

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 an 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

REPLY COMMENTS OF CENTURYLINK

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EXECUTIVE SUMMARY

In its initial comments, CenturyLink urged the Commission, in resolving the intercarrier compensation (ICC)-related issues raised in the *Further Notice of Proposed Rulemaking (FNPRM)*, to remain cognizant of potential limitations to its legal authority and to generally proceed with caution. Many of the initial comments of other parties echo these principles. However, certain comments proposed approaches that would go too far in each of the broad areas addressed in the *FNPRM* -- bill and keep implementation, potential further regulatory action toward end user charges and the ICC replacement portion of the Connect America Fund (CAF ICC), and IP interconnection:

Bill and Keep Implementation. Certain parties in their initial comments urge the Commission to move aggressively to adopt further regulatory changes for originating access and the variety of terminating carrier and intermediate carrier functions that do not fall within the bill and keep end state established by the *USF/ICC Transformation Order* or the transition thereto. Similarly, many of these same parties urge the Commission to adopt network edge definitions that would now shift still further network costs to legacy incumbent local exchange carriers (ILECs) without providing any effective mechanism for them to obtain compensation for those services. The Commission should reject these comments and proceed in accordance with the comments of CenturyLink and numerous other parties who advocate: (1) that there should be no further regulatory action regarding ICC charges for these services, and (2) that, should the Commission take any such action, it should be accompanied by adequate revenue recovery. This approach is warranted because of the distinct characteristics of originating access and these terminating carrier and intermediate carrier functions at issue. In all events, any action should be delayed until the *USF/ICC Transformation Order* bill and keep transition has been completed.

Regulatory action as sweeping as that accomplished in the *USF/ICC Transformation Order* demands a “cooling off” time period or natural pause during which the Commission and the states can evaluate the reform process and make any required adjustments to alleviate any unintended consequences.

Similarly, the Commission should establish a default network edge for carriers of last resort who continue to be subject to end-user rate regulation that establishes the edge for traffic terminating to the ILEC’s end users at the ILEC’s first point of switching in the call path to the ILEC called party. This rule would establish the edge for traffic the ILEC terminates to the other provider’s end users at that same location. Whatever policy rationale may exist for forcing terminating carriers to recover from their end users the network costs associated with traffic terminating to those end users, that rationale does not extend to these other carrier rate elements. Nor does it support a network edge definition that would require carriers to look solely to their end users for recovery of costs in providing these other elements, such as elements associated with intermediary services.

The Commission should also reject the comments of certain parties advocating that the Commission simply eliminate tariffs, without establishing an alternative process by which default arrangements can be adopted easily.

Further Regulatory Action Toward End User Charges and CAF ICC Support. The Commission should also reject the calls of certain parties in their comments that the Commission take further regulatory action regarding end user charges and CAF ICC support at this time. As CenturyLink and numerous other parties demonstrated in their initial comments, it would be arbitrary and capricious to impose a new ICC regime based on a foundational finding that carriers can and should look to their own end users for cost recovery, while simultaneously

eliminating the only mechanisms by which carriers might do that. No party rebuts that demonstration and, indeed, those parties advocating for such a result wholly ignore this concern.

IP Interconnection. The Commission should allow IP-to-IP interconnection arrangements to be driven by economics and efficiency, rather than regulatory mandates as advocated by certain parties. All voice providers, including ILECs, have tremendous incentives to migrate TDM networks to IP, to take advantage of the substantial cost savings and improved functionality of IP technology as quickly as possible, and ultimately to remain competitive with other IP-based competitors. Once a provider has transitioned its local voice network to IP in a given market, it will naturally seek to exchange voice traffic with other providers through IP-to-IP interconnection arrangements.

This migration to IP-based voice services will fundamentally alter the economic principles underlying the Commission's current TDM-based interconnection rules, enabling the Commission to rely on market forces to ensure reasonable arrangements for the exchange of VoIP traffic. ILECs have neither ubiquitous IP networks nor market power with respect to VoIP services. As the Commission has suggested, many providers believe that the interconnection arrangements for the exchange of VoIP and other forms of Internet traffic will likely converge over time, as standards and practices evolve to maintain QoS across networks. With this convergence, VoIP will be merely another IP service exchanged through the system of commercially-negotiated transit and peering arrangements that have functioned so successfully through the development of the Internet.

In the meantime, the Commission has already established an obligation for ILECs to interconnect for the exchange of VoIP traffic. Any additional rules would be premature and unwarranted. As noted by Comcast, "[i]n these early stages of VoIP IP-to-IP interconnection

development, regulations based on incorrect assumptions about the optimal future trajectory of these arrangements could hinder the industry's growth, stunt the development of innovative technologies and commercial arrangements, and ultimately risk dangerous intervention into IP data interconnection."¹ This is particularly true given the absence of any evidence of market failure in this area. ILEC-specific interconnection requirements would be particularly unwarranted, in light of the Commission's limited legal authority under section 251(c)(2) and the negative impact of tilting the marketplace in favor of one category of providers, at the expense of interconnection arrangements that are economically efficient on a collective basis.

¹ Comcast at 25.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
I. INTRODUCTION.....	1
II. DISCUSSION	2
A. The Commission Should Reject Comments That Propose Overly Aggressive Approaches To The Bill And Keep Implementation Issues Raised In The <i>FNPRM</i>	2
1. The Commission Should Reject Comments Calling For Elimination Of Originating Access And Terminating And Intermediate Carrier Rate Elements Falling Outside Of The Existing Bill And Keep Transition.....	2
2. The Commission Should Reject Comments Calling For Network Edge Definitions That Likewise Shift Still More Costs To Legacy Incumbent Carriers In A Manner That Is Inconsistent With The Policy Rationale For The Commission's Bill And Keep Approach.....	7
3. The Commission Should Reject Calls To Eliminate Tariffs Without Establishing An Adequate Alternative Default Arrangement.....	10
B. The Commission Should Reject Calls For Further Regulatory Action Toward End User Charges And CAF ICC Support	11
C. The Inevitable Migration To IP-To-IP Interconnection For Voice Services Should Be Driven By Economics And Efficiency, Rather Than Commission Mandates	11
1. All Voice Providers Have Significant Incentives to Migrate to IP	12
2. The Migration from TDM to IP Networks Will Alter the Economic Principles Underlying the Current Regulatory Structure for TDM-Based Interconnection	13
3. Any Additional Exercise of Commission Authority Over IP Interconnection Is Premature and Otherwise Unwarranted	18
a. Industry Standards and Practices Are Still Evolving	18
b. Further Regulation of IP-to-IP Interconnection Will Lead to Inefficient Network Design, Endless Disputes and New Forms of Arbitrage.....	19
c. There Is No Evidence of Market Failure Regarding IP-to-IP Interconnection.....	21
d. ILEC-Specific Interconnection Requirements Would Be Particularly Misguided	23

i.	The Commission Lacks Legal Authority to Mandate IP Interconnection Obligations Under Section 251(c)(2) for ILECs or Their Affiliates.....	23
ii.	Application of Section 251(c)(2) in this Context Would Preclude Efficient IP Interconnection Arrangements	27
III.	CONCLUSION	29

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REPLY COMMENTS OF CENTURYLINK

I. INTRODUCTION

CenturyLink submits these reply comments regarding Sections XVII. L-R of the *Further Notice of Proposed Rulemaking (FNPRM)* in the above-captioned proceeding¹ -- which address

¹ See *In the Matter of Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform - Mobility Fund*, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 (rel. Nov. 18, 2011) (*USF/ICC Transformation Order*), *Order Clarifying Rules*, DA 12-147, rel. Feb. 3, 2012, Erratum, rel. Feb. 6, 2012, Application for Review, USCC, *et al.*, filed Mar. 5, 2012, *Further Clarification Order*, DA 12-298, rel. Feb. 27, 2012; *pets. for recon. pending; pets. for rev. of the Report and Order pending, sub nom.* IN RE FCC 11-161 (10th Cir. No. 11-9900, Dec. 16, 2011).

potential further regulatory action regarding intercarrier compensation (ICC) beyond that which was already accomplished in the *USF/ICC Transformation Order*.

II. DISCUSSION

A. The Commission Should Reject Comments That Propose Overly Aggressive Approaches To The Bill And Keep Implementation Issues Raised In The *FNPRM*

1. The Commission Should Reject Comments Calling For Elimination Of Originating Access And Terminating And Intermediate Carrier Rate Elements Falling Outside Of The Existing Bill And Keep Transition

Much of the *FNPRM* is devoted to seeking comment regarding the proper ICC treatment for originating access and for a variety of terminating carrier and intermediate carrier functions that do not fall within the bill and keep end state established by the *USF/ICC Transformation Order* or the transition thereto. As CenturyLink demonstrated in its initial comments, providers of these originating access and terminating and intermediate carrier functions should be able to continue to charge separately for these functions under the new rules.² If the Commission reduces or eliminates the ability to charge for such functionality, it will only stifle such competition as carriers will be disincented from further building out these facilities. A large and diverse group of commenting parties agree with these principles with respect to some or all of these types of services and likewise support excluding them from bill and keep treatment.³ But, certain parties argue that at least some of these services should be reduced to bill and keep as

² CenturyLink Comments at 2-21.

³ MIEAC at 4-9; Neutral Tandem at 2-4; NECA, *et al.* at 9-19; Cbeyond (originating access) at 5-9; COMPTTEL (originating access) at 33-35; Hypercube (originating access) at 14-15; Moss Adams Companies at 4-7; Nebraska Independent at 2-5; ITTA at 2-5; AT&T at 51-66; Verizon at 4-9; Frontier at 2-7; GVNW 8-13; Windstream at 3-5.

well.⁴ These parties seem to call for this treatment in knee-jerk fashion as they uniformly fail to account for the distinct characteristics of these services that clearly distinguish them from the terminating network functionality that the *USF/ICC Transformation Order* includes in the bill and keep transition. Many also either ignore the need to attend to a recovery mechanism for these services or affirmatively advocate either for no recovery mechanism or for an even less effective mechanism than was provided for in the *USF/ICC Transformation Order* for the termination functions reduced there.⁵ The Commission should reject these comments and proceed in accordance with the comments of CenturyLink and numerous other parties advocating that the Commission take no further action regarding ICC charges for these services, or that any such action be delayed until the *USF/ICC Transformation Order* bill and keep transition has been completed and be accompanied by adequate revenue recovery.⁶

As CenturyLink and other parties detailed in their comments, as an initial matter, the Commission should recognize the clear limitations upon its legal authority regarding these services and the general need to proceed with caution in light of the massive scope of the changes already accomplished in the *USF/ICC Transformation Order*.⁷

⁴ Leap Wireless at 3-6 (originating access); Cbeyond at 9-11 (terminating carrier functions); COMPTTEL (same) at 2-8; Metro PCS at 4-6 (originating access and terminating carrier functions); CTIA at 3-5 (same).

⁵ See, e.g., CTIA at 5; Cbeyond at 8-9; COMPTTEL at 10-13.

⁶ There was little or no comment beyond CenturyLink's comments regarding how the Commission should handle other rate elements not addressed by the transition set forth in the *USF/ICC Transformation Order* for example, the variety of flat rate charges and outside the edge elements, all forms of transit and transient signaling. They are separately charged for today. Accordingly, there should be no dispute that carriers should be able to separately charge for them going forward.

⁷ CenturyLink Comments at ii, 2-5, 11, 16-21. See also AT&T at 58-62; Cbeyond at 5-9; MIEAC at 6-8.

Even more fundamentally, the Commission must attend to the distinct characteristics of these services in undertaking any regulatory action with respect to related ICC charges. As CenturyLink and other parties discuss in their comments, originating access is essentially an input to an IXC's long distance service.⁸ The IXC in essence leases the connectivity between the IXC's customer and the IXC's facilities in order for that IXC's customer to initiate a long distance call. The LEC is only part of the call stream because it facilitates the ability of the IXC to receive traffic from its own paying customer. Unlike with terminating access and traditional (local) reciprocal compensation, the IXC chooses to offer the service to the end user, receives payment from the end user, and bills the end user for use of the service. If the Commission were to eliminate originating access charges and not permit the originating LEC a recovery opportunity for the lost revenue, the originating LEC will not be compensated for use of its network. And, even if the originating LEC were given revenue recovery via an additional charge placed on the end user, the long distance customer would pay twice for the same connectivity. This dynamic distinguishes originating access from both the originating and terminating ends of traditional reciprocal compensation traffic flows and from the terminating side of access traffic flows. Moreover, originating access is different from terminating access in another important way. One might argue that a terminating monopoly phenomenon exists for terminating access service. In other words, one might argue that a terminating access charge cannot be avoided by the IXC handling a long distance call. And, one can argue that a long distance carrier is not able to choose to *not* terminate traffic in high cost areas and therefore can not adequately control termination costs. However, a long distance carrier can choose to not originate traffic in high cost areas. Thus, where originating access charges exist, a long distance carrier can reasonably

⁸ CenturyLink Comments at 7-11. *See also* COMPTEL at 34.

set prices, terms and conditions of its service, based upon its own costs plus known and predictable originating access costs. Given these attributes, it simply doesn't make sense from a policy standpoint to reduce or eliminate originating access charges and replace them with end-user charges.

A similar conclusion follows for both local and intraLATA transit and access "transit." These services are, by definition, provided by carriers that do not have an end user in the call flow. Carriers incur costs in providing these services and competitive alternatives exist for the provision of these services. And, carriers charge separately for these functions today in both access and reciprocal compensation call flows. Carriers providing these services must be able to obtain compensation from the carriers whose end users are generating and receiving the calls. No party seriously disputes this contention, but rather, numerous parties resurrect their previous arguments that the Commission should now rule that transiting services should be subject to section 251(c) interconnection obligations and, as a result, that ILECs have a mandatory obligation to provide such services and must provide them at TELRIC-based rates.⁹ As CenturyLink's comments detailed and the Commission itself acknowledged in the *USF/ICC Transformation Order*, these services today are considered transit when provided in connection with local and intraLATA traffic and jointly provided switched access (JPSA) when provided in connection with access traffic.¹⁰ The *USF/ICC Transformation Order* specifies that the transition it establishes leaves local and intraLATA transit services untouched and subjects access "transit" or JPSA services to the cap but otherwise leaves those services untouched.¹¹

⁹ See, e.g., MetroPCS at 8-10; Cbeyond at 11-14.

¹⁰ CenturyLink Comments at 17. See also *USF/ICC Transformation Order*, ¶¶ 1311-1313.

¹¹ CenturyLink Comments at 16-18. See also *USF/ICC Transformation Order*, ¶¶ 819, 1311-1312 and n. 2367.

Numerous parties join CenturyLink in their comments in advocating that these services continue to be subject to a light touch approach or that these services be moved toward further de-regulation.¹² Indeed, for local and intraLATA transit services, those services should already be deemed completely de-regulated services where prices are established by the market and there are many competitive alternatives.¹³ There is no reason to treat access “transit” or JPSA services any differently.

Similarly, the transport and other rate elements provided by a terminating carrier that are not subsumed in the bill and keep end state and transition also have distinct characteristics warranting different treatment.¹⁴ Whether provided as part of access or non-access call flows, these rate elements are distinct from the terminating network functions that are subject to the bill and keep transition under the *USF/ICC Transformation Order* (i.e., the tandem switching, transport and end office functionality of tandem-owner terminating traffic and the end office functionality of a non-tandem-owner terminating traffic). These are all elements where terminating carriers incur additional costs beyond those terminating network functions. There are competitive alternatives for these services and terminating carriers charge separately for these functions today in both access and reciprocal compensation call flows.

In short, given the distinct characteristics of originating access and these terminating carrier and intermediate carrier functions falling outside of the *USF/ICC Transformation Order*'s bill and keep end state, ICC charges for these services should not be subjected to further

¹² See, e.g., AT&T at 58-62; MIEAC at 4-5; Neutral Tandem at 2-4.

¹³ CenturyLink Comments at 17-18. See also CenturyLink Apr. 18, 2011 Comments at 75-77 (discussing clarifications with respect to transiting, including that transit service is not subject to sections 251 and 252 and that transit service providers have no mandatory obligation to provide such service).

¹⁴ CenturyLink Comments at 12-15; AT&T at 52-58; Neutral Tandem at 2-4.

regulatory action. For all these rates, the cap already ensures that carriers will not be able to shift costs to these rate elements. If the Commission were to eliminate the ability of carriers to impose ICC charges to recover the cost of these services, it would only create new opportunities for arbitrage. The *USF/ICC Transformation Order* has already created opportunities for arbitrage as bad actors will seek to leverage the ability to impose costs on terminating carriers without incurring any financial responsibility due to the Commission's failure to-date to incorporate balance of traffic considerations into its new rules.¹⁵ These arbitrage opportunities will be amplified still further if the Commission were to now extend bill and keep treatment to other terminating carrier functionality and to originating access and intermediate carrier functions. Moreover, to do so without providing any new recovery mechanism to compensate carriers for the costs of providing these services would, in addition to being subject to legal challenge,¹⁶ be wholly non-credible from a policy standpoint.

2. The Commission Should Reject Comments Calling For Network Edge Definitions That Likewise Shift Still More Costs To Legacy Incumbent Carriers In A Manner That Is Inconsistent With The Policy Rationale For The Commission's Bill And Keep Approach

These same concerns -- the potential harm of eliminating a carrier's ability to recover the costs of still more network functions beyond those covered by the *USF/ICC Transformation Order's* bill and keep end state, the availability of competitive alternatives for these functions, and the potential for arbitrage -- must be attended to in addressing the network edge issues raised in the *FNPRM*. Indeed, the *FNPRM* financial edge issues implicate the very same terminating carrier and intermediate carrier functions discussed above. The *FNPRM* begins with the following premise: "the 'edge' is the point where bill and keep applies, a carrier is responsible

¹⁵ CenturyLink Comments, at 26-28; Verizon at 7-9.

¹⁶ See, e.g., CenturyLink Comments at 9, 11, 16-21.

for carrying, directly or indirectly by paying another provider, its traffic to that edge.”¹⁷

Conversely, a terminating carrier is responsible for carrying traffic from the edge to its end user. For all the reasons discussed above and in CenturyLink’s prior comments, the Commission should define the edge consistent with the principles detailed above regarding the appropriate treatment for terminating carrier and intermediate carrier functions that do not fall within the bill and keep end state transition established by the *USF/ICC Transformation Order*. CenturyLink’s edge proposal in its initial comments accomplishes this. Specifically, the Commission should establish a default network edge for carriers of last resort (COLR), particularly where accompanied by end-user rate regulation, that establishes the edge for traffic terminating to the ILEC’s end users at the ILEC’s first point of switching in the call path to the ILEC called party.¹⁸ Building from this foundational rule, competitive carriers and CMRS providers should be financially responsible for transporting that traffic in the other direction (*i.e.*, from the ILEC’s calling party to one of the other provider’s end users) as well from that same point on the ILEC network.¹⁹ This same edge rule should apply even to the extent that, in a given traffic arrangement, traffic only flows in one direction.²⁰ This rule would also be subject to specific guidelines regarding when carriers would be required to use dedicated rather than

¹⁷ As CenturyLink emphasized in its initial comments, “edge,” must be distinguished for purposes of this discussion from physical point of interconnection. CenturyLink Comments at 47. Because of this, the Commission should, for a bill and keep end state, clarify that the point of physical interconnection may be different from the point of financial responsibility. And, it should also clarify that, to the extent additional functionality is provided by a terminating carrier to transport traffic from the physical point of interconnection to an edge or point of financial responsibility that lies deeper in a terminating carrier’s network, terminating carriers remain free to charge separately for those services.

¹⁸ CenturyLink Comments at 21-24.

¹⁹ *Id.*

²⁰ *Id.*

common/tandem transport connections to the ILEC's end office.²¹ This approach will help maintain some economic and structural balance of PSTN interconnection in the bill and keep end state -- particularly where no account is given for the impact of out-of-balance traffic. In other words, when it comes to rules for network edges, the Commission must reflect the principles discussed above regarding originating access and terminating carrier and intermediate carrier functionality that currently lies outside the Commission's bill and keep transition. And, the Commission must also account for the unique impact of continuing carrier of last resort obligations and end-user rate regulation on legacy ILECs.

A number of parties proposed edge definitions that are not consistent with these principles.²² For example, a number of wireless parties and interests express their continued support for the Mutually Efficient Traffic Exchange (METE) proposal.²³ The Commission should reject these proposals. As these same parties acknowledge, the METE proposal is lacking adequate detail to even begin to ascertain its full impact.²⁴ And, what is known about the METE proposal is fundamentally flawed. For example, the METE proposal fails to account for COLR and end user rate regulation and other unique obligations of ILECs under the Commission's legacy regulatory framework. In addition, it incorporates edge definitions that effectively shift still more network costs to legacy ILECs. Indeed, these parties simultaneously oppose establishing any new recovery mechanism to enable ILECs to obtain compensation for those costs.²⁵ This approach, in addition to being subject to legal challenge for the reasons detailed

²¹ *Id.*

²² *See, e.g.*, CTIA at 6-7; MetroPCS at 11-12; Sprint Nextel at 26-49; COMPTTEL at 8-10.

²³ *See, e.g.*, CTIA at 5-7; Sprint Nextel at 30-31.

²⁴ *See, e.g.*, Sprint Nextel at 30 ("CTIA does not explain its METE proposal in detail").

²⁵ *See, e.g.*, CTIA at 5.

extensively in the initial comments, is also not credible as a policy matter. Indeed, it is wholly inconsistent with the underlying policy rationale of the Commission's bill and keep approach -- that carriers should now look to their end users for recovery of their network costs. Moreover, given the burden already imposed on end users due to the scope of the changes adopted in the *USF/ICC Transformation Order*, it must be recognized that any new recovery mechanism necessitated by further regulatory action regarding ICC charges could not and should not be imposed on end users. It would have to come from another source.

3. The Commission Should Reject Calls To Eliminate Tariffs Without Establishing An Adequate Alternative Default Arrangement

Numerous parties, in their initial comments, advocate that the Commission simply eliminate tariffs, without calling for the Commission to establish an alternative process by which default arrangements can be adopted easily.²⁶ Curiously, certain of these parties calling for the elimination of tariffs even oppose the extension of section 252 interconnection agreement rules to all telecommunications carriers.²⁷ In other words, they would leave carriers entirely without any mechanism for seeking agreements. CenturyLink joins numerous other parties in urging the Commission to reject these proposals and maintain either tariffs or another suitable default alternative.²⁸ As CenturyLink detailed in its initial comments, carriers should be able to continue to rely on tariffs during the transition to bill and keep.²⁹ And, the Commission must ensure that, even thereafter in a bill and keep end state, carriers have an immediately available default arrangement of some kind that can be entered into solely through a carrier's unilateral decision to

²⁶ CTIA at 9-10; Sprint Nextel at vi, 49-50.

²⁷ See, e.g., CTIA at 9-10.

²⁸ CenturyLink Comments at 25-26; GVNW at 14; Windstream at 12; ITTA at 4-5; NECA, *et al.* at 27-29; Nebraska Independent at 24; TelePacific at 4-5; XO at 6.

²⁹ CenturyLink Comments at 25-26.

exchange traffic.³⁰ Tariffs serve that purpose today. It may be possible to create an alternative default mechanism by which carriers can trigger the default rate and other mechanisms of the Commission's new rules without need for individual negotiation. But, in all events, some additional default alternative must be available – even in the event the Commission extends section 252 interconnection agreement rules to all carriers.

B. The Commission Should Reject Calls For Further Regulatory Action Toward End User Charges And CAF ICC Support

The Commission should also reject the calls of certain parties in their comments that the Commission take further regulatory action toward end user charges and CAF ICC support at this time.³¹ As CenturyLink and numerous other parties demonstrated in their initial comments, it would be arbitrary and capricious to impose a new ICC regime based on a foundational finding that carriers can and should look to their own end users for cost recovery, while simultaneously eliminating the only mechanisms by which carriers might do that.³² And, those parties advocating for such a result wholly ignore this concern. The Commission should not impose further constraints on ARC charges, should not modify the phase-out period for ICC-replacement CAF funding and should retain existing SLC mechanisms.

C. The Inevitable Migration To IP-To-IP Interconnection For Voice Services Should Be Driven By Economics And Efficiency, Rather Than Commission Mandates

Someday, TDM networks will be a thing of the past. Already, many providers view IP voice services as just another IP application, albeit one they may choose to provide with a higher quality of service (QoS) than other IP applications. In an all-IP world, it should be beyond

³⁰ *Id.*

³¹ *See, e.g.,* Comcast at 13-14; CTIA at 11-12; NASUCA at 6-8.

³² CenturyLink Comments at 28-32. *See also,* Windstream at 5-8; ITTA at 5-7; AT&T at 78-79; Frontier at 7-11.

dispute that regulation of interconnection for voice services will be no more necessary than it is for IP data services today. While this transition is likely to take a number of years, the Commission should consider the questions presented in the *FNPRM* -- and particularly the need for regulation of IP interconnection during this transition -- with this ultimate outcome in mind. An evaluation of the record leads to the conclusion that the adoption of rules for IP interconnection is premature and unnecessary and would hinder efficiency and innovation. In short, it would be “counterproductive for the Commission to impose rules grounded in a legacy regulatory regime that is designed *for an entirely different marketplace structure.*”³³

1. All Voice Providers Have Significant Incentives to Migrate to IP

IP technology offers tremendous benefits to telecommunications providers, as well as their customers and the public at large. IP voice services can be far more efficient than TDM voice services, leading to potential savings in network costs and the opportunity for innovative voice services and functionalities.³⁴ The resulting cost savings and new services from transitioning to IP also can improve the business case for extending or upgrading broadband networks in rural areas, leading to more broadband investment. At the same time, the Commission’s application of interstate access charges to VoIP has reduced incentives for LECs to exchange voice traffic in TDM. In order to stay competitive, therefore, every voice provider has significant incentives to transition their voice services to IP as expeditiously as possible. Given these incentives, all voice

³³ Comcast at 23-24 (emphasis supplied). Such rules also would send the wrong message to other governments and international organizations that are considering Internet regulation. Verizon at 21-22.

³⁴ See AT&T at 29-30; Bandwidth.com at 6.

providers are at least in the planning stages for the migration to IP, though CLECs and wireless providers generally are the farthest along in this transition.³⁵

Particularly for ILECs, however, the transition from TDM to IP will be very costly and therefore cannot be done overnight. Full conversion of CenturyLink's local ILEC networks to IP will cost billions of dollars. Windstream similarly estimates that it will cost more than \$200 million just to replace its working TDM switches with softswitches, plus \$500 million for broadband ports to voice-only customers.³⁶

Given these facts, the Commission should calibrate its policies to bolster existing incentives to move to IP, while avoiding regulatory mandates that would require providers to expend their limited network capital on premature requirements to deploy IP-to-IP interconnection for voice services.³⁷

2. The Migration from TDM to IP Networks Will Alter the Economic Principles Underlying the Current Regulatory Structure for TDM-Based Interconnection

As noted by Time Warner Cable, "[t]he central premise of interconnection mandates is that ILECs have ubiquitous networks that were developed over the course of decades for the provision of voice services and possess market power that they will exercise to thwart competition for such services."³⁸ None of these premises applies to IP networks and the interconnection of those networks. To the extent they have them at all, ILECs do not have

³⁵ While IP technology is prevalent in long distance networks, Verizon at 12, it generally is not widespread in ILEC local networks, though that is changing. For example, Verizon projects that its IP-originated voice traffic will increase five-fold by 2015. Verizon at 19.

³⁶ Windstream at 17. Frontier believes its full conversion to IP would cost hundreds of millions of dollars. Frontier at ii.

³⁷ See CenturyLink Comments at 53-55.

³⁸ Time Warner Cable at 16.

ubiquitous IP networks for voice services -- particularly compared to cable companies and other non-ILEC providers -- and are only in the initial stages of deploying them. ILECs also do not possess market power with respect to IP voice services, or, for that matter, any IP services at all. The Commission therefore should not transplant legacy interconnection mandates that were premised on the existence of ubiquitous ILEC voice networks to the new IP world where there are no incumbents. Instead the Commission should build on the tremendous success of the Internet, engendered by regulatory restraint, and allow IP voice providers to establish IP interconnections for voice services through commercial arrangements, in the same way that IP transiting and peering arrangements have developed free of regulatory oversight.³⁹

As the Internet continues to evolve, more diverse forms of interconnection have developed, “opening a variety of new paths,”⁴⁰ with IP networks now interconnecting “in a myriad of ways.”⁴¹ Growing redundancy “ensures that there are fewer and fewer opportunities for significant disruptions of the Internet based on a dispute between two networks.”⁴² Indirect interconnection, in particular, “plays an important role in facilitating efficient interconnection and delivery among carriers.”⁴³ Over time, prices for transiting have plummeted,⁴⁴ ensuring that “networks that either do not qualify for direct interconnection or have no interest in seeking

³⁹ See Verizon at 3. The commercial arrangements that underlie and self-regulate the Internet enable it to adapt quickly to market changes and innovations to best meet customers’ needs. Verizon at 11.

⁴⁰ Comcast at 36. See also Hypercube at 10 (“there are multiple network bridge providers, including Hypercube, available to make . . . indirect interconnection technically feasible and cost efficient.”)

⁴¹ US Telecom at 7.

⁴² Comcast at 37.

⁴³ Neutral Tandem at 2.

⁴⁴ AT&T at 14.

direct interconnection with myriad other networks nevertheless have a reasonable marketplace option.”⁴⁵

Some proponents of regulatory mandates curiously suggest that the success of the Internet is “irrelevant” because facilities-based VoIP providers generally maintain separate facilities and interconnection arrangements for IP voice and data traffic.⁴⁶ However, a diverse group of commenters assert that the interconnection arrangements for exchanging IP voice and data traffic may well converge over time.⁴⁷ These views are consistent with the Commission’s previous suggestion that, “[a]s networks evolve . . . it may make little sense for providers to maintain different interconnection arrangements for the exchange of VoIP and other forms of Internet traffic.”⁴⁸ Under this view, potential efficiency and cost savings of consolidating IP traffic on a single network will likely give carriers significant incentives to do so.⁴⁹

Of course convergence of IP data and voice networks will require the development of industry standards and practices regarding the hand-off of traffic that is typically carried on

⁴⁵ Comcast at 38.

⁴⁶ See Cbeyond at 28. See also Time Warner Cable at 11 (“Although ‘Internet Protocol’ has the word ‘Internet’ in it, IP-to-IP interconnection under Section 251 does *not* involve ‘traffic exchanges on the Internet.’”) (citation omitted, emphasis in original). Of course, many VoIP providers are successfully exchanging VoIP traffic through the same transiting and peering arrangements used to exchange Internet data traffic.

⁴⁷ See, e.g., AT&T at 19-25; Comcast at 27; Sprint Nextel at 16. Sprint Nextel goes so far as to ask the Commission to rule that “the POIs used with IP voice interconnection should presumptively be located at the places where IP network operators currently exchange non-voice traffic (so voice traffic can utilize the same IP facilities that non-voice traffic uses).” Sprint Nextel at 17. Similarly T-Mobile proposes an “Internet-Modeled Network.” T-Mobile at 2.

⁴⁸ *In the Matter of Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up*, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 26 FCC Red 4554, 4773-74 ¶ 679 (2011).

⁴⁹ See XO at 11 (noting that “cost efficiencies could often be achieved” by commingling voice traffic with Internet traffic).

“managed” IP networks. Over time, the necessary standards for maintaining QoS between IP networks are likely to evolve from the current “best efforts” delivery of traffic over the Internet. Indeed, even in the absence of such standards, some providers are already negotiating commercial interconnection arrangements for the efficient exchange of managed real-time services that include a voice component.⁵⁰ Therefore current distinctions between “managed” IP voice networks and IP data networks will likely fade over time, given potential efficiencies of consolidating voice and data networks.

This likely convergence leads to a number of conclusions. *First*, the migration of voice services to IP will obliterate distinctions between “ILECs” and “CLECs.” Instead customers will buy IP voice services from broadband ISPs, a marketplace in which ILECs are far from dominant.⁵¹ From its inception, the Internet marketplace “has been characterized by the absence of a dominant network,” with no terminating networks possessing market power that can reasonably be addressed by regulation.⁵² The Commission has already concluded that there is sufficient competition for these services to take a more deregulatory approach.⁵³ *Second*, there is

⁵⁰ AT&T at 10.

⁵¹ *Id.* at 4. If any group of providers is dominant in the provision of broadband ISP services, it is cable modem providers.

⁵² Comcast at 42.

⁵³ *In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798 (2002), *aff’d sub nom., NCTA v. Brand X*, 125 S. Ct. 2688 (2005). *In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for*

no reason to single out IP voice for disparate regulation, particularly given that it is only one of many real-time IP applications, and “will utilize a tiny fraction of capacity on IP networks.”⁵⁴ *Third*, the history of the Internet has demonstrated that no provider possesses a terminating monopoly for IP services. During the Internet’s astonishing development, IP transiting and peering arrangements have successfully grown and evolved without regulatory intervention. This is due largely to the availability and use of indirect interconnection; the price for peering arrangements is disciplined by providers’ ability to interconnect indirectly through transiting arrangements.⁵⁵ Given that IP voice will likely account for less than one percent of IP traffic overall, there is no reason to believe that its addition to IP networks will alter the current framework -- absent government intervention.

Some parties, including Ad Hoc and Time Warner Cable, assert that the migration from TDM to IP is no different than previous technological transitions, such as the move from analog to digital switches.⁵⁶ This is fundamentally wrong. These earlier transitions did not change the underlying economics of the network. Network facilities that route and carry IP traffic “are not add-ons to the legacy circuit-switched PSTN. They are wholly new networks and wholly new technologies.”⁵⁷ As noted, the transition to IP-to-IP interconnection will preclude any carrier from disadvantaging their rivals. The Commission therefore should not import legacy regulation to these non-legacy networks and services.

Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises; Consumer Protection in the Broadband Era, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853 (2005).

⁵⁴ See Sprint Nextel at 20.

⁵⁵ AT&T at 13-15.

⁵⁶ Ad Hoc at 2-8; Time Warner Cable at 7.

⁵⁷ Verizon at 9.

3. Any Additional Exercise of Commission Authority Over IP Interconnection Is Premature and Otherwise Unwarranted

The Commission has already ruled that ILECs have an obligation to accept IP-originated voice traffic.⁵⁸ Thus, today, there is a clear obligation for IP networks to interconnect to exchange voice traffic. Given the fundamental changes occasioned by the migration to IP, any additional exercise of Commission authority over IP-to-IP interconnection would be both premature and unwarranted. Additional Commission intervention, particularly at this stage, threatens to disrupt evolving industry standards and practices, lead to endless disputes and potentially spawn new forms of arbitrage. Given the lack of any evidence of market failure, Commission action is unneeded and unwarranted. That is particularly the case with regard to ILEC-specific interconnection obligations, which, in addition to being unlawful, would distort the development of efficient interconnection arrangements for IP voice traffic. The Commission should “allow the market to experiment and learn from real-world experience before concluding that a prescriptive regulatory regime for IP-to-IP voice interconnection would serve the public interest.”⁵⁹

a. Industry Standards and Practices Are Still Evolving

Commenters generally acknowledge that there are still numerous details that must be resolved by industry and individual providers to facilitate IP-to-IP interconnection.⁶⁰ Clearly, there is no standard interconnection method in place today.⁶¹ “[C]lear answers have yet to

⁵⁸ See Verizon at 25, n. 37 (citing *CRC* and *Time Warner Cable Declaratory Rulings* and other prior orders).

⁵⁹ Comcast at 25.

⁶⁰ See, e.g., AT&T at 19; Cbeyond at 25; Comcast at 23-25; Sprint Nextel at 21-22; Verizon at 23-25.

⁶¹ See Verizon at 16.

emerge about the optimal structure, scope, and terms of these voice IP-exchange agreements; they are evolving in response to changes in technology, service offerings, and the specific needs of the parties seeking such arrangements.”⁶² Because CLECs and ILECs have had “little, if any, experience with interconnecting with each other in IP,” such interconnection is likely to raise complex implementation issues.⁶³ Given this complexity, Commission rules addressing these issues are likely to be “unworkable,”⁶⁴ and there is no reason to believe that a regulator will be in a better position to resolve these difficult issues than the parties themselves. As Google suggests, “it is in the best interests of all for an industry-led body to take a leading role, at least initially” to address technical issues and develop IP-to-IP interconnection standards and requirements.⁶⁵

b. Further Regulation of IP-to-IP Interconnection Will Lead to Inefficient Network Design, Endless Disputes and New Forms of Arbitrage

Further regulation of IP-to-IP interconnection arrangements for voice services will disrupt the natural evolution of IP networks in multiple ways:

- a. Further Commission regulation will interrupt the potential convergence of interconnection arrangements for IP voice and data services -- as providers generally seek to avoid having Commission regulation apply to currently unregulated IP transiting and peering arrangements.⁶⁶
- b. Further regulation will also lead to inefficient network design, as providers configure their IP networks to fall within or outside the reach of that regulation, to gain the advantage or avoid the disadvantage of the Commission’s rules.⁶⁷ It will

⁶² Comcast at 20.

⁶³ See *Cbeyond* at 26.

⁶⁴ See *id.*

⁶⁵ Google at 6.

⁶⁶ See Comcast at 27.

⁶⁷ AT&T at 25.

also hinder the natural evolution of IP networks and interconnection. For example, a number of providers suggest that, in the long run, IP interconnection for voice services will likely require fewer points of interconnection than exist today for TDM interconnection, with LATA- or state-specific interconnection points eventually giving way to more regional POIs, potentially aligned with existing IP peering points.⁶⁸ Regulation would disrupt this evolution by granting one category of providers a regulatory entitlement to insist on IP interconnection arrangements that may be advantageous to them but less efficient overall.

- c. Further regulation will result in endless disputes about whether a particular interconnection arrangement falls within the scope of the Commission's rules. Innovative IP services that include both voice and non-voice components are particularly apt to generate such disputes.⁶⁹ Adoption of the Commission's proposal to impose the costs of TDM-to-IP conversions on a provider that has an IP network but chooses to interconnect in TDM would likely place the Commission in the middle of additional disputes.⁷⁰ If IP interconnection disputes are subject to the section 252 arbitration process, "disputes about IP interconnection arrangements' specific details would be resolved not by technical experts, but by more than fifty different state public utility commissions applying their own views of appropriate IP interconnection arrangements."⁷¹
- d. Intrusive regulatory intervention will "risk creating unforeseen arbitrage opportunities and costly inefficiencies that are not yet understood or predictable."⁷²
- e. Finally, and most disturbingly, further regulation will "risk dangerous intervention into IP data interconnection"⁷³ -- an outcome that nearly all commenters advise against -- and put the Commission on a "very slippery regulatory slope."⁷⁴ NCTA and Time Warner Cable naively imply that the Commission can draw clear lines between interconnection for IP voice services and interconnection for other IP services.⁷⁵ In practice, this distinction is likely to be illusory and fraught with the potential for disputes. Google and Sprint Nextel's

⁶⁸ See, e.g., Leap Wireless at 12; Sprint Nextel at 16; T-Mobile at 3; Verizon at 15-16; Windstream at 16; XO at 10; Y-Max at 9.

⁶⁹ AT&T at 23-24.

⁷⁰ See, Cbeyond at 25-26; Frontier at 13.

⁷¹ Verizon at 34.

⁷² Comcast at 20.

⁷³ *Id.* at 25-26.

⁷⁴ *Id.* at 27.

⁷⁵ NCTA at 7; Time Warner Cable at 17.

requests to extend regulation to other IP services vividly illustrate the potential for mission creep if the Commission exercises authority over IP interconnection for traditional voice services.⁷⁶

In the absence of any evidence that the market is not working, the Commission should not impose further regulation on IP-to-IP interconnection arrangements.

c. There Is No Evidence of Market Failure Regarding IP-to-IP Interconnection

As noted, all voice providers have tremendous incentives to migrate to IP services, to enjoy inherent cost savings, to offer innovative services and -- most fundamentally -- to compete against rivals that have already upgraded their networks. With those upgrades, providers will naturally migrate to IP-to-IP interconnection arrangements to exchange traffic. As Comcast notes, “VoIP service providers are in the opening stages of developing commercial voice IP interconnection, and there is no market failure or impending crisis that requires immediate regulatory intervention.”⁷⁷ The Commission therefore should “tread carefully” to allow commercial IP interconnection arrangements for voice to develop on their own.⁷⁸ Indeed, VoIP providers already are beginning to enter into commercial IP interconnection for the exchange of voice traffic without regulatory intervention.⁷⁹ And providers such as Hypercube offer third-party conversion services between TDM and IP.⁸⁰

⁷⁶ See Google at 7 (urging the Commission to “be alert to discriminatory or unreasonable practices that may arise for other types of non-Internet-based traffic that may be carried on carrier managed IP networks (e.g., video chat, HD voice); Sprint Nextel at 4 (“the same default rules the FCC develops for simple IP voice applications can later be used” with “emerging IP multimedia applications” such as presence, instant messaging, video and image sharing, short message services and multimedia messaging services).

⁷⁷ Comcast at 21.

⁷⁸ *Id.*

⁷⁹ *Id.* at 20.

⁸⁰ Hypercube at 2.

Sprint Nextel attempts to concoct a story of anticompetitive intent by ILECs that have declined to engage in IP interconnection arrangements for voice traffic,⁸¹ while ignoring the obvious and legitimate reason that ILECs generally have not been willing to enter into IP interconnection arrangements -- that the vast majority of their voice customers are still served on TDM networks. Not surprisingly, CLECs generally are farther along in the transition to IP than ILECs given that they tend to serve more densely populated areas.⁸²

ILECs cannot magically deploy IP networks overnight. For CenturyLink alone, a complete migration to IP will cost billions of dollars. It is eminently reasonable for a carrier to seek to continue to exchange traffic in TDM as long as most of its customers are still served on TDM networks. Once an ILEC has converted its local voice network to IP in a given geographic area, it will make economic sense for it to exchange voice traffic for that area with other IP providers through IP-to-IP interconnection arrangements. Where its customers are still served on a TDM network, VoIP traffic will generally have to be converted to TDM for termination anyway, so such conversions do not impose “needless costs,” as Time Warner Cable suggests.⁸³ In the meantime, there is no indication that the lack of widespread IP interconnection for local voice services is retarding the development of VoIP services or voice competition.⁸⁴

⁸¹ See Sprint Nextel at 5-6.

⁸² CenturyLink Comments at 44.

⁸³ See Time Warner Cable at 11.

⁸⁴ Indeed, by 2010, interconnected VoIP subscriptions accounted for nearly one-third of wireline residential subscriptions. See *Local Telephone Competition: Status as of December 31, 2010*, Industry Analysis and Technology Division, Wireline Competition Bureau, available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DOC-310264A1.pdf, at 2. (FCC Oct. 7, 2011). See also Leap Wireless at 12 (the “same Internet exchange points and peering and transit arrangements are already used to carry IP-voice [and IP data] traffic today.”).

d. ILEC-Specific Interconnection Requirements Would Be Particularly Misguided

The requirements of section 251 “were meant to address the difficulties of competitors in providing voice telephony service in a marketplace where incumbent LECs were monopolists with ubiquitous facilities and 100 percent market share.”⁸⁵ As discussed, the migration to IP networks will fundamentally alter the economic principles upon which current TDM interconnection obligations are based, including “network effects” arising from ubiquitous coverage and dominant market share. Just as with other IP-based services, ILECs will lack any dominance in the provision of IP voice services. In light of this ongoing transformation, importation of section 251(c)(2) obligations to IP interconnection would be particularly misguided, both in terms of the Commission’s limited legal authority and sound public policy.

i. The Commission Lacks Legal Authority to Mandate IP Interconnection Obligations Under Section 251(c)(2) for ILECs or Their Affiliates

CLEC proposals to impose section 251(c)(2) obligations on IP interconnection would stretch the Commission’s authority beyond the limits of that provision in at least four respects.

First, the Commission could not require IP-to-IP interconnection pursuant to section 251(c)(2) without first classifying VoIP as a telecommunications service *and* a local exchange or exchange access service.⁸⁶ Most parties acknowledge this fact, at least implicitly.⁸⁷ For example, Time Warner Cable recognizes that there is no “plausible statutory basis to extend interconnection regulations to private carriers or to providers of information services.”⁸⁸ As

⁸⁵ NCTA at 5.

⁸⁶ *See* CenturyLink Comments at 49.

⁸⁷ *See, e.g.*, NASUCA at 8-9 (arguing that VoIP should be classified a telecommunications service).

⁸⁸ Time Warner Cable at 16.

noted by the California PUC, without FCC clarity on the classification of VoIP services, it is at least doubtful whether the states would have authority to resolve disputes about IP interconnection, which could result in “protracted litigation in federal courts.”⁸⁹

COMPTEL’s claim that facilities-based VoIP providers are entitled to section 251(c) interconnection because they are “telecommunications providers”⁹⁰ is unmoored from the language of the statute, which gives those rights only to telecommunications “carriers” for the transmission and routing of “telephone exchange service and exchange access.”⁹¹ Likewise, XO cites no legal authority for its unfounded assertion that it is not necessary for the Commission to classify VoIP service to confirm a telecommunications carrier to interconnect on an IP basis.⁹²

Second, proposals to mandate IP interconnection would grant CLECs access to a “yet unbuilt superior network,” in contravention of the Eighth Circuit’s decision in *Iowa Utilities Board*.⁹³ For instance, Leap Wireless would have the Commission require carriers to accept traffic in IP even if they have not transitioned their customers to IP, thereby diverting capital resources that could be used to upgrade underlying broadband networks.⁹⁴

⁸⁹ California PUC at 15.

⁹⁰ COMPTEL at 17.

⁹¹ 47 C.F.R. § 251(c)(2).

⁹² XO at 14.

⁹³ See CenturyLink Comments at 47-49 (citing *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813 (8th Cir. 1997), *subsequent history omitted*). U.S. TelePacific erroneously asserts that the 8th Circuit’s decision that ILECs are not required to build a superior network for its competitors applies only to section 251(c)(3) unbundling requirements and not section 251(c)(2) interconnection. U.S. TelePacific at 19. The court struck down “the Commission’s rules requiring incumbent LECs to alter substantially their networks in order to provide superior quality interconnection[.]” *Iowa Utils. Bd. v. FCC*, 120 F.3d 813, n. 33 (1997). The IP-to-IP interconnection that U.S. TelePacific and others are seeking would require much more than mere network modifications that the court contemplated. *See id.*

⁹⁴ See Leap Wireless at 13.

Third, section 251(c)(2) does not entitle requesting carriers to a particular format of interconnection.⁹⁵ Claims that section 251(c)(2) is “technologically neutral” do not lead to the conclusion that IP interconnection is covered by that provision.⁹⁶ Sections 251 and 252 “were designed for ‘narrowband’ voice (*aka*, TDM circuit-switched) networks that most parties acknowledge are becoming obsolete.”⁹⁷ Technological neutrality does not mean that the Commission’s rules should be unchanging in light of technological changes that alter the assumptions underlying the requirements of that provision and therefore demand a different regulatory model.⁹⁸

Finally, the Commission cannot subject an affiliate of an ILEC to section 251(c) obligations, as CLECs advocate,⁹⁹ unless that affiliate is deemed to be a “successor or assign” of an ILEC.¹⁰⁰ Likewise, the Commission cannot “treat the facilities of ILEC affiliates as if they are the ILEC’s facilities,” based on an unfounded assumption that ILECs are “separately deploying IP networks via their affiliates in order to avoid IP interconnection obligations under section 251.”¹⁰¹

Dating back to the U S WEST/Qwest merger, legacy Qwest used its affiliate Qwest Communications Company, LLC (QCC) to serve large business customers with geographic presences both within and outside Qwest’s ILEC region. With section 271 authorization, Qwest

⁹⁵ Verizon at 30.

⁹⁶ See Coalition for Rational Universal Service and Intercarrier Reform at 11; Time Warner Cable at 6.

⁹⁷ Sprint Nextel at 6.

⁹⁸ See Verizon at 10.

⁹⁹ See, e.g., Charter at 7; COMPTTEL at 26-28; Sprint Nextel at 13-15.

¹⁰⁰ See 47 U.S.C. § 153(5).

¹⁰¹ See XO at 15.

was permitted to provide in-region long distance services through QCC; in fact, it was required to do so by section 272.

Like other IXCs, QCC has long used IP technology for transport in its long haul network and now offers IP termination services for long distance traffic. In addition, QCC offers three other types of VoIP services to business customers across the country: Integrated Access,¹⁰² Managed VoIP,¹⁰³ and SIP Trunking.¹⁰⁴ These services are a natural evolution of QCC's product portfolio, and necessary for QCC to remain competitive, rather than some nefarious attempt to evade regulation.¹⁰⁵ These services are offered by numerous competitors, are highly competitive and are subject to significant price compression.¹⁰⁶ To the extent it uses the facilities of CenturyLink ILEC operating companies, QCC does so as a wholesale customer, consistent with applicable Commission regulations.

COMPTEL and U.S. TelePacific misread the D.C. Circuit's *Ascent* decision when they suggest that corporate affiliates of ILECs should be treated as ILECs themselves merely because

¹⁰² CenturyLink Integrated Access provides IP voice and data over the same T-1 circuit. CenturyLink website, available at <http://www.centurylink.com/business/products/bundled-solutions/integrated-access-secure/integrated-access.html>.

¹⁰³ CenturyLink Managed VoIP permits up to 200 VoIP users per location and a total of 500 across all customer locations, bundled with Internet access service. CenturyLink website, available at <http://www.centurylink.com/business/products/products-and-services/voip-adv-voice/managed-voip-bundle.html>.

¹⁰⁴ CenturyLink SIP Trunking is designed to work in conjunction with CenturyLink IQ Networking service, which includes a secure, managed, fully interoperable and scalable suite of wide area network (WAN) services. CenturyLink website, available at <http://www.centurylink.com/business/products/products-and-services/voip-adv-voice/sip-trunk.html>.

¹⁰⁵ See Charter at 7. CenturyLink's ILEC affiliates are not providing IP-to-IP interconnection to their non-ILEC affiliates, as Charter suggests. See *id.*

¹⁰⁶ For example the per-session price for CenturyLink SIP Trunking has dropped by two-thirds since the service was launched two years ago.

they offer IP services.¹⁰⁷ *Ascent* involved a situation where the affiliate in question was using facilities transferred from the affiliated ILEC to serve customers previously served by the ILEC.¹⁰⁸ That is not the case here. Moreover, under the *Non-Accounting Safeguards Order*, an affiliate's provision of services that were traditionally provided by the ILEC does not cause the affiliate to be regulated as an ILEC.¹⁰⁹

ii. Application of Section 251(c)(2) in this Context Would Preclude Efficient IP Interconnection Arrangements

In light of the lack of industry standards for IP interconnection, some CLECs suggest that the Commission need “only” clarify that these arrangements are subject to section 251(c),¹¹⁰ to create a regulatory “backstop” for disputes.¹¹¹ However, such clarifications would upend the current framework for IP interconnection arrangements, stifling innovation and efficiency and prompting endless disputes and opportunities for arbitrage.¹¹² Today, through commercial negotiations, IP providers have an incentive to establish arrangements that are economically

¹⁰⁷ See *COMPTEL* at 26-27; *U.S. TelePacific* at 15.

¹⁰⁸ See *Ascent v. FCC*, 235 F.3d 662, 668. See also *In the Matter of Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements*, Memorandum Opinion and Order, 17 FCC Rcd 26869, 26873 ¶ 7, n. 22 (2002) (noting that, under the statute, the definition of “Bell operating company” specifically excludes affiliates of BOCs unless they are a successor or assign of the BOC).

¹⁰⁹ 11 FCC Rcd 21905, 22056 ¶ 312 (“We find no basis . . . to find that a BOC affiliate must be classified as an incumbent LEC under section 251(h)(2) merely because it is engaged in local exchange activities.”)

¹¹⁰ See, e.g., *Cbeyond* at 21; *Charter* at 2-3; *Time Warner Cable* at 8-9. There is tremendous irony in cable providers like Charter and Time Warner Cable demanding that section 251(c) obligations be imposed on ILECs for IP interconnection. Given cables' dominant position in the market for broadband services, there is no rationale for treating ILECs as the incumbent in this way.

¹¹¹ See *Bandwidth.com* at 7-8; *Google* at 6; *Windstream* at 15.

¹¹² *AT&T* at 2.

efficient on a collective basis.¹¹³ Application of one-sided section 251(c)(2) obligations would completely change this dynamic, giving a CLEC an incentive to maximize its own interests, knowing that it can always initiate a dispute before a regulator to enforce regulatory-mandated rates, terms and conditions.

In this light, COMPTEL's assertion that the Commission should "reaffirm" the application of the section 251/252 framework to IP interconnection and then "allow the market an opportunity to evolve within that framework"¹¹⁴ is ridiculous. Extension of that framework to IP interconnection will destroy any commercial market for those services.¹¹⁵ Why would a CLEC use third-party interconnection when it is entitled to regulatory-mandated prices and conditions for IP interconnection under section 251? The Commission should allow the market for IP interconnection to evolve by declining to exercise additional authority over those arrangements.

¹¹³ Comcast at 45.

¹¹⁴ COMPTEL at iv.

¹¹⁵ Similarly the government mandates that Hypercube seeks are inconsistent with the reliance on the market that it also advocates. *See* Hypercube at 3-4, 11. As noted by Comcast, awarding regulatory rights to particular market participants eliminates their incentive to find collectively efficient arrangements. Comcast at 45. Moreover, there are limitations on ILECs' ability to enter into commercial agreements for matters covered by section 251. *See In the Matter of Qwest Corporation; Apparent Liability for Forfeiture*, Notice of Apparent Liability for Forfeiture, 19 FCC Rcd 5169 (2004).

III. CONCLUSION

For the reasons stated above, CenturyLink respectfully requests that the Commission take the action described herein.

Respectfully submitted,

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