

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
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337

**COMMENTS OF  
QWEST COMMUNICATIONS INTERNATIONAL INC.**

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July 12, 2010

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QWEST COMMUNICATIONS INTERNATIONAL INC.**

Qwest Communications International Inc. (Qwest), submits these comments in accord with the Federal Communications Commission's (Commission) *Notice of Inquiry and Notice of Proposed Rulemaking* in the above-referenced dockets.<sup>1</sup>

**I. INTRODUCTION AND SUMMARY**

To accomplish the goal of universal availability of broadband service in the United States, it is time to explicitly and directly support broadband service, especially deployment of broadband-capable networks to unserved areas, through a modified universal service high-cost program. In the National Broadband Plan, the Commission has set out several recommendations for transitioning the current Universal Service Fund (USF) high-cost program to explicit support for broadband. In this *NOI* and *NPRM* the Commission is taking its first steps to evaluate and implement some of those recommendations. Qwest commends the Commission not only for its preparation of a comprehensive plan to effectively disseminate and harness the benefits of

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<sup>1</sup> *In the Matter of Connect America Fund; A National Broadband Plan for Our Future; High-Cost Universal Service Support*, Notice of Inquiry and Notice of Proposed Rulemaking, WC Docket Nos. 10-90 and 05-337, GN Docket No. 09-51, FCC 10-58, rel. Apr. 21, 2010 (*NOI* or *NPRM*, as appropriate).

broadband technology throughout our Nation, but also for its continued focus on moving forward to make the Plan a reality.

The Plan estimates that 14 million people living in seven million housing units in the U.S. do not have access to terrestrial broadband infrastructure that can provide the Plan's target broadband service.<sup>2</sup> The Plan recommends modifying the existing universal service high-cost program to address this gap and support broadband deployment to unserved areas.

Reform is critical. The current high-cost program is already in need of significant repair and should be overhauled in order to explicitly and effectively support broadband-capable networks. Since its inception, the high-cost mechanism for distributing high cost model support to "non-rural" carriers has been ineffective in distributing support. Any mechanism for distributing support for broadband must not replicate the errors of that mechanism. Further, as the Commission has recognized, the current non-rural high-cost model is not designed to consider broadband network costs and in turn does not provide support that would enable non-rural providers to take on those costs in many rural areas. To accomplish universal broadband service, new mechanisms that directly support broadband deployment to those areas must be designed and implemented.

And, there are other inefficiencies in the existing high-cost program that should be addressed and not perpetuated in reforming the program to support broadband. High-cost support to competitive carriers -- in areas that could not economically sustain one carrier -- has caused the fund to increase dramatically, while steering the fund well off its intended course of ensuring universal availability of essential communication services. Irrespective of whether it

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<sup>2</sup> NBP, Chapter 8.1 at 136.

ever has, the high-cost program is not now providing support in a manner that effectively advances its fundamental goal of universal availability of essential communication services.

The Commission needs to refocus high-cost support to broadband and voice services, target support to truly high-cost areas, and eliminate extraneous support so that at most not more than one provider of fixed service and one provider of mobile service is receiving support. To accomplish this, Qwest supports the Commission's recommendation to establish a Connect America Fund (CAF) to support universal access to broadband and voice services. There should be two CAF mechanisms: (1) a competitive bidding process to support broadband deployment to unserved areas and (2) a model for ongoing support of broadband and voice service in high-cost areas. The Commission should move forward with implementing a competitive bidding process as soon as possible, but will need to take more time to properly design a model for on-going high-cost support. The CAF competitive bidding process should be a competitively-neutral process that permits any provider that meets the pre-screening requirements to submit a funding proposal to deploy broadband to an unserved area. The Commission would award a one-time grant to a single winner that would support the costs of deploying broadband infrastructure and providing broadband and voice service in the funded area for a finite time period.

The Commission should recognize that the proposed broadband availability target speeds may significantly increase the cost of universal broadband, and that the proposed broadband availability target upload speed of 1 Mbps may not be well aligned with current broadband technology used in the industry. The Commission should carefully review the speeds it has selected to define the universal broadband availability target. The Commission should insure that carrier-of-last-resort (COLR) obligations only extend to the area for which broadband universal service support is provided.

In designing the CAF model, the Commission needs to first create a framework for open evaluation of the model. To develop the CAF model, the Commission should apply a modified version of its ten criteria for forward-looking economic cost determinations that it originally established in designing the first forward-looking high-cost model for distributing support to “non-rural” carriers. Model net-gap support should be based on forward-looking cost less forward looking revenues of supported services, and inputs to the model will need to be updated periodically for the model to remain effective in distributing high-cost support. The Commission may also be able to use a well-designed CAF model to determine reserve prices for competitively bid unserved areas.

As the Commission moves forward with establishing a competitive bid process, and designing the CAF model, the Commission should also take steps to eliminate ineffective high-cost support and to design the transition of other legacy high-cost program support to support for broadband and voice service in high-cost areas. The Commission should not begin to phase out interstate access support (IAS) for incumbent carriers until after it implements the CAF so that carriers and investors have time to adjust to a new support regime and to ensure that broadband deployment is advanced and not inhibited by carriers’ loss of this critical support. The Commission should cap legacy high-cost support at 2010 levels to stem further growth of the USF. And, the Commission should move forward with phasing out excessive and ineffective competitive eligible telecommunications carrier (CETC) high-cost support including accelerating that process by promptly limiting high-cost support to wireless carriers to one handset per household.

## II. NOTICE OF INQUIRY

### A. **The Commission should establish the CAF to support universal access to broadband and voice services.**

The Commission seeks comment on the NBP recommendation to establish the CAF to support universal access to broadband and voice services. Qwest agrees with this recommendation. The Commission should use a competitive bidding process to determine and distribute support for broadband deployment to unserved areas. A high-cost support model based on forward-looking costs should primarily be used as a mechanism to distribute on-going support to high-cost areas, but also may be useful in setting reserve prices for the competitive bidding process, if the model can demonstrate accuracy at small, selective geographic areas. The Commission can move forward with designing and implementing a competitive bid process without waiting to complete the model.

The Commission should take care not to replicate the problems of the existing high-cost program in the new fund to support broadband. Although there may be more than one mechanism for distributing CAF support (*e.g.*, a competitive bidding process for deployment to unserved areas and a model for on-going support to high-cost areas), these mechanisms should apply to all types of carriers providing or seeking to provide the requisite services. There should not be different mechanisms for distributing support to different types of carriers.<sup>3</sup> Additionally, the support should be targeted to small geographic areas, no larger than a wire center. Broad averaging is problematic in both the current rural and non-rural funds, causing disparate treatment between some rural and non-rural communities with similar household densities and wire center sizes.

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<sup>3</sup> The CAF model may calculate different support amounts that would be needed for different technologies in the same area, but the same general approach to calculating costs (*e.g.*, forward-looking costs less revenues) would apply to all technologies.

**B. CAF mechanism #1: Competitive bidding process to support broadband deployment to unserved areas.**

A competitive bidding process should enable a more efficient funding process for determining support to unserved areas than a computer model could. A model will not capture every cost that will be incurred in extending broadband plant in a specific geographic area. This is especially true where varied technologies can be used to provide broadband services. Instead, providing support using a competitive bidding mechanism should enable funding to be provided in the most efficient manner. Each potential provider will evaluate the costs to extend their network to provide broadband service throughout a specific area with the competitive pressure to enter a bid that will accomplish broadband deployment in the most cost-effective manner.

The CAF competitive-bidding mechanism should be a competitively-neutral process that permits any provider that meets the pre-screening requirements to submit a funding proposal. For each proposed funding area, the mechanism would award a one-time grant to a single winner that would support the costs of deploying broadband infrastructure and providing broadband and voice service in the funded area for a finite time period.

Initially, bidders would submit proposals for deploying broadband infrastructure and providing broadband services for the term of the grant period, similar to the American Recovery and Reinvestment Act (ARRA) proposals. But, other parties may file their intention to bid on the same or a substantially overlapping unserved area within 30 days of the initial party's filing in order to commence a competitive bidding process. Each bidder proposes the unserved area it wishes to serve and provides the geographic boundaries of the area in its bid. In the early years of the program, the Commission could target unserved areas where it is less costly to provide broadband service, in order to maximize the number of unserved households connected each year. But the initial target areas should be those where no broadband service at any speed is

currently available or is only available to a small percentage of locations within the area. Only after broadband service is provided to these areas should universal service funds be used to increase broadband speeds to universal target speeds in other areas. Winning bidders should be limited to charging no more than 125% of the state-wide average rate for comparable broadband service. By instituting this new USF mechanism to spur broadband to unserved areas, the Commission can ensure progress toward the goal of universal access to broadband services in a rational and cost-effective fashion.

For the competitive bid process, a bidder would identify an unserved area on which it intended to bid to deploy broadband service throughout the identified area at the required speeds and quality level. Others could bid to provide broadband service for the same area or an unserved area that had at least 50% overlap with the unserved area identified by the original bidder. Support would be capped at \$3,000 per location passed and projects that connected more locations at a lower cost per location would receive a higher priority for earlier funding. A winning bidder would be subject to reporting requirements including construction progress reports and financial accounting, and would have COLR obligations to provide service within a pre-established price range to all locations in the area for a committed number of years.

A competitive bid process can be implemented quickly once rules are adopted for the process and without waiting for full development of a support model. The Commission could move forward with one-time grants to deploy broadband to unserved areas, while addressing on-going support in a later CAF rulemaking. The Commission could move forward with a competitive bid process without relying on a model to set a reserve price.

The competitive bid process would include a prescreening process, a bidding period, a bid selection period, and a service delivery and reporting period that would include provider-of-last resort obligations. Components of the bid process would include the following:

#### Prescreening process

- Companies certified as Network providers need no further qualification.
- Bidders may be:
  - For-profit corporations
  - Limited liability companies
  - Cooperative or mutual organizations
  - Non-profit foundations
- Bidders must have demonstrated technical ability to deploy and manage broadband networks.
- Bidders must have demonstrated financial resources and management resources to profitably operate a broadband network.
- Bidders must have demonstrated ability to meet accounting, monitoring, reporting requirements.

#### Pre-bid intent

Potential bidders must provide pre-bid statements of intent demonstrating their ability to meet pre-screening requirements.

#### Definitions

- *Service Area* - the geographic area proposed by the initial bidder for funding.
- *Broadband* – Commission-specified downstream and upstream speeds.
- *Unserved Area* – a service area defined by the bidder with no access to facilities-based, terrestrial broadband service, either fixed or mobile, at the minimum broadband speed or an area where no more than a Commission-specified percent of the locations have access to facilities-based, terrestrial broadband service, either fixed or mobile, at the minimum broadband speed.

#### Bids

##### Application and submission information

- Projects must be deemed technically feasible and include system design, network diagram and project timeline, certified by a professional engineer.
- Identify Unserved Area based on definitions of available speed and the % households meeting unserved definition.
- Geographically define area with map files.
- Current available services and speeds and providers.
- Upgrade speeds available to X percent of the locations in the defined area.
- Amount of funding required.
- Amount of funding per location passed.
- Potential number of new location at upgraded speed.
- Maximum price to consumers for upgraded tiers of service.

- Projects must be financially feasible and sustainable. Provide business case information and identify CAF funds necessary for positive business case. The business case must demonstrate that the project has sufficient revenues to cover its expenses, has sufficient cash flow to service its debts and obligations as they come due. Project must demonstrate a positive cash balance for each year of the forecast period.

#### Bid Selection Criteria

- Cost-effectiveness – assistance is limited to no more than \$3,000 per location passed. Projects that connect more locations at lower cost per location passed are given higher priority.
- Number of unserved locations that will be served at completion of project.
- Proportion of served locations (prior to project) in the service territory.
- Additional weight will be given to projects that deliver higher broadband speeds.<sup>4</sup>

Counter-bids are allowed for areas where 50 percent overlap can be demonstrated.

- Intent to file counter-bid must be filed within 30 days of original bid.
- Counter-bid must be filed within 45 days of statement of intent to counter-bid.

#### Compliance and Accountability

- Reporting requirements.
- Construction progress reports.
- Accounting for funds spent.
- Financial reporting for completed projects.
- Service delivery with COLR obligations for FCC-specified term.

#### **C. The proposed broadband availability target speeds may significantly increase the costs of universal broadband deployment.**

The NBP describes the “National Broadband Availability Target” as every household and business location in America having access to affordable broadband services with (1) actual download speeds of at least 4 Mbps and actual upload speeds of at least 1 Mbps, and (2) an acceptable quality of service for the most common interactive applications.<sup>5</sup> The NBP also recommends that the Commission review and reset this target every four years.

In order to be most beneficial to the Commission’s intent to accomplish universal access to broadband, lower minimum upstream and downstream speeds may be a more practical target.

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<sup>4</sup> For example, if two projects add the same number of locations at the same cost, but one project provides higher speeds, that higher speed project would get priority.

<sup>5</sup> NBP, Chapter 8.1 at 135.

The Commission has acknowledged that not significantly increasing the size of the universal service fund is an important consideration in designing a new fund to support broadband services, including broadband deployment to unserved areas.<sup>6</sup> While there are DSL-based technologies that can provide an actual download speed of 4 Mbps and should be able to provide a stable throughput upload speed of 1 Mbps in low density areas, such as VDSL2, these technologies will be quite expensive to deploy in low density unserved areas. The key cost driver is the feeder fiber deployment that will be required to support this technology. DSL-based technologies using copper feeder can be deployed in the same area at a much lower cost, but those technologies will not support the target speeds identified by the Commission. If the Commission implements the 4 Mbps down, 1 Mbps up as the universal target, areas that are currently receiving broadband via these lower speed technologies will be deemed unserved areas for purposes of accomplishing the broadband universal service target. To accomplish universal service at the current target speeds significant support will be needed to upgrade these areas as well. This will not only increase the total amounts needed to accomplish and maintain universal broadband, but it could also cause support to be diverted for an extended period of time from areas where there is still no broadband service at all. In proposing the 4 x 1 target speeds it seems the Commission has made a choice to provide new broadband service to fewer new locations each year instead of selecting lower speeds, such as 1.5 Mbps down and 896 kbps up, that could provide a broadband service to 2-5 times as many locations. The Commission should

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<sup>6</sup> See *In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service; Joint Petition of the Wyoming Public Service Commission and the Wyoming Office of Consumer Advocate for Supplemental Federal Universal Service Funds for Customers of Wyoming's Non-Rural Incumbent Local Exchange Carrier*, 25 FCC Rcd 4072, 4114-15 ¶ 81 (2010).

carefully review this decision and the minimum broadband speeds it will require for receipt of universal service support.

**D. The proposed broadband availability target upload speed of 1 Mbps is not well aligned with current broadband technology used in the industry.**

Additionally, even those DSL-based technologies that can accomplish an actual download speed of 4 Mbps, cannot necessarily accomplish a stable throughput upload speed of 1 Mbps. This seems to be a concern for ADSL2+. In calculating the Broadband Availability Gap, the Commission has correctly recognized that “the ADSL2+ standard is widely deployed today in telco DSL networks”, but also assumed, perhaps incorrectly, that it is the minimum standard that will achieve the broadband availability target.<sup>7</sup> In calculating the gap the Commission has also recognized that DSL (which for purposes of the gap model is a 12,000 ft ADSL2+ network) tends to be less expensive to deploy in low-density areas than wireless service, “particularly where terrain drives the need for smaller cell sites that drive up the cost of wireless.”<sup>8</sup> If the Commission requires an actual minimum upload speed of 1 Mbps for broadband universal service support, it may inadvertently eliminate use of the very DSL technology it assumed could help accomplish universal broadband at the lowest cost in many rural areas. The Commission should re-evaluate whether it has effectively aligned broadband target speeds with current broadband technology generally used in the industry.

**E. Broadband COLR obligations should only extend to the area for which broadband universal service support is provided.**

Additionally, it is reasonable that the National Broadband Availability Target, being the target for universally available broadband service, would reflect the level of broadband service

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<sup>7</sup> *NOI/NPRM*, Exhibit 4-AH, Downstream Speed of a Single ADSL2+ Line as a Function of Loop Length (24 AWG) at 86.

<sup>8</sup> *Id.* at 10, 86.

that would receive universal service support in high cost areas. But, to accomplish that universal objective, the Commission must ensure that any COLR obligations to provide the supported broadband service are limited to the specific geographic areas for which a provider receives USF support to provide that broadband service. There should not be any requirement that broadband USF support would depend on a carrier providing broadband throughout existing areas where it has been designated a COLR or eligible telecommunications carrier (ETC) for voice services.

Any COLR obligations for broadband should be co-extensive and consistent with the universal service broadband support. Thus, under a competitive bidding mechanism, the winning bidder could have a COLR obligation for the area for which the grant was awarded and for the term of the grant. Similarly, if a provider is only receiving targeted universal service support from the CAF model to maintain its broadband network in a specific area, any COLR obligation should be limited to the targeted area in which it has already deployed its infrastructure. In this case, there should not be a COLR obligation to expand its broadband network footprint.

Also, if the cost of providing the supported level of broadband service to certain locations in a supported area is not economically reasonable, *i.e.*, above a Commission-determined cost-per-location threshold that would trigger use of an alternative technology, the COLR should be permitted -- perhaps through a waiver process -- to meet its obligations through alternative means, such as working with a satellite broadband provider to provide the broadband service.

**F. CAF mechanism #2: CAF model for on-going support of broadband and voice services in high-cost served areas.**

At this point in a model selection process, it is more critical to establish a framework for evaluating a model rather than discussing model characteristics. The Commission must establish an open process and provide access to documented model algorithms, model input data, and the

ability to run the model itself through a wide range of sensitivity exercises which involves modifications to inputs and algorithms. The underlying geographic data must also be available for scrutiny. It is only when all concerned parties have access to the model, its processes, and underlying data that a substantive debate can take place to distill the critical model features and data that will best be able to spur broadband investment in unserved and high cost areas. As part of this process the Commission should utilize an updated version of its ten criteria used to establish the original non-rural high cost model for calculating high-cost support.

Qwest's experience with the current cost-model based mechanism for distributing high-cost support to non-rural carriers thus far leaves much room for concern in starting down a similar path of cost-model based support. The greatest flaw in the existing non-rural high-cost program is not specific to the design of the cost model itself, but rather is the model's application using state level averaging. The rural program has the parallel flaw of using study area averaging and masking high-cost areas within the study area.

Perhaps the biggest flaw in the current non-rural cost model itself is that the Commission has failed to update the geographic inputs to the model to sufficiently reflect changes in deployed infrastructure, and network costs.<sup>9</sup> In a new cost model the Commission should require periodic updates to the geographic model inputs.

If the Commission correctly adjusts the manner in which it uses a cost model to determine high-cost areas, a well-designed forward-looking cost model could be an effective tool for determining and distributing on-going universal service support for broadband and voice services in high-cost areas. There should be one model that can be used for the entire existing

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<sup>9</sup> But, this flaw is dwarfed by the problems created in the Commission's methodology of averaging costs on a statewide basis to determine which states should receive support for their high-cost areas, instead of directing support directly to high-cost areas identified by the model.

network for calculating on-going operational support. A model may also be used to calculate the incremental cost of extending the existing network using different technologies to reach unserved households if it effectively incorporates existing network nodes and can prove itself to be accurate in a wide range of real world situations.

The Commission should start with the NBP model, not the Hybrid Cost Proxy Model (HCPM). It should be a model that determines support based on the geographic and population characteristics of the area served, rather than the regulatory classification of the incumbent telephone company that serves the area. The Commission should incorporate state mapping data into the model to more accurately determine unserved areas. For the model, support should be based on forward-looking costs less forward-looking revenues of services to be supported. For the currently proposed universal broadband availability target of 4 Mbps down and 1 Mbps up, supported services would not include broadband video, as that would require higher download speeds. Forward-looking revenues should include assumptions of reasonable take rates and consideration of what consumers are actually purchasing and paying for supported services. The Commission should take care not to replicate the problems of the existing HCPM in the new CAF model. For instance, determining which areas are high-cost areas should not be determined through statewide averaging, but should instead be targeted more directly to high-cost areas in need of on-going support.

- 1. The Commission should apply its ten criteria for forward-looking economic cost determinations to designing the CAF model.**

In 1997, when the Commission was developing a forward-looking cost model for distributing high-cost support to non-rural carriers, it set out ten criteria that any methodology used to calculate the forward-looking economic costs of providing universal voice service in

rural, insular, and high cost areas must meet.<sup>10</sup> In designing a model to calculate the forward-looking economic costs of providing universal broadband and voice service in rural, insular, and high-cost areas, the Commission should again apply those ten criteria, with a few modifications.

Generally, those criteria are the following:

1. The technology assumed in the cost model should be the least-cost, most-efficient, and reasonable technology for providing the supported services that is currently being deployed.
2. Any network function or element, such as loop, switching, transport, or signaling, necessary to produce supported services must have an associated cost.
3. Only long-run, forward-looking economic cost should be included. The long-run period must be long enough for all costs to be treated as variable and avoidable. Costs are not to be embedded costs but are to be based upon an examination of the current cost of purchasing facilities and equipment.
4. The rate of return must be either the authorized federal rate of return or the state's prescribed rate of return for intrastate services.
5. Economic lives and future net salvage percentages used in calculating depreciation expense must be within the Commission-authorized range.
6. The model should estimate the cost of providing service for all businesses and households within a geographic region.
7. A reasonable allocation of joint and common costs must be assigned to the cost of supported services, so that forward-looking costs do not include an unreasonable share of the joint and common costs for non-supported services.
8. The cost model and all underlying data, formulae, computations, and software associated with the model must be available to all interested parties for review and comment. All underlying data should be verifiable, engineering assumptions reasonable, and outputs plausible.
9. The model should include the capability to examine and modify the critical assumptions and engineering principles.

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<sup>10</sup> *In the Matter of Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, 8913 ¶ 250 (1997).

10. The model should deaverage support calculations to the wire center serving area level at least, and, if feasible, to even smaller areas such as a Census Block Group, Census Block, or grid cell.

In applying these criteria to designing the CAF model, the Commission should modify the fourth and fifth criteria. The Commission should make sure that the rate of return and the economic depreciation lives appropriately reflect the rapidly changing technology used to deploy broadband and the economic life of the technology, rather than reflecting the Commission's historical authorized rate of return and authorized range in depreciation and salvage values. And, the Commission should take special care to follow the last three criteria. It is critical to designing a model that effectively grounds its costs in today's marketplace realities that the details of the model be available for review and comment. This provides an important opportunity for those designing and building broadband networks to confirm whether the model appropriately reflects the costs involved. Additionally, the model should deaverage support calculations to the wire center or sub-wirecenter, and distribute support directly to those areas with the highest costs. This will better target support to the areas with the highest costs than the current use of state-wide averaging in the high-cost support mechanism for non-rural carriers. With these modifications, the criteria remain sound guideposts for designing a forward-looking economic cost model that should be used to develop any cost model for broadband universal service high-cost support.

Additionally, as the Commission recognizes, the current NBP model is not sufficiently accurate to be used to determine which areas are unserved or to determine on-going support to high-cost broadband areas. To be effective, the model will need to incorporate the data from the state mapping efforts that are currently underway. This should provide the necessary geographic detail of service availability to appropriately target and calculate support. Once the Commission

is able to incorporate this data into and complete its design of the model it should provide another opportunity for notice and comments on the model.

**2. The NBP cost model employs several approaches that should be adopted in a CAF cost model.**

As noted above, the Commission needs to take additional steps to make the design of the cost model more transparent and ultimately needs to use the model in a manner that will distribute support to high-cost areas in a more targeted manner than the way the current forward-looking cost model is used to distribute high-cost support to non-rural carriers. Nevertheless, thus far, several aspects of the NBP cost model design are appropriate for incorporating into a CAF model. In the NBP model the Commission has identified the appropriate technology platforms that should be included in the model, and sufficiently explained leaving broadband provided by satellite out of the model.

The “scorched node” approach for the model, which assumes existing infrastructure locations (*e.g.*, central offices, towers, remote nodes) and then estimates the incremental costs of brown field build outs and only estimates green field builds where there is no nearby infrastructure is a reasonable approach for estimating forward-looking costs. The Commission has also identified appropriate nodes for different broadband technologies. A propagation model to determine actual costs of a wireless deployment seems unnecessarily complex for this endeavor. The Commission should be able to get an idea of propagation problems in an area if it is using existing tower sites, fiber-link locations and microwave-link locations for wireless brownfield deployments. In using the scorched node approach the Commission should use as much actual data on existing infrastructure as it can.

Overall it makes sense not to include current high-cost support in determining future CAF support because the current support will be phased out.

Revenues used to determine “net-gap” support should be forward-looking potential revenues, that also take into account reasonable take rates for the supported services. Reasonable take rates will need to be based on accumulated experience such as surveys, census data and other information gathering regarding consumer broadband service subscriptions. In determining on-going support, in areas where there is more than one broadband provider, to determine a reasonable take rate, the Commission needs to look at the overall take rate of broadband service for all of the providers together.

And, while the net-gap support should be based on forward-looking costs less forward-looking revenues, the Commission still needs to examine the broadband services customers are currently purchasing and the amounts they are paying as that will reflect the services and prices that customers are actually able and willing to pay. This should provide a useful, realistic measure for helping to determine the appropriate forward-looking revenues that should be used in determining net-gap support. The Commission would need to use customer surveys to learn what customers are paying for different combinations of services.

**3. For the CAF cost model to be effective in determining broadband universal service support, inputs to the model should be updated periodically.**

Ideally, all inputs to the model should be updated in sync. But, because revenues are likely to change faster than costs, even if updates to the model costs are less frequent, the revenue inputs to determining net-gap support should be updated annually. The Net present value of cash flows should not be calculated for a period longer than ten years and even that is likely to be on the long side for these networks. Twenty years, as currently proposed, is too long to expect anything to remain static with respect to these services. The networks will be updated continuously and the technology is changing rapidly. The Commission should make sure that depreciation lives match up with the net present value (NPV), and are set at an appropriate time

period for the life of a network without significant updates. The Commission should also consider linking the NPV to updates of the technology modeling. The Commission has proposed redefining the broadband availability target every four years. If the Commission does so, it also will need to tie the redefined target speeds into the business case calculation for the net present value as well as the depreciation lives, so that companies receiving support are adequately compensated for having to continuously up-grade their systems to the supported level of service.

**4. The CAF model should be used to determine ongoing support for broadband and voice services in high-cost areas.**

The model should be used to determine which served areas have sufficiently high operational and capital costs so as to need on-going support and at what support level. Competitive bidding should not be used to determine on-going support in served areas. A forward-looking cost model should be used to determine on-going support for all providers. Support based on historical, embedded costs should be phased out.

The Commission should use *total* costs of providing *supported* services to determine on-going support. In other words, all the costs of maintaining the network to provide voice services and broadband service at the targeted speeds and service quality level should be included. But, the costs of maintaining the network to provide broadband service at higher speeds and to provide video service should not be supported by the CAF.

If the Commission intends to use the proposed broadband availability target of at least 4 Mbps of actual download speed, 4 Mbps will not support broadband video services. That download speed will only support Internet and voice services. In turn, any additional costs or revenues from providing video services should not be considered in determining support. Only the costs and revenues associated with the supported services -- broadband (however ultimately defined) and voice -- should be included.

The model should have the ability to calculate costs of and target support to wire center and sub-wire center areas. For each wire center the model should be able to distinguish the costs for the higher-density core area of the wire center from the less dense areas outside the core.

**5. The CAF model may be able to determine reserve prices for competitively bid unserved areas.**

Qwest agrees with the methodology used in the NBP model of using the second-lowest cost technology for establishing a reserve price. A competitive bidding process will better determine the support needed to deploy broadband to unserved areas, but the model could be a useful check on that process. This will depend on whether the model can accurately depict the geographic area which is the subject of the bid and accurately identify the closest facility node from which facilities would be extended. The Commission should rely on the competitive bidding process to calculate the costs and permit the bidders to propose the unserved geographic area in which they wish to deploy services. Any modeling approach will not sufficiently capture the reality of providing service to an unserved area because it will not have sufficient detail of the closest network facilities.

**III. NOTICE OF PROPOSED RULEMAKING**

In the *Notice of Proposed Rulemaking*, the Commission seeks comment on certain proposed specific reforms to the existing high-cost program that could be implemented more immediately to make the existing program more effective while transitioning the program to focus its support on broadband. The Commission should move forward with eliminating inefficient high-cost support, including phasing out all CETC high-cost support. The Commission should not begin to transition IAS support for incumbent carriers before it has implemented a mechanism that appropriately repurposes that funding to support broadband networks.

**A. The Commission should not begin to phase out IAS for incumbent carriers until after it implements the CAF.**

The Commission seeks comment on eliminating IAS and transferring those funds to the CAF to support broadband-capable networks. In both the NBP and *NPRM* the Commission notes that when the Commission created the IAS in 2000 it stated that it would review the funding mechanism in five years to ensure that the funding was sufficient but not excessive, but the review has not occurred.<sup>11</sup> Now, in lieu of performing such a review, it seems the Commission intends to quickly and wholly eliminate the fund and repurpose that fund to support broadband networks. Rather than eliminate IAS in the rapid manner it seems to be proposing, the Commission should phase out IAS as it turns up the CAF.

First, rapid and complete elimination of IAS support goes against one of the NBP's guiding principles for comprehensive USF reform that there should be no flash cuts.<sup>12</sup> The Commission expressly recognized in the NBP that "[n]ew rules should be phased in over a reasonable time period. Policymakers must give service providers and investors time to adjust to a new regulatory regime." While the end goal may be to fully repurpose IAS to support broadband networks, any such refocusing of IAS must be accomplished through a reasonable transition. The Commission recognized this in the NBP when it stated that:

Freezing ICLS and refocusing IAS could have distributional consequences for existing recipients; individual companies would not necessarily receive the same amount of funding from the CAF as they might otherwise receive under the legacy programs. As the FCC considers this policy shift, it should take into account the impact of potential changes in free cash flows on providers' ability to continue to provide voice service and on future broadband network deployment strategies.<sup>13</sup>

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<sup>11</sup> NBP, Recommendation 8.6 at 147; *NPRM* ¶ 57.

<sup>12</sup> NBP, Chapter 8.3 at 143.

<sup>13</sup> *Id.*, Recommendation 8.6 at 147.

Second, the Commission should heed its own advice. Eliminating interstate access support for incumbent carriers will significantly undermine those carriers' ability to invest in their networks. If the Commission intends to use the CAF to increase broadband deployment in rural areas served by "non-rural" carriers, it will need not only to replace the lost IAS funding but also to provide additional funding to support that deployment. The Commission must consider these effects in designing any refocusing of IAS.

Third, any transition from IAS must recognize and include the historical purpose of the fund in any repurposing of that support. IAS was created to provide an explicit funding source for price-cap carriers to recover higher costs of service that had previously been recovered through implicit subsidies in their interstate access charges. Simultaneously, the Commission raised, but capped subscriber line charges. The Commission should not remove this critical support for price-cap carriers before it has an alternative mechanism in place to replace this support. The Commission should not eliminate IAS funding for incumbent carriers before it implements a mechanism for distributing high-cost support for deployment of broadband to unserved areas. Any transition from IAS for incumbent carriers needs to be prudently aligned with the CAF mechanisms for distributing broadband support. Annual CAF funds available for broadband support should include the amount of any annual IAS reduction as well as the annual reduction in CETC funding.

**B. The Commission should cap legacy high-cost support.**

As an interim measure to help control the size of the current USF the Commission should cap legacy high-cost support provided to incumbent carriers at 2010 levels. There should be a cap on each fund -- high-cost model, high-cost loop, safety-valve, safety-net, local switching support and interstate common line support. The cap should be by study area, such that for each study area, the amount an ETC gets per-line, per-study area is frozen. If an ETC loses lines, it

loses the support for the lines lost. But, the Commission should not ratchet down the cap on support per line each year if lines are lost. Instead, the amount of support per-line per-study area should remain frozen at the same 2010 levels until longer-term reform is accomplished.

**C. The Commission should move forward with phasing out all CETC high-cost support.**

As the Commission has recognized, CETC high-cost support is determined solely from the incumbent carrier's support and thus is not provided based on the CETC's own costs, nor determined based on the costs of the most efficient technology to support telephone service in a given area. And, providing funding for multiple ETCs in areas that would not be economic for a single provider to serve without support is excessive and an inappropriate use of high-cost support.

Consequently, Qwest agrees with the Commission that competitive ETC high-cost support should be phased out over five years, with that money being redirected into the CAF. Five years is a reasonable period of time for providers to adjust investment expectations and should be consistent with the five-year phase out process to which Verizon Wireless and Sprint have already agreed. Additionally, Qwest agrees that to accelerate reduction of inefficient high-cost spending, the Commission should immediately eliminate support for more than one wireless phone in a household.<sup>14</sup> There is no rational justification for providing support to wireless providers that are three and four times those granted the wireline incumbent. Qwest has estimated a \$463 million savings in USF if high-cost USF support were limited to one handset per wireless family plan.<sup>15</sup>

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<sup>14</sup> *Id.*, Chapter 8 at 148.

<sup>15</sup> *See Qwest ex parte*, CC Docket No. 96-45, filed Feb. 4, 2010.

And, the Commission has already tentatively concluded that IAS and ICLS support for CETCs should be eliminated.<sup>16</sup> Qwest agrees with the Commission that the purposes underlying IAS and ICLS support to ILECs are not served in providing this support to CETCs and should be phased out. The Commission should promptly move forward with phasing out CETC high-cost program support that is not advancing universal service and refocus that support to effectively and efficiently promote access to broadband and voice services in high-cost areas.

#### **IV. CONCLUSION**

Qwest supports the Commission's direction in initiating design of the CAF to explicitly support broadband as well as voice services in high-cost areas. The Commission should quickly press forward with design and implementation of a competitive bidding process to spur deployment of broadband to unserved areas. At the same time, the Commission should move ahead with designing the CAF model while ensuring that it is an open process that provides interested parties with the opportunity to examine, test, and critique the model data and processes. To help control the size of the current USF and to begin phasing out ineffective high-cost support the Commission should cap legacy high-cost support and begin phasing out CETC support. The Commission should begin to phase out IAS for incumbent carriers only after it begins providing CAF support. Continuing to forge ahead with design and implementation of the CAF should keep the Commission on the right path to accomplishing its goal of universal broadband service in a timely and effective manner.

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<sup>16</sup> See *In the Matter of High-Cost Universal Service; Federal-State Joint Board on Universal Service*, Notice of Proposed Rulemaking, 23 FCC Rcd 1467, 1477 ¶ 23 (2008).

Respectfully submitted,

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July 12, 2010

CERTIFICATE OF SERVICE

I, Richard Grozier, do hereby certify that I have caused the foregoing **COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.** to be: 1) filed with the FCC via its Electronic Comment Filing System in WC Docket Nos. 10-90 and 05-337 and GN Docket No. 09-51; 2) served via e-mail on Mr. Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau at [Charles.tyler@fcc.gov](mailto:Charles.tyler@fcc.gov); and 3) served via e-mail on the FCC's duplicating contractor, Best Copy and Printing, Inc. at [fcc@bepiweb.com](mailto:fcc@bepiweb.com).

/s/Richard Grozier

July 12, 2010