BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of Connect America Fund A National Broadband Plan for Our Future High-Cost Universal Service Support	 WC Docket No. 10-90 GN Docket No. 09-51 WC Docket No. 05-337

REPLY COMMENTS
OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION
AND THE PEOPLE OF THE STATE OF CALIFORNIA

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August 11, 2010

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The California Public Utilities Commission and the People of the State of California (CPUC or California) submit these Reply Comments in response to comments filed in the Federal Communications Commission's (FCC or Commission) Notice of Inquiry (NOI) and Notice of Proposed Rulemaking (NPRM) on reform of the high-cost universal service support program.[1]

I. INTRODUCTION

The National Broadband Plan (NBP) states that the long range goal [of high-cost support reform] should be to replace all the legacy high-cost programs with a new program that preserves the connectivity that Americans have today and advances universal broadband in the 21st Century. To accomplish this goal the NBP recommends establishing the Connect America Fund (CAF) to support universal access to broadband and voice services, including providing any ongoing support necessary to sustain service in areas that already have broadband because of the existing high-cost universal service program.[2] In response, the FCC is proposing to gradually end legacy high-cost support and transition over a ten-year period to funding of broadband only via a new Connect America Fund (CAF). The NOI and NPRM seek comment on specific reforms to meet those goals.

The NOI seeks comment on whether the Commission should use an economic model, specifically the National Broadband Plan model, to help determine universal

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[1] *In the Matter of Connect America Fund, A National Broadband Plan for Our Future, High-Cost Universal Service Support*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337, NOI and NPRM, rel. April 21, 2010, (NOI and NPRM).

[2] *Id*, paras. 9 and 10.

service support levels in areas where there is no private sector business case to provide broadband and voice services. The accompanying NPRM seeks comment on specific common-sense reforms to cap growth and cut inefficient funding in the legacy high-cost support mechanisms and to shift the savings toward broadband.[3]

II. DISCUSSION

A. NOI – COST MODEL

1. Market-Based Mechanisms – Reverse Auction

In the NOI, the FCC seeks comment on whether the Commission should develop a nationwide broadband model to estimate support levels for the provision of broadband and voice service in areas that are currently served by broadband with the aid of legacy high-cost support, as well as areas that are unserved."[4] The Commission notes that it has previously sought comment on using reverse auctions to determine high-cost support amounts for voice telephony and tentatively concluded that reverse auctions offer several potential advantages over current high-cost support distribution mechanisms.[5] The FCC now seeks comment on whether a model would be an important tool, even if the Commission uses a market-based mechanism to identify supported entities and support levels under the CAF.[6]

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[3] *Id*. para. 2.

[4] *Id*, para. 17. The NBP defines "unserved" as areas where there is no private sector business case for deployment of broadband networks which meet the National Broadband Plan (NBP) target of 4 Mbps down/ 1 Mbps up. See Federal Communications Commission, *Connecting America: The National Broadband Plan*, (rel. Mar.16, 2010) (NBP), pp. 135-136.

[5] NOI and NPRM, para.19.

[6] *Id*, para. 20.

California agrees with the New Jersey Board of Public Utilities (New Jersey Board), the Telecommunications Industry Association (TIA), Time Warner Cable Inc. (TWC), and other commenters, that the FCC should explore using market-based mechanisms or reverse auctions, where appropriate, to determine the subsidy for areas where there is no business case for deployment and for providers of last resort. TWC supports reverse auctions, stating that "reverse auctions offer an efficient and competitively neutral means of targeting support to fund broadband deployment in unserved areas….By awarding support to the lowest bidder in a particular geographic area, reverse auctions would eliminate the tremendous waste that is built into the existing high-cost program .…"[7] TIA states that the market-based mechanism proposed in the *Notice* – the proposed interim competitive procurement auctions – should be explored as mechanisms for deploying broadband networks to serve unserved households in an efficient manner."[8] The New Jersey Board also recommends the use of reverse auctions. "The Board continues to recommend the use of reverse auctions to replace all of the various high cost support sub-funds with one payment. We believe this is consistent with the FCC's tentative conclusion noted in the NOI that 'reverse auctions offer several potential advantages over current high-cost support distribution mechanisms.'"[9]

The CPUC suggests that the use of market-based mechanisms or reverse auctions to determine the appropriate subsidy for high-cost areas and providers of last resort may

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[7] Time Warner Cable Inc. (TWC) Comments, (filed July 12, 2010), p. 10.

[8] Telecommunications Industry Association (TIA) Comments, (filed July 12, 2010) p. 10.

[9] New Jersey Board of Public Utilities (New Jersey Board) Comments, filed July 12, 2010), p.7. (Footnote omitted).

be appropriate in certain circumstances. However, many questions remain unanswered regarding the feasibility of reverse auctions. In addition, the CPUC realizes that in remote and difficult-to-reach areas, providers' economies of scale in serving such areas may be diminished. Thus, the private sector may not have a sufficient incentive to provide service in these areas or to bid aggressively in an auction covering such high-cost regions. Therefore, the CPUC recommends that the Commission further explore this issue before adopting a reverse auction mechanism to determine high cost support for broadband. We also support adoption of a model to determine the subsidy level in areas where auctions would not be successful.

2. National Broadband Plan Model

The FCC specifically seeks comment on whether the Commission should use the National Broadband Plan model as the starting point for developing a cost model, or alternatively a cost/revenue model, to use in determining future support for broadband-capable networks that provide voice service. The Commission seeks comment on whether the analysis and economic model that Commission staff used to estimate the broadband availability gap in unserved areas provides a useful foundation for calculating the support levels needed for the CAF in a way that minimizes waste, fraud and abuse. The FCC also seeks comment on what modifications to the National Broadband Plan model would be required if the CAF is eventually to replace all of the legacy high-cost programs.[10]

[10] *Id*, para 14.

California agrees with the Five MACRUC States,[11] the Nebraska Public Service Commission (NE PSC), the North Dakota Public Service Commission (ND PSC) and the New Jersey Board that broadband funding should not be based solely on an investment gap analysis.[12] Rather, any model should also take into consideration other factors such as the level of state investment in broadband deployment. In addition, a mechanism should be in place to incent states to invest in their own infrastructure.

The Five MACRUC States "endorse a matching grant program whereby recipients of FUSF would be required to receive a state USF or broadband program grant match that is dollar-for-dollar equal to the support from the FUSF. If states were to match the funding from the FUSF, broadband deployment would occur more expeditiously (a goal emphasized in the BNP), and those states would be more efficient and careful in planning and strategizing their broadband deployment…. Moreover, this matching state support ensures that states and broadband service providers who request FUSF funding do so responsibly."[13] The Nebraska and North Dakota Public Service Commissions state that the FCC must provide a stronger incentive to states that would supplement the universal

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[11] Comments of Five MACRUC States of the Mid-Atlantic Conference of Regulatory Utility Commissioners, (Five MACRU States), (filed July 12, 2010).

[12] The investment gap means the amount needed to make a business case for deployment in areas where there currently is no business case, based on the net gap between the projected incremental costs of broadband network deployment and the projected revenues from the broadband-capable network. The availability gap means areas where housing units have no access to a 4Mbps downstream/1Mbps upstream internet connection. *See* NOI and NPRM, Appendix C, Omnibus Broadband Initiative, The Broadband Availability Gap, (OBI Technical Paper

No. 1,) pp. 5-17.

[13] *Id* at p. 12.

service mechanisms with a state allocation.[14] The New Jersey Board comments as follows:

> The Board again reminds the Commission that there are other areas in government where matching structures are in place, including the current LifeLine/Link-Up program. It is this Board's contention that any restructure of the federal high-cost fund must include a matching funds requirement for a state to be eligible for high-cost support. By requiring states to establish a matching funding mechanism, they would have a greater incentive in monitoring high cost funds. State matching funds should be a requirement for receipt of maximum funding under any high cost fund. We strongly support the concept of a state matching fund requirement for all federal high cost support. As this Board has pointed out in the past, several states which are among the largest net recipients (disbursements less collections) of funds under the federal universal service program do not have a state universal service program.[15]

The CPUC agrees with these comments. The broadband funding mechanism should include consideration of state investments in broadband network infrastructure. California currently helps fund broadband deployment through a grant program – the California Advanced Services Fund (CASF) – administered by the CPUC. We also provide state high cost support payments to eligible carriers. A federal funding mechanism that takes into account a state's investment in broadband would incent states to invest in their own infrastructure rather than merely relying on federal support. If funding were based only on an investment gap analysis, states with their own state broadband deployment programs would be disadvantaged because federal dollars would

[14] Joint Comments of the Nebraska Public Service Commission and North Dakota Public Service Commission (filed July 12, 2010), p. 15.

[15] New Jersey Board, p. 13.

be distributed largely to states that have not invested in their infrastructure, thus penalizing states that have.

A matching grant requirement, at least for federal deployment dollars, would ensure state investment. The National Broadband Plan itself recommends that the FCC focus first on states that have a higher absolute number or percentage of unserved housing units per capita, or states that provide matching funds for broadband construction.[16] We agree.

3. Technology Neutral – Role of Satellites

The FCC also seeks comment "on the role of a model in identifying the most costly areas to serve, where the Commission may want to consider alternative approaches to providing access to broadband and voice services. For example, the National Broadband Plan's estimate of the $24 billion broadband availability gap is based on the economics of terrestrial technologies only and on the assumption that satellite capacity in the foreseeable future does not appear sufficient to serve *every* unserved household."[17]

California agrees with the Public Utilities Commission of Ohio (Ohio Commission), Hughes Network Systems, LLC (Hughes), and Comcast Corporation (Comcast) that the availability of satellite service should be included in the FCC's economic model for determining the availability and investment gaps. The Ohio Commission states:

> While there may be capacity issues with satellite service today, it seems short-sighted to assume that this will always be the case. The NBP takes a long-view over a ten-year transition period. Today's cutting-edge technology will likely seem antiquated at the end of this

[16] NBP, Recommendation 8.9, at 149.

[17] NOI and NPRM, para. 22.

period as advancements are made in the deployment and delivery of broadband service. Such advances will most certainly include satellite service. Consequently, categorically excluding *any* type of technology from the model raises questions about whether the most efficient provider has been selected to provide broadband service at the lowest cost and contradicts the NBP's stated principle of technology neutrality.[18]

Hughes asserts that the exclusion of satellite broadband from the FCC's model will lead to inefficient subsidization of terrestrial build out. Hughes explains:

> The NOI's cost model may provide a prediction of what it would cost to extend *terrestrial* infrastructure to the 7 million homes identified as unserved. … By basing costs of funding exclusively on terrestrial technology without accounting for the ability of satellite to efficiently serve these subscribers, the Commission would be inefficiently subsidizing terrestrial technologies for households that satellite is already available to serve... As noted above, satellite broadband is approximately ten times more cost-effective than terrestrial technology in reaching the estimated 7 million households who do not yet have broadband at the targeted speeds (additional investment of $1.4 billion for satellite vs. at least $12 billion for terrestrial).... Existing and soon to be available satellite broadband platforms can offer virtually any American, including one located in a remote, unserved area, broadband at the targeted speed. Thus, satellite-based broadband Internet access plays a vital role in fulfilling the Commission's goal of universal service in rural and high-cost areas, and can be heavily relied on to bridge the supposed 7 million household gap in broadband availability at the targeted speeds, without the need for the billions of universal service support dollars predicted in the National Broadband Plan and the OBI Technical Paper.[19]

Comcast points out that the base case for broadband funding excludes the use of satellite-based broadband, even though as the report recognizes, it "has some clear advantages relative to terrestrial service for the most remote, highest-gap homes: [including] near-ubiquity in service footprint and a cost structure not influenced by low densities." Comcast further states:

[18] Ohio Public Utilities Commission Comments (Ohio Commission) (filed July 14, 2010), p. 11.

[19] Hughes Network Systems, LLC (Hughes) Comments, (filed July 12, 2010), p.14.

> The cost of serving the "highest-gap" homes using land-based technology, however, is a very large proportion of the total gap amount. The OBI Technical Paper reports that 57% of the total gap, or $13.4 billion, is attributable to the cost of serving only 3.5% of the unserved housing units. If these housing units were served by satellite (even assuming that retail rates for satellite were subsidized to comparable rates for terrestrial service in other areas), the total gap would be reduced to only $10.1 billion. Although the OBI Technical Paper expresses some concern about whether there will be sufficient satellite capacity to serve these 250,000 households, it would seem that the potential for saving over $13 billion should drive efforts to examine and address those concerns.[20]

The CPUC agrees that the FCC should include satellite service in the calculation of the availability and investment gaps, and permit support from the proposed Connect America Fund of satellite service where it meets the target goals. The Commission states that broadband-over-satellite is a cost effective solution for low-density areas and that it could reduce the $24 billion total investment gap by $14 billion, if used to reach the 250,000 most-expensive-to-reach housing units.[21] In addition, although the FCC did not include satellite in its economic model for the Connect America Fund, 2009 Rural Broadband Report did include satellite as a technological alternative.[22]

For the forgoing reasons the California urges the FCC to take actions consistent with the CPUC's recommendations.

B. NPRM – Legacy High Cost Fund Reform

In the NPRM, the FCC seeks comment on specific proposals to contain growth in the legacy high-cost support mechanisms that could be initially implemented to create a pathway to a more efficient and targeted mechanism for funding broadband. The intent of

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[20] Comcast Corporation (Comcast) Comments (filed July 12, 2010), p. 13. (Footnotes omitted).

[21] OBI Technical Paper No. 1, p. 89.

[22] Federal Communications Commission, *Bringing Broadband To Rural America: Report on a Rural Broadband Strategy*, May 22, 2009.

these proposals is also to eliminate the indirect funding of broadband capable networks today through the federal legacy high-cost program.[23]

The FCC seeks comment on capping legacy high-cost support provided to incumbent local exchange carriers at 2010 levels, adopting cost-cutting measures, and eventually transitioning, over a ten-year period, to funding only broadband and voice under a new Connect America Fund (CAF). The FCC also proposes phasing out competitive eligible telecommunications carrier (CETC) high-cost support in five years.

California supports the Commission's proposal to transition over a ten-year period from the funding of legacy voice wirelines to the funding of only broadband deployment and voice service in high-cost unserved areas. We also support funding for ongoing operating costs where absolutely necessary.

1. Capping Existing High-Cost Support for ILECs

The CPUC agrees with commenters that the FCC should adopt its proposal to cap existing legacy high-cost support at 2010 funding levels throughout the remaining existence of the legacy high-cost support program.[24] TWC states that capping legacy support for ILECs at 2010 levels is a necessary constraint on the growth of support until comprehensive reform is adopted.[25] The National Cable & Telecommunications Association (NCTA) "fully supports the NBP's recommendation that the Commission take steps to manage the universal service fund so that its total size remains close to its current level (in 2010 dollars) to minimize the burden of increasing universal service

[23] NOI and NPRM, para.53.

[24] The CPUC does not take a position at this time on how such a cap should be imposed.

[25] Time Warner (TWC), pp. 5-7.(footnote omitted)

contributions on consumers. Controlling the size of the high-cost program is a step that NCTA has endorsed for years.

We agree with the Commission that constraining the size of the fund is an essential first step toward repurposing the universal service fund to support broadband. Any one of the various cap methodologies identified in the *Notice* would be preferable to not imposing a cap."[26] Comcast states: "As an initial step toward comprehensive reform of the high-cost USF program, the FCC should cap legacy high-cost support at existing levels, as proposed in the *NPRM."*[27] The Public Service Commission of the State of Missouri ("MoPSC") comments that "[t]he FCC's proposal to cap legacy high-cost support to incumbent local telephone companies at 2010 levels appears reasonable as a temporary measure until the FCC determines how to distribute funds in a more efficient manner."[28] The Massachusetts Department of Telecommunications and Cable (MDTC) "applauds the Commission's decision to cap ILEC support and concurs with the Commission that such a step will help to minimize the burden on consumers who ultimately pay for universal service through carrier pass-through charges."[29]

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[26] National Cable & Telecommunications Association (NCTA) Comments (filed July 12, 2010), pp.5-8.(footnote omitted)

[27] Comcast, pp.3-4.

[28] Public Service Commission of the State of Missouri ("MoPSC") Comments (filed July 12, 2010), p. 6. (footnote omitted)

[29] Massachusetts Department Of Telecommunications And Cable (MDTC) Comments (filed July 12, 2010), p.3.

2. Elimination of Competitive ETC (CETC) High Cost Support

The Nebraska and North Dakota PSCs support the Commission's proposal "to slowly ramp down competitive ETC support over a five-year period" stating that the "transition period should be predictable and certain for competitive ETCs."[30] The MoPSC states: "The proposal to eliminate high-cost support for competitive eligible telecommunications carriers has merit because supporting multiple providers to provide service within the same area is conceptually inefficient."[31] The Communications Workers of America (CWA) and Comcast also support the FCC's proposal to eliminate CETC support in five years.[32] California agrees with these commenters.

C. Broadband Speed in Rural Areas

The CPUC agrees with the Nebraska and North Dakota PSCs, as well as other commenters, that "the 4 Mbps standard does not advance universal service in many rural areas. The Commission should set comparable broadband milestones in rural areas so that rural consumers do not get left behind."[33] As we stated in our comments filed in the Framework for Broadband Internet Service proceeding,[34] the CPUC is concerned that consumers in rural areas not be left behind by being subject to a lower speed standard for Internet connection. The CPUC urges the FCC to consider carefully, and to weigh the

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[30] NE PSC and ND PSC, p. 14. (Footnote omitted).

[31] MoPSC. p.8.

[32] Communications Workers of America (CWA) Comments (filed July 12, 2010), p.4. Comcast, pp.6-7.

[33] NE PSC and ND PSC, pp. 1-2.(emphasis in original)

[34] Comments of the California Public Utilities Commission and the People of the State of California, *In the Matter of Framework for Broadband Internet Service*, GN Docket No.10-127, (filed July 15, 2010),pp.18-19.

potentially negative consequences, of creating a two- tier system for broadband Internet access service speeds. If the U.S. is to be globally competitive, then all Americans should have access to broadband Internet access service that will enable them to connect in a quick timeframe to the rest of the network.

III. CONCLUSION

California recommends that the FCC explore further the idea to use reverse auctions or other market-based mechanisms, where appropriate, to determine the CAF subsidy for broadband in high-cost areas and for providers of last resort. We urge that any cost model for support of broadband service reward states that provide state subsidies for broadband deployment and operational support. The model should also incent states to contribute funding, possibly through a matching fund requirement. In addition, the FCC should include satellite service when developing an economic model for the CAF, at least where such technology meets the target goals.

The CPUC supports capping current high-cost subsidies at 2010 levels, and transitioning over a ten-year period from high-cost support for legacy wireline service to high-cost support for broadband. We also support elimination of high-cost support to competitive ETCs in five years as proposed by the Commission. Finally, we urge the FCC to adopt broadband goals for rural areas that are comparable to those adopted for urban areas.

Respectfully submitted,

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