

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas)	
)	
CAF II Cost Model Version 4.0)	DA 13-2304

COMMENTS OF HAWAIIAN TELCOM, INC.

Hawaiian Telcom, Inc. (“HTI”) hereby submits its comments in response to the Wireline Competition Bureau’s (“Bureau’s”) Public Notice concerning Connect America Cost Model Version 4.0 (CACM v4.0), which, among other things, models costs associated with Connect America Fund (“CAF”) Phase II support for price cap carriers serving areas outside the contiguous United States.¹ The cost model changes identified in the Public Notice are intended to implement the Commission’s mandate that universal service fund (“USF”) support to price cap carriers take into account the unique characteristics of these non-contiguous areas, including the State of Hawaii,² and respond in part to comments received concerning Version 3.2 of the model.³

¹ Public Notice, *Wireline Competition Bureau Announces Availability of Version 4.0 of the Connect America Fund Phase II Cost Model, and Seeks Comment on Adopting Current Default Inputs in Final Version of Model*, WC Docket No. 10-90, DA 13-2304 (Wir. Comp. Bur., rel. Dec. 2, 2013) (“Public Notice”). The locations involved are the States of Alaska and Hawaii, and the territories of Puerto Rico, U.S. Virgin Islands, and the Commonwealth of the Northern Marianas Islands.

² *Connect America Fund*, WC Docket No. 10-90, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, ¶ 193 (2011) (“*USF-ICC Transformation Order*”), *pets. for review pending sub nom. In re: FCC 11-161*, No. 11-9900 (10th Cir., filed Dec. 18, 2011).

³ See Public Notice, *Wireline Competition Bureau Announces Availability of Version 3.2 of the Connect America Fund Phase II Cost Model, and Illustrative Results; Seeks Comment on*

HTI applauds Commission staff for making cost model changes that take into account real world cost characteristics of price cap carriers serving non-contiguous areas in order to better provide universal service support for the provision of broadband services to rural customers in such areas. Although these changes represent tangible and beneficial progress, there are further changes, identified in past comments, which have not yet been included in the model. No explanation has been provided for such exclusions. As the Commission has recognized, in order to meet the Commission's broadband goals, its cost model must reflect the higher costs in Hawaii for providing broadband.⁴ The reasons for higher costs in Hawaii have previously been thoroughly documented.⁵

This proceeding provides the Commission with the unique ability to invest universal service funds to produce significant and targeted public interest benefits: unserved Americans in rural areas will be allowed to join the Internet age which other Americans have already been enjoying for a number of years. These comments outline how the Commission could easily and more completely address these rural American access issues. By making these modest final changes, the Bureau will better implement the Commission's command to improve rural broadband service access in non-contiguous areas of the country served by price cap carriers.

Several Modifications for Non-Contiguous Areas, WC Docket No. 10-90, DA 13-1846 (Wir. Comp. Bur., rel. Aug. 29, 2013) ("CACM v.3. Public Notice").

⁴ HTI filed cost information demonstrating these higher costs. Letter from Steven P. Golden, Hawaiian Telcom, Inc. to Marlene Dortch, FCC, WC Docket No. 10-90, *et al.* (filed Sept. 11, 2013) ("HTI Cost Ex Parte"). This information was supplemented in Letter from Steven P. Golden, Hawaiian Telcom, Inc. to Marlene Dortch, FCC, WC Docket No. 10-90, *et al.* (filed Nov. 8, 2013).

⁵ Hawaiian Telcom, Inc. Petition for Waiver of Sections 54.309 and 54.313(d)(vi) of the Commission's Rules, WC Docket No. 08-4 (filed Dec. 31, 2007) ("HTI Petition"); Comments of Hawaiian Telcom, Inc., WC Docket No. 10-90 (filed April 18, 2011) ("HTI Comments").

I. CHANGES INCORPORATED IN CACM V4.0 HAVE CORRECTLY INCREASED HIGH COST SUPPORT TARGETED TO NON-CONTIGUOUS AREAS SERVED BY PRICE CAP CARRIERS.

HTI applauds the Commission for including a special module in CACM v4.0 that recognizes the higher middle mile costs incurred in non-contiguous areas because undersea submarine cable must be used for robust and route-diversified broadband service. In addition, we commend the staff for updating its use of mapping resources to include more accurate, up-to-date information. Finally, CACM v4.0 recognizes the significant amount of hard rock located in HTI territory, and adjusts modeling characteristics to include Hawaii-specific hard rock characteristics. HTI is encouraged by the progress, but believes further work should be done as specified below.

II. CACM V4.0 FAILS TO ACCURATELY REFLECT UNDERSEA SUBMARINE COSTS FOR HAWAII.

As HTI has previously noted, unlike the rest of the United States, HTI must depend on deep sea submarine cables to provide voice and broadband transport facilities to connect to the mainland.⁶ Although fiber is the best choice for interstate connectivity, deploying submarine fiber entails substantial costs, as HTI has fully explained elsewhere.⁷ Without explanation, CACM v4.0 simply continues to use the same erroneous formulation of transpacific undersea cable costs as used in CACM v3.2. Although the Commission accurately includes special adjustments for undersea cable costs for price cap carriers serving non-contiguous areas, the model adjustments continue to substantially underestimate HTI costs and should be modified.

⁶ Comments of Hawaiian Telcom, Inc., WC Docket No. 10-90, DA-13-1846, 2-6 (filed Sept. 12, 2013) (“HTI CACM v3.2 Comments”).

⁷ HTI Comments, Appendix, at 9.

A. Undersea Transport Percent Use Should Be Applied To Lit Capacity.

The CACM v4.0 develops a %-Use factor based on the highest total capacity and highest lit capacity of existing transpacific fiber cable systems. The resulting %-Use factor is applied to determine the portion of the investment that will be included in the CACM results. The Undersea Fiber investment development is inconsistent with the forward-looking cost methodology used throughout the CACM because the %-Use factor is based on existing facility-specific and route-specific fill factors, which are subject to change by the independent cable consortiums, rather than national averages or simplifying assumptions. This unrealistic fill factor must be corrected because it does not represent what an efficient provider would experience on a forward-looking basis, which is the very rationale for adopting a particular cost parameter in the model.⁸ The Public Notice contains no explanation for the fill factor usage.

As v3.2 did, the CACM v4.0 calculates Hawaii's 7.91 %-Use factor based solely on the undersea cable system with the highest total capacity and highest lit capacity, which yields the lowest %-Use result solely because of the high unused capacity, and not because use of that cable represents the most efficient choice. Applying the same calculation methodology to the TPC5 cable system yields a %-Use factor in excess of 100 percent, which is illogical. The proposed methodology in calculating the %-Use factor is arbitrary, and improperly restricts Hawaii's recovery of the undersea transport costs to 7.91 percent, as explained in the following sections.

Owners of undersea cable seek recovery of their costs to install and maintain those facilities based on the current lit capacity of the fiber.⁹ These owners only light the amount of

⁸ *USF-ICC Transformation Order*, ¶ 166.

⁹ Letter from David B. Cohen, USTelecom, to Marlene H. Dortch, FCC, WC Docket No. 10-90, DA 13-1846, 2 (filed Oct. 21, 2013).

capacity that they reasonably believe will be purchased and utilized over a relatively short term future. Cable owners do not base pricing on total capacity because to do so would artificially lower prices, precluding effective cost recovery in a reasonable amount of time. This economic behavior is no different from any manufacturer of goods that adjusts supply based on anticipated demand, and thus is consistent with efficient economic behavior in the marketplace. Any uneconomic behavior would quickly be corrected by actions of competitors to secure new business. The Commission itself has recognized that there is significant and growing undersea cable capacity in the Pacific region,¹⁰ and thus there exists a functioning competitive marketplace. There is no justification for second-guessing these free market decisions on expanding cable capacity, pricing and deployment.

To price undersea cable based on total, including unlit, capacity is thus arbitrary and irrational. It is unrelated to the way that fiber is built and sold in the marketplace, and cannot represent the costs that an efficient lessee of capacity would incur in utilizing undersea cable. A company seeking to purchase an IRU would not find an IRU for sale based on total capacity simply because no one in the market prices capacity on that basis. Thus, the formulation for transpacific fiber in CACM v4.0 does not reflect forward-looking costs and is inconsistent with Commission forward-looking cost principles.¹¹ The clear result of this erroneous IRU costing

¹⁰ Federal Communications Commission, International Bureau Report, 2011 Section 43.82 Circuit Status Data, Tables 7-A, 7-B (Jun. 2013) (“2013 International Cable Report”), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-321707A2.pdf.

¹¹ This principle is consistent with past Commission decisions which would apply fill factors to cable costs to reflect the capacity that an efficient provider would reasonably be able to deploy. See, e.g., *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report & Order, CC Docket No. 96-98, 11 FCC Rcd 15499, ¶ 682 (1996).

approach in CACM v4.0 is that insufficient support will be provided to support broadband, which is inconsistent with the dictates of Section 254(b)(5) of the Communications Act.¹²

In addition, CACM v4.0's modeling based on a single provider of undersea cable in the marketplace today is erroneous. Use of the cable characteristics of this single provider, which happens to be the largest provider in today's marketplace, distorts what rationally can be expected to model future costs. First, the facilities of a single provider entail substantial risk of misidentification of the market behavior expected of an efficient provider, and is thus arbitrary. Second, today's largest provider may not represent what will exist in the future. Therefore, a more rational approach, and one that is more consistent with forward-looking cost principles, would be to average current providers together to derive a hypothetical cost modeled facility.

Given this analysis, the CACM should instead be based only on lit capacity of fiber that an efficient provider would be expected to utilize in the future, based on an average of all available fiber. Consequently, the CACM should apply any usage factor to only the total lit capacity to ensure accurate recovery of undersea cable costs. This approach is more realistic given that the current costs of obtaining the transpacific transport necessary for Internet communications is significantly higher than mainland costs incorporated into the model. HTI has demonstrated that its peering costs are roughly 10 times what is spent on the mainland for peering.¹³ This differential must be reflected in the model adjustments in order to provide sufficient universal service support for broadband service in Hawaii.

¹² 47 U.S.C. § 254(b)(5).

¹³ HTI Cost Ex Parte at 4.

B. An Undersea 50 Percent Middle Mile Sharing Factor Understates Projected Hawaii Usage.

The undersea fiber transport investments in CACM v4.0 continue to be capped based on the assumption that 50 percent of the facility investment would be “shared” with other, non-broadband services (e.g., cost would be recovered through special access and private line services). No explanation is given for this assumption. For HTI, the transpacific undersea fiber costs should not be subject to the 50 percent investment cap for two principal reasons. First, HTI is a minor provider of interstate, interLATA special access and private line services. As a price-cap ILEC operating in a non-contiguous area, HTI does not possess the market power to capture a 50 percent market share. Second, the development of the demand component of the calculation is based on the CACM’s Busy-Hour Offered Load (“BHOL”), which already excludes special access and private line forecasted requirements from its results. The application of a secondary 50 percent investment cap effectively penalizes HTI for having too much forecasted demand for broadband transport, versus available capacity, circumstances which do not exist in reality. HTI estimates that 90 percent of its existing infeasible right of use (“IRU”) capacity currently is used to provide residential and small business high speed Internet service.¹⁴ This market reality is not expected to change and this same percentage, at a minimum, can be expected to be used for any expanded capacity in the future. As ACS notes, use of broadband is only expected to increase in the future.¹⁵ Therefore, the 90 percent usage factor should be used for HTI.

C. Undersea Cable Inputs Do Not Reflect IRU Applications.

Currently, HTI’s principal method of securing bandwidth capacity to the contiguous states is through IRUs. As stated previously, the undersea fiber inputs for the CACM do not

¹⁴ HTI Cost Ex Parte at 6.

¹⁵ ACS July 9 Ex Parte at 13.

accurately model IRU costs for Hawaii. Rather, the CACM assumes that the current model fully compensates a price cap carrier serving a non-contiguous area. No explanation has been provided for this conclusion. This computation is wrong for the following reasons. First, IRUs are secured based on forecasted demand and not on the availability of excess capacity. HTI's projected transpacific capacity¹⁶ would result in a %-Use of 89 to 90 percent, which would be consistent with HTI's current 90 percent utilization rate. Second, IRUs do not represent forward-looking costs. The cost of an IRU is based on the market value of the capacity being leased. Third, IRU pricing includes the cost recovery of under-utilized, un-lit excess capacity, which is not properly included in the CACM undersea cable investment development. Therefore, to be consistent with the FCC assumption that a non-contiguous area price cap carrier would purchase IRUs for transport, the CACM's forward-looking construction costs must be adjusted to better reflect the impact of cost-recovering IRU purchases.¹⁷

D. Staff Should Modify CACM v4.0 to Permit Adequate Hawaii Cost Recovery, Consistent with Forward-Looking Cost Principles.

To better align the undersea cable inputs for HTI's broadband requirements, whether HTI constructed a new transpacific undersea fiber facility or leased equivalent capacity on an existing undersea fiber system, the CACM inputs should be adjusted to reflect a %-Use factor of 90 percent applied to lit capacity. Utilizing the CACM v4.0 proposed revisions,¹⁸ HTI ran the model with three additional parameters to more accurately reflect HTI forward-looking costs.

¹⁶ HTI Cost Ex Parte at 5.

¹⁷ In any event, HTI has demonstrated that it must pay higher IRU rates for transport, based on a 90 percent capacity utilization as specified above. *Id.* at 6. These rates do reflect the higher costs of peering that HTI experiences, and will continue to experience in the future, because of its remote location in the middle of the Pacific Ocean. By adjusting the applied factors within the CACM model, the undersea fiber construction cost results will become closer, more representative of the incurred IRU costs.

¹⁸ August 29 Public Notice, *supra* note 5.

First, the %-Use factor is computed as the average of all three transpacific systems identified in the Public Notice (AAG, Sothern Cross, and TPC-5), using lit capacity only, and applying a 90 percent fill factor. Second, costs are computed using a lit-capacity-only utilization factor to reflect 100 percent facility cost recovery. Third, an adjustment factor is applied to address 1,642,080 feet of intrastate undersea fiber, which includes a 50 percent sharing adjustment.¹⁹

III. CACM V4.0 FAILS TO TAKE OTHER PROPOSED ACTIONS.

HTI does not agree with all the final parameters of CACM v4.0, such as the failure to treat Hawaii as entirely made up of hard rock or to adjust plant mix factors to be consistent with HTI's current plant mix. Support for taking into account these additional factors has been well documented in previous HTI comments.²⁰

IV. CONCLUSION

The Commission's universal service support policies have short-changed certain non-contiguous areas of the U.S. such as Hawaii in the past, making the provision of advanced voice and broadband services difficult. HTI applauds the Commission's efforts to move forward to grant further CAF support to price cap carriers serving non-contiguous areas. The Commission can better address improved broadband facilities to unserved areas in price cap territories by adopting the proposals outlined in these comments. The resulting support will produce greater

¹⁹ See HTI Cost Ex Parte at 6-7 for a more precise description of how these adjustments translate into specific number changes to the model.

²⁰ HTI CACM v3.2 Comments at 6-10.

public interest benefits that will redound to rural Americans living in non-contiguous areas, and bring them closer to being part of the Internet age.

Respectfully submitted,

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