorado, Oregon, and Washington, where CenturyLink would have to scale back the ambitious construction projects it has planned to bring affordable, robust broadband to consumers who would otherwise lack it. The Commission should grant this waiver to avoid that outcome. In so doing, the Commission can make good on its laudable ambition to “spur

⁴ Report and Order and Further Notice of Proposed Rulemaking, *Connect America Fund et al.*, 26 FCC Rcd 17663, 17673, 17713, 17720 ¶¶ 21-22, 128 n.201, 145 (2011) (“*USF/ICC Reform Order*”).

⁵ *Id.* at 17673 ¶ 22.

⁶ Public Notice, DA 12-639, *Wireline Competition Bureau Announces Support Amounts for Connect America Fund Phase One Incremental Support*, WC Docket Nos. 10-90 & 05-337, ¶ 9 (rel. Apr. 25, 2012).

immediate broadband buildout . . . to extend robust, scalable broadband to hundreds of thousands of unserved Americans” in 2012.⁷

This waiver petition is *not* meant as a criticism of WISPs in general. WISPs and satellite broadband providers serve the valuable function of providing Internet connectivity to some households in communities where, even with federal support, wireline deployment is simply not feasible. But like satellite service, the services offered by the listed WISPs are inadequate substitutes for wireline broadband services in communities where, with CAF Phase I funding, wireline deployment *is* feasible. This waiver petition seeks to have WISPs treated like satellite broadband providers for CAF Phase I purposes only where their services are most clearly inadequate as substitutes for the robust, scalable wireline broadband services CenturyLink hopes to offer.

DISCUSSION

CenturyLink seeks to use CAF I funds to serve communities that fall into one of two categories. First, as discussed in Section I, CenturyLink wishes to use those funds to provide wireline broadband to any supposedly WISP-served community that lies within a state that has not independently verified WISP coverage areas if there are objective reasons to doubt that the WISP serves the broad areas that the NBM shows it to cover.⁸ In those circumstances, there is no sound basis for assuming that the community in question is served by *any* terrestrial broadband provider. Second, as discussed in Section II, CenturyLink also seeks to use CAF Phase I funds to deploy wireline broadband to any community that is served only by a WISP that, like satellite broadband providers, imposes unusually high retail prices or stringent data caps.⁹

⁷ *USF/ICC Reform Order*, 26 FCC Rcd at 17673 ¶ 22.

⁸ These WISPs are identified in Exhibit C.

⁹ These WISPs are identified in Exhibit B.

I. A WISP’S OSTENSIBLE PRESENCE SHOULD NOT DEPRIVE A COMMUNITY OF WIRELINE BROADBAND IF THE RELEVANT STATE HAS NOT INDEPENDENTLY VERIFIED THE WISP’S COVERAGE AND THERE ARE OBJECTIVE REASONS TO DOUBT THE NATIONAL BROADBAND MAP’S ACCOUNT OF THAT COVERAGE.

Price-cap ILECs may spend CAF I funds to deploy broadband networks only to areas that are not currently served by a fixed broadband provider capable of meeting, among other minimum service attributes, a 768/200 kbps speed threshold.¹⁰ To determine which areas are “unserved” for this purpose, the Commission relies on the NBM, which NTIA aptly describes as a “best efforts snapshot”¹¹ of broadband coverage based on pervasively incomplete data. Inflexible adherence to the NBM would subvert the goals of the CAF program wherever the NBM grossly overstates the quality or scope of those services: already-collected universal service funds would go unspent, and many consumers would be left with inadequate and expensive broadband service, or none at all, even though the ILEC stands ready to provide robust and affordable broadband services to those very consumers.

Inflexible application of the NBM would pose exactly that danger in the circumstances addressed here because the NBM greatly overstates the broadband capabilities of certain WISPs. This problem is obvious on the face of the NBM itself, where the “coverage” areas identified for some WISPs are self-evidently exaggerated and appear on the NBM only because regulators lacked the resources or evaluation tools needed to vet them rigorously. For example:¹²

- In Arizona, a number of WISPs are shown to provide uninterrupted coverage within perfect circles that extend many miles from a cell site. Those depictions are plainly inaccurate: as discussed below, *no* WISP service, operating on high frequencies and

¹⁰ *Id.* at 17720-21 ¶ 146; *see* Second Order on Reconsideration, FCC 12-47, *Connect America Fund et al.*, WC Docket Nos. 10-90 *et al.*, ¶¶ 12-13 (rel. Apr. 25, 2012) (“*Second Reconsideration Order*”).

¹¹ *See USF/ICC Reform Order*, 26 FCC Rcd at 17720-21 ¶ 146; *see also* NTIA, “About National Broadband Map,” <http://www.broadbandmap.gov/about> (describing map).

¹² The living unit numbers below are detailed in Exhibit C.

amid geographic and other obstructions, could possibly serve all customers within such large and neatly defined radii. These self-evident inaccuracies nonetheless appear in the NBM because Arizona state authorities did not have the evaluation tools needed for an independent assessment. The consequences of taking those assessments at face value would be severe. Absent the waiver sought here, the inaccuracies would foreclose wireline broadband to approximately 15,000 living units in Arizona alone that lie within areas shown as “served” solely by a WISP associated with such dubious coverage claims.

- In Washington State, the NBM purports to show that WISPs serve areas defined neatly by county boundaries, even though the same WISPs’ service areas are presented in far more granular and realistic form in neighboring Idaho. These coverage representations in the Washington map are self-evidently inaccurate: radio waves do not artificially reach out to county boundaries and then fall to the ground. It is thus no surprise that, while the state Broadband Office performed a limited verification of WISP-submitted data, it lacked the resources to fully validate WISP service areas. There are around 5,700 living units in Washington falling within areas shown as served by a WISP associated with facially dubious coverage data.
- The Colorado Office of Information Technology is currently analyzing the data submitted by WISPs for that state, but it lacked the ability to vet the data underlying the current version of the NBM. The Office agrees that many of the areas shown as covered on that version appear overstated. According to CenturyLink’s data, those areas could include as many as 8,000 living units.
- In Oregon, the state commission has concerns with the verification procedures used by the mapping agency, but it lacked funding to do its own verifications. There are at least 700 affected living units in Oregon.
- North Dakota took WISP-submitted data completely at face value when putting together its broadband service map. CenturyLink’s analysis reveals that inaccurate coverage data could deprive more than 400 living units of wireline broadband service.
- Florida too simply accepted WISPs’ coverage claims and did not perform any type of independent verification. More than 30 living units in Florida are within areas purportedly “served” only by a WISP associated with questionable coverage data.

In short, in the absence of the proposed waiver, a number of communities throughout these states would be deprived of CAF Phase I funding even though, in all likelihood and contrary to the obvious inaccuracies in the NBM, they are *literally* unserved. Although CenturyLink could justifiably seek a waiver as to *all* WISP-only areas shown on the NBM in these states, it is seeking instead a narrower waiver only as to areas served by the WISPs with the most palpably unreasonable coverage depictions. As discussed in the Declaration of Peter

Copeland (Exhibit A, hereinafter “Declaration”), there are strong objective indications on the face of the NBM that these WISPs could not plausibly serve the areas that the NBM shows them to cover.¹³

II. A WISP’S OSTENSIBLE PRESENCE SHOULD NOT DEPRIVE A COMMUNITY OF WIRELINE BROADBAND IF ITS SERVICE EXHIBITS THE LIMITATIONS THAT LED THE COMMISSION TO DISREGARD SATELLITE BROADBAND SERVICES WHEN IDENTIFYING “UNSERVED” AREAS.

Quite apart from the issue of facially implausible NBM coverage depictions, this petition also separately seeks relief as to areas served by any WISP in any state if the WISP’s service exhibits the characteristics that led the Commission to disregard satellite broadband services for purposes of deciding which areas are “unserved” under CAF Phase I. Those characteristics fall into four categories, the first two of which are technological and endemic to most WISPs, and the last two of which are retail-oriented and specific to the particular WISPs at issue in this waiver petition. In particular, (1) WISPs lack the capacity to serve many high-bandwidth subscribers within their service areas; (2) their services will not work at all if there is no line of sight between the customer and the provider’s antenna; (3) they charge recurring and/or non-recurring prices substantially higher than those of wireline broadband providers; and (4) some of them

¹³ See Declaration ¶¶ 5-6. That point sharply distinguishes this narrow waiver request from the much broader request filed by ITTA and rejected by the Commission in the *Second Reconsideration Order* (¶¶ 12-13). The Commission denied the ITTA request not because it considered the NBM infallible, but because the ITTA petition raised administrability concerns not present here—specifically, it proposed a regime in which, anywhere in the country, carriers and WISPs could produce warring consumer declarations about precisely what WISP services are available where. Unlike ITTA, CenturyLink is relying for relief on objectively obvious inaccuracies in the NBM, and is further confining that relief to particular states that lack the resources to verify the NBM’s accuracy as to WISPs. Similarly, the waiver request discussed in Section II below is also confined to specific WISPs on the basis of objectively and immediately verifiable shortcomings.

impose unusually stringent data caps as well.¹⁴ CenturyLink confines this waiver request to areas served by the specific WISPs identified in Exhibit B, which combine the technological shortcomings common to most WISPs with either unusually high retail prices or stringent usage caps.¹⁵

A. WISP capacity constraints.

When it excluded satellite broadband providers from consideration for purposes of identifying “unserved” areas, the Commission stressed that “[c]onsumer satellite services have limited capacity allowances today” and thus cannot serve more than a small fraction of customers within their coverage areas.¹⁶ WISPs typically suffer from the same fundamental problem: they lack the capacity to accommodate significant increases in traffic or customers within their service areas. For example, even where a town might fall within the literal coverage area of a WISP tower, the tower could not accommodate bandwidth-intensive usage from more than a limited percentage of the town’s inhabitants on the network at any given time, because they would all be sharing the same congested spectrum resources. At a minimum, these capacity constraints would severely hamstring these WISPs’ ability to expand service to additional customers beyond the bare minimum speeds they typically offer today (768 kbps down and 200 kbps up). And for the same reason, the services offered by these WISPs—much like WiFi services offered at crowded hotels—will increasingly deteriorate as customer throughput

¹⁴ See generally FCC: *Connecting America: The National Broadband Plan* 37 (2010) (noting that WISP services “tend to be either more expensive or offer a lower range of speeds than today’s wireline offerings”) (footnote omitted).

¹⁵ As discussed above, CenturyLink also seeks a waiver with respect to six additional WISPs that serve only business customers. See note 3, *supra*.

¹⁶ *USF/ICC Reform Order*, 26 FCC Rcd at 17701-02 ¶ 104.

demands soar with the explosive popularity of streaming video and other bandwidth-intensive applications.

Moreover, like satellite providers, WISPs cannot easily overcome these constraints simply by adding new, low-cost capacity. In metropolitan areas, mobile wireless providers can often accommodate increasing demands for their service by attaching antennas and backhaul links to a variety of physical structures, and the high density of their subscriber base can often cover the modest costs of those “cell splits.” But even in high-density areas, the Commission has observed that consumer-driven bandwidth demands are rapidly outpacing the existing spectrum resources allocated to mobile licensees, producing service degradation and higher quality-adjusted prices.¹⁷ The capacity problem is even more severe for the WISPs operating in areas covered by the CAF program, which are by definition some of the most rural and sparsely populated areas in the country. Unlike mobile providers in urban areas, WISPs often could not find appropriate buildings to attach full-blown cell sites to, and given the sparseness of the population in these areas, the additional revenues these WISPs could hope to earn as the result would often be insufficient to justify such expenditures. And to compound the problem, WISPs generally operate on unlicensed spectrum, where—in the words of their own trade association—“existing congestion” from other uses can “also prevent expanded service.”¹⁸

¹⁷ See, e.g., Remarks of FCC Chairman Julius Genachowski, CTIA Wireless 2011, at 9 (Mar. 22, 2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-305309A1.pdf (“If we do nothing in the face of the looming spectrum crunch, many consumers will face higher prices—as the market is forced to respond to supply and demand—and frustrating service—connections that drop, apps that run unreliably or too slowly.”).

¹⁸ WISPA Reply Comments on NBP Public Notice #6, GN Docket Nos. 09-47 *et al.*, at 8 (filed Nov. 13, 2009) (“*WISPA PN #6 Reply Comments*”).

B. WISP line-of-sight coverage limitations.

As the Commission has noted, satellite broadband providers are subject to a further constraint as well, which prevents them from serving many customers altogether: they must have a direct line of sight to their customers.¹⁹ Similarly, WISP services, too, are badly degraded or simply unavailable whenever anything obstructs a clear line of sight between the transmitter and the customer's receiver.²⁰

WISPs commonly use unlicensed spectrum at such high frequencies that they cannot reliably penetrate ubiquitous obstacles such as trees, buildings, hills, or valley walls.²¹ For example, as one WISP warns prospective customers: "If you cannot see the [transmitter] site, we may not be able to get signal to your location. Any obstructions such as trees, buildings or

¹⁹ See *USF/ICC Reform Order*, 26 FCC Rcd at 18102-03 ¶ 1272 (noting that certain satellite providers "require that subscribers have a clear view of the southern sky in order to obtain a signal") (footnote omitted); see also Thirteenth Annual Report, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 24 FCC Rcd 542, 590 ¶ 97 (2009).

²⁰ See CenturyLink, *Limitations of Connect America Fund Phase I Incremental Support Criteria*, at 8 (Jan. 25, 2012), attached to Letter from Jeffrey S. Lanning, CenturyLink, to Marlene H. Dortch, FCC, WC Dockets 10-90 *et al.* (filed Jan. 27, 2012) (providing example); see also Declaration at ¶ 5.

²¹ See WISPA Reply Comments on NBP Public Notice #30, GN Docket Nos. 09-47 *et al.*, at 2 (filed Jan. 27, 2010) (noting that "WISPs 'mix and match' spectrum from a variety of Part 15 unlicensed frequency bands—the 900 MHz (902-928 MHz), 2.4 GHz (2400-2483 MHz) and 5 GHz bands (5250-5350 MHz, 5470-5725 MHz and 5725-5825 MHz)"); Jack Unger *et al.*, *WISPA National Broadband Presentation*, at 8 (Jan. 13, 2010), attached to Letter from Stephen E. Coran, Counsel to WISPA, to Marlene H. Dortch, FCC, GN Docket Nos. 09-47 *et al.* (filed Jan. 14, 2010) ("*WISPA National Broadband Presentation*"). Although some WISPs offer the option of service on the unlicensed 900 MHz band, which can penetrate trees and walls better than higher-band spectrum, that band is notoriously subject to interference from a broad range of other unlicensed uses. See *WISPA PN #6 Reply Comments* at 8 (noting that, in the 902-928 MHz band, "the existing congestion will continue to present service difficulties for both WISP subscribers and the oil and gas industries, and will also prevent expanded service").

passing semi trucks will impede the signal coming from our [transmitters].”²² Another WISP confirms: “The biggest limitation of wireless is that it requires line of sight to one of our broadcast antennas. This means it is not available for everyone. Especially if you are in the woods. . . . [I]f there is a forest in the way, you will probably not get a good connection.”²³ This problem is endemic to the very technology used by most WISPs. That is not to say that WISP services are useless; they are sometimes the only option for remote communities. Again, however, they are no substitute for wireline broadband services.

C. High WISP prices.

As the Commission has found, “current satellite services tend to have significantly higher monthly prices to end-users than many terrestrial fixed broadband services, and frequently include substantial up-front equipment and installation costs.”²⁴ The WISPs subject to this waiver request exhibit the same basic features. Specifically, most of the WISPs failing the second prong of the waiver test impose an aggregate charge of at least \$720 on new subscribers for the first year of service.²⁵

The prices any broadband ISP charges fall into two categories: up-front (“nonrecurring”) and monthly (“recurring”) charges. In both respects, the listed WISPs charge substantially more

²² See also Amigo.net, “Frequently Asked Questions,” <http://www.amigo.net/cms/index.php?id=117>.

²³ Grand County Internet Services, “Frequently Asked Questions,” <http://wireless.rkymtnhi.com/wirelessfaqs.html>; see also *WISPA National Broadband Presentation* at 8; Brainstorm Internet, “Wireless,” <http://www.gobrainstorm.net/en/products/residential/wireless.html> (“To receive a signal of sufficient quality to establish service, your location must have clear line of sight view to the tower (some services can transmit through light foliage).”).

²⁴ See *USF/ICC Reform Order*, 26 FCC Rcd at 18102 ¶ 1266; see also *id.* at 18102 ¶¶ 1267-71. See also footnote 35, *infra*.

²⁵ See Exhibit B. A few of the WISPs subject to this waiver petition charge less than \$720 for the first year of service. However, as discussed in the next section, they impose highly restrictive data caps.

than CenturyLink, even though CenturyLink’s DSL services, which start at 1.5 Mbps, are typically faster and more reliable than the WISP services to which they are compared. *First*, a number of these WISPs impose very large up-front installation and equipment fees, ranging from \$200 to \$600.²⁶ By contrast, the analogous CenturyLink fee is \$49.95 for a technician installation, and *free* self-installation is used by almost all customers.²⁷ *Second*, many of these WISPs also impose very high monthly service charges, ranging as high as \$80.²⁸ CenturyLink, in contrast, offers its superior-quality 1.5 Mbps broadband service on a month-to-month, no-contract basis for only \$40/month (or \$45/month for customers who wish to rent a modem).²⁹ The upshot is that a CenturyLink customer pays \$480 (or \$540 with modem rental) overall for the first year of service at up to 1.5 Mbps, whereas the typical customer of one of these WISPs pays \$918—at 768 kbps up to 1.5 Mbps.³⁰ What is more, CenturyLink offers even lower rates (currently as low as \$19.95/month) under term plans and plans that bundle Internet with voice service, to which the vast majority of CenturyLink customers subscribe.³¹

Moreover, these expensive WISP services are generally far lower in quality than wired broadband, making the *quality-adjusted* prices for those services even more anomalously high. Even apart from the explicit speed differentials, WISPA’s own executive director emphasizes that “there’s a lot of different users sharing [the unlicensed] spectrum” on which most WISPs rely to provide service and that, “because the unlicensed bands are so narrow, they are almost

²⁶ *See id.*

²⁷ *See* Declaration ¶ 9 & n.5.

²⁸ *See* Exhibit B.

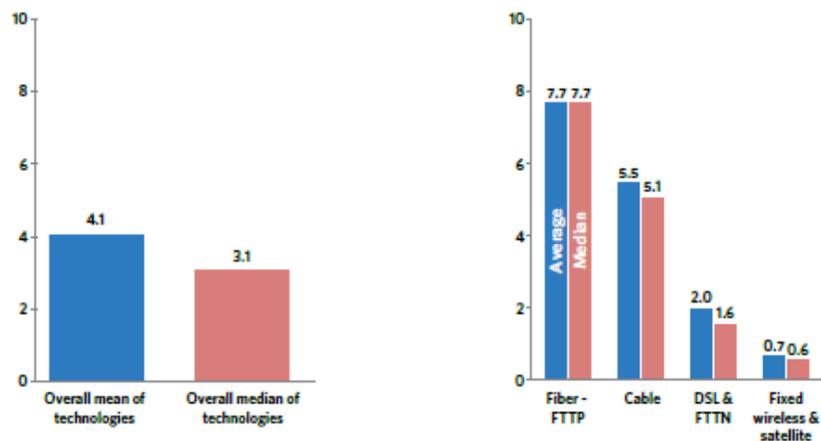
²⁹ *See* Declaration ¶ 9.

³⁰ *See* Exhibit B. This number represents the average annual charge of those WISPs charging an aggregate of more than \$720 for the first year.

³¹ *See id.* ¶ 9 n.4.

polluted with all the different users.”³² Other sources confirm as well that WISP services are subject to common and unpredictable degradation from third-party interference.³³ And in terms of actual download speeds achieved by various broadband technologies, the FCC has previously lumped fixed wireless together with satellite at the very bottom:³⁴

*Exhibit 17:
Average (Mean)
and Median Actual
Download Speeds,
Overall and By
Technology (Mbps)*



Indeed, the disparity between the performance of ILEC- and WISP-provided broadband service is even more pronounced than this chart suggests. Any ILEC accepting federal funding under

³² Stuart Zipper, *WISPs Storm D.C., Plead Unlicensed-Spectrum Case*, WISPA News (May 17, 2012), <http://www.wispa.org/2012/05/18/wisps-storm-dc-plead-unlicensed-spectrum-case>.

³³ See, e.g., Adam Morrison, *Bridging the Last Mile-California Wireless Internet Providers at 11*, State of California (Working Draft) available at http://hbtf.org/files/CBI_WISP_Report_WorkingDraft.pdf (“One of the largest problems WISP operators face is signal interference” because “[t]he portion of the spectrum that is unlicensed is used by many different types of technologies. Transmissions from devices such as cordless phones, garage door openers, microwave ovens and wireless microphones can corrupt the data within a packet on the same frequency. This means that layers of redundancy must be built into the network to ensure that any corrupted data is identified and replaced. While these steps increase a networks quality of service, they also increase latency or cause delays in data delivery.”); *WISPA National Broadband Presentation* at 8 (nothing that the spectrum used by WISPs is “prone to noise, interference, [and] [o]ngoing reliability concerns”).

³⁴ FCC, *Broadband Performance: OBI Technical Paper No. 4*, at 15 Ex. 17 (2010), available at [http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-\(obi\)-technical-paper-broadband-performance.pdf](http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-(obi)-technical-paper-broadband-performance.pdf).

this program will be required to provide 4 Mbps downstream within a year or two, whereas WISPs as a group face no similar obligation.

D. Stringent WISP data caps.

Satellite broadband also often comes encumbered with restrictive data caps.³⁵ The same is true of many of the WISPs subject to this waiver request. They impose on their users highly restrictive data caps of less than 25 GB per month.³⁶ Indeed, two of the WISPs impose a cap of just 5 GB per month.³⁷ It is no surprise that these WISPs would impose such unusually low caps; like satellite providers, they must ration out their highly constrained capacity among the various end users who compete for it. WISP broadband capacity—unlike the customer-specific links in DSL-based broadband—is shared by all customers within a given wireless cell or sector. This means that the more customers a WISP persuades to sign up, the worse the average service quality gets for all customers unless the WISP sharply limits how much customers may consume.

³⁵ See, e.g., HughesNet Services, “Plans and Pricing,” <http://www.hughesnet.com/residential-satellite-internet/plans.cfm> (explaining the daily “download allowance” of various HughesNet satellite plans); WildBlue, “Packages and Pricing,” <http://www.wildblue.com/options/availability>; see also Opposition of the National Exchange Carrier Association, Inc. *et al.* to Various Petitions for Reconsideration, *Connect America Fund et al.*, WC Docket Nos. 10-90 *et al.*, at 8 (filed Feb. 9, 2012) (noting with respect to satellite broadband that “even if consumers are willing to suffer through . . . technical and service quality shortcomings, they are often required to pay higher rates under multi-year contract commitments with data caps”).

³⁶ See Exhibit B. As CenturyLink has demonstrated in a prior filing, the *average* user of broadband Internet consumes around 25 GB per month. See Letter From Melissa Newman, CenturyLink, to Marlene H. Dortch, FCC, WC Docket Nos. 10-90 *et al.*, at 2 & n.2 (filed Mar. 30, 2012). This means that a great many customers in the territories of the identified WISPs are likely constrained by those WISPs’ caps. In comparison, CenturyLink imposes data caps of 150 GB per month for its 1.5 Mbps service, and 250 GB per month for its higher-speed services. These caps affect less than 0.5 percent of CenturyLink’s broadband customers. See Declaration at ¶ 10.

³⁷ See Exhibit B.

That imperative may be an unavoidable consequence of the WISPs' technology, but it further underscores the need to give the affected consumers a robust broadband alternative.

III. GRANTING THE WAIVER REQUEST WILL BRING AFFORDABLE BROADBAND INTERNET SERVICE TO THOUSANDS OF NEW CUSTOMERS AND ADVANCE THE COMMISSION'S AMBITIOUS BROADBAND AGENDA.

The analysis provided above and in the attached declaration amply satisfies the "special circumstances" prong of the two-part waiver test, identifying the specific areas where, for CAF Phase I purposes, it makes abundant sense to deviate from the NBM's flawed depiction of broadband coverage and treat the listed WISPs as the functional equivalent of satellite providers. Granting this waiver request would also strongly serve the public interest by enabling CenturyLink to help the Commission achieve its goal of universal broadband deployment.

As the Commission noted in the *USF/ICC Reform Order*, "[m]ore than 83 percent of the approximately 18 million Americans who lack access to fixed broadband live in price cap study areas."³⁸ The Commission commendably designed the first phase of the CAF program to begin closing the rural-rural divide immediately by enabling "price cap carriers to extend robust, scalable broadband to hundreds of thousands of unserved Americans beginning in early 2012."³⁹ In announcing that aspiration, the Commission understood that it would take at least a year—and likely longer—to design and implement a CAF Phase II structure based on new forward-looking cost-models and competitive bidding.⁴⁰ The Commission thus designed CAF Phase I as a vital "transitional distribution mechanism" while these longer-term reforms remain in their complex planning stages.⁴¹

³⁸ *USF/ICC Reform Order*, 26 FCC Rcd at 17712 ¶ 127.

³⁹ *Id.* at 17673 ¶ 22.

⁴⁰ *See id.* at 17715 ¶ 132.

⁴¹ *Id.*

Granting this waiver is critical to achieving these laudable Phase I objectives. As noted above, CenturyLink is entitled to receive funding sufficient to serve approximately 116,000 currently unserved locations—nearly one-third of the total amount. So long as it is precluded from serving the areas in question, however, it is prepared to take funding that would support deployment to only a fraction of those locations.⁴² If this waiver is granted, CenturyLink expects to take an additional amount of approximately \$32.6 million in CAF I funding, which equates to an obligation to serve around 42,000 additional living units.⁴³ Again, these are all living units that would otherwise be left either with *no* broadband options or, at most, WISP services that suffer from the same basic shortcomings, high prices, and service limitations as satellite broadband. The Commission’s decision on this waiver request will thus determine whether tens of thousands of geographically remote American households will, or will not, have fast and dependable broadband Internet access at affordable prices. Granting this waiver will allow CenturyLink to make broadband a reality for these tens of thousands of households, while underscoring the Commission’s genuine commitment to universal broadband throughout the United States.

⁴² See *supra* page 3.

⁴³ See Declaration ¶ 13.

CONCLUSION

CenturyLink's petition should be granted.

Melissa E. Newman
Jeffrey S. Lanning
1099 New York Avenue, NW
Suite 250
Washington, DC 20001
(202) 429-3120

Respectfully submitted,

Craig J. Brown
/s/Craig J. Brown
Tiffany W. Smink
1801 California Street
10th Floor
Denver, CO 80202
(303) 992-2503

Attorneys for

CENTURYLINK

June 26, 2012