Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Sandwich Isles Communications, Inc.	)	Docket No. 09-133
Petition for Declaratory Ruling	)	

COMMENTS OF SANDWICH ISLES COMMUNICATIONS, INC.

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I. INTRODUCTION AND SUMMARY OF ARGUMENT

Sandwich Isles Communications, Inc. ("SIC") submits these comments in response to the March 29, 2016 Public Notice in which the Wireline Competition Bureau (the "Bureau") seeks information to update the record in this long pending dispute.[1] The dispute is principally between SIC and the National Exchange Carrier Association ("NECA"), and relates solely to payments which SIC is entitled to recover from NECA's traffic-sensitive pool for SIC's cable network that it constructed and operates in the Hawaiian Home Lands ("HHL").

The HHL region was established by Congress in 1921 for the benefit of native Hawaiians. It spans roughly 200,000 acres spread out over 70 non-contiguous parcels on six of the largest eight Hawaiian Islands. The vast majority of the HHL consists of remote and under-developed rural land, separated by undeveloped government property and open-ocean. The State of Hawaii in general—and even more acutely, the HHL—is a unique, difficult and expensive area for telecommunications providers to serve. Hawaii is the only state in the U.S. that is comprised entirely of islands—hundreds, in fact,

[1] Public Notice (Wireline Competition Bureau Seeks to Refresh Record in WC Docket No. 09-133 and Seeks Comment on AT&T Application for Review, Sandwich Isles Petition for Reconsideration, and NECA Petition for Clarification and/or Declaratory Ruling), DA 16-322, released March 29, 2016.

scattered across more than 1500 miles. And it is located along a volcanic archipelago in the middle of the Pacific Ocean, over 2,500 miles from the nearest continental land-mass. Developing and maintaining adequate telecommunications infrastructure and operations to service this region is resource-intensive, to say the least.

Still, for more than two decades, SIC has been dedicated to providing residents of the HHL with modern, high-speed telecommunications service and infrastructure. In 1995, after unsuccessful attempts to get GTE to provide single-party service to HHL residents at reasonable cost, the Department of Hawaiian Home Lands ("DHHL") licensed SIC to serve HHL.[2] SIC subsequently obtained financing from the Rural Utilities Service ("RUS") and waivers of relevant Federal Communication Commission ("FCC" or "Commission") rules to allow it to participate in the NECA tariffs and pools, and to receive Universal Service support as if it were an incumbent local exchange carrier. SIC began limited-scale operations in 1997.

From 1997 to the present, SIC has served only the HHL. Its study area presently consists solely and entirely of scattered and non-contiguous parcels on the islands of Oahu, Kauai, Molokai, Maui and the Big Island. The company quickly realized that the existing inter-island and terrestrial facilities could not provide HHL with the modern technology, reliable communications links, or capacity for growth necessary to meet the needs of its small but undeniably deserving and growing subscriber base. In fact, the existing inter-island facilities of GTE wholly bypassed the island of Molokai, where native Hawaiians are in the majority, which has many eligible HHL beneficiaries and which contains substantial areas of undeveloped HHL. As a result, SIC's parent company undertook to arrange the

[2] None of the pre-existing service providers had invested in adequate and reliable inter-island and terrestrial facilities to serve the outer islands and other rural areas of Hawaii, including the Hawaiian Home Lands. The lack of adequate service finally led the legislature to authorize the state commission to certify additional telephone companies. See e.g. Letter from Robert N. Herkes, State Representative, 5th District to Marlene H. Dortch, FCC, CC Doc. 96-45 (Jun. 29, 2005) (noting that "we passed Act 80….opening the way for additional telephone companies to serve our neglected rural areas with modern infrastructure capable of delivering advanced services.")

financing for and construction of the terrestrial and undersea fiber network (the "Paniolo Cable")[3] that began operations in 2009 and that continues to provide the backbone of SIC's service to the HHL. In the face of NECA's opposition to recognizing the eligibility of SIC's Paniolo Cable lease costs for recovery from the NECA traffic-sensitive pool, SIC was constrained to seek a declaratory ruling from the Bureau. The Bureau subsequently issued a decision, pursuant to SIC's petition, reaffirming earlier Commission determinations that the cable was a sound investment of benefit to the HHL and holding that 50% of the cost of construction and operating costs should be reimbursed through the NECA pool.[4] NECA appealed the Bureau determination and SIC sought reconsideration.[5]

Thus, the issue before the Bureau today is exactly the same as the issue before the Bureau in 2010 when the decision was issued: it is beyond question that SIC's lease costs for the Paniolo Cable network are eligible for cost recovery from the NECA pool; the only question is the proper method for computing the level of and the amount of that cost recovery. While the issue remains unchanged, there have been developments which suggest that it is no longer necessary for the Bureau to choose between the binary positions taken by NECA and AT&T on the one hand and SIC on the other.

SIC will show in these comments that the record fully supports a conclusion that the funding levels approved by the Bureau significantly understate the funding to which SIC is entitled under established precedent and policy. We will further show that through its own efforts (and at considerable cost to SIC), SIC has found a path leading to refinancing the Paniolo Cable. This approach reduces the NECA funds required to recover SIC's costs, and will permit SIC to continue to provide essential, high-cost service to the rural and remote, but developing, HHL.

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[3] For the purposes of these comments, we refer to the submarine cable at issue as the "Paniolo Cable" and to the entire SIC communications network (of which the cable is a part) as the "SIC Network."

[4] Wireline Competition Bureau, Sandwich Isles Communications, Inc. Petition for Declaratory Ruling, Declaratory Ruling, 25 FCC Rcd 13647 (DA-10-1880A1) (Sept. 29, 2010).

[5] Sandwich Isles Communications Petition for Reconsideration, WC Docket No. 09-133 (filed Oct. 29, 2010)

II. EXECUTIVE SUMMARY

The single most salient fact to emerge from this protracted proceeding is that, as we discuss in Section IV, SIC has found a path to refinance the Paniolo Cable lease costs that will reduce its annual lease payments to $8.1 Million. If approved by the Bureau, as it should, this will reduce the SIC total revenue requirement by nearly $16 million, enabling SIC to withdraw a portion of the cable capacity from the company's rate base and use it for other purposes, while retaining more than sufficient capacity to continue to meet present and future demand for the high quality service that SIC provides to the residents, schools, public facilities and business interests in the HHL. Equally importantly approval of this plan by the Bureau will moot SIC's petition for reconsideration of the Bureaus' September 2010 Declaratory Order ("2010 Declaratory Order") and result in dismissal of the pending pleading by NECA and AT&T, bringing this decades long proceeding to a final definitive end.

A review of the record in this proceeding which has now been ongoing for nearly 11 years is nonetheless useful because the Bureau's 2010 Declaratory Order —holding that 50% of the Paniolo Cable lease costs should be included in the NECA computation of the SIC revenue requirement—actually understates the amount of funding to which SIC was entitled under the general accepted accounting and economic principles that the Commission has applied. *A fortiori*, the refinancing plan more than satisfies the applicable standards. The incontestable facts which emerge from a review of the record may be summarized as follows: First, the SIC cable network, including the Paniolo Cable, was licensed by the State of Hawaii precisely because the incumbent LECS—which at the time, were encountering serious financial difficulties—did not adequately serve and in some cases did not at all serve the needs of the residents, public facilities and schools and businesses in the HHL.[6] On each of

[6] See e.g. SIC EXHIBIT 1 (letter from the Hawaii House of Representatives in support of SIC's study area waiver, and noting that the Hawaiian service provider raising the relevant objection had made "no commitment to connect existing unserved residents within its service area on the Big Island who have been bypassed by all its predecessors.")

the three occasions in which an issue regarding financing of the network has been present, the Commission has unequivocally found that the purposes of the SIC cable network fall squarely within the universal service goals of the High Cost support program and NECA pooling. The Commission has repeatedly recognized that the unique challenges associated with extending service to the HHL—including deep-sea beds, challenging topography, restless weather patterns, and aging, existing infrastructure—create a profound and transparent need for subsidized support, if the universal service mandate is to be realized in this region.

Second, the decision to build the Paniolo Cable as a 48 fiber line was carefully and thoughtfully made. It reflected, among other relevant considerations, the fact that the existing systems did not reach the areas that SIC needed to serve (and, in fact, did not connect Molokai at all). The design of the system was driven by the need for state of the art technology which is compatible with the terrestrial legs of the network. The terrestrial legs had been substantially completed well before RUS financing of the undersea portion was withdrawn and before final regulatory approval of the private financing for the undersea cable was obtained. Most importantly, the predominant portion of the cost of a submarine cable route consists of the cost of laying the cable itself. The incremental cost associated with the inclusion of additional fibers is relatively minor and reflected only at the margins. Thus, the Paniolo Cable was built in accordance with accepted and sound economic and engineering principles.

While it is true that the HHL population growth projections on which SIC relied have proven to be optimistic, the devastating effects of the economic downturn in the years 2007-2010, when the undersea legs were being designed and constructed, could not have been reasonable predicted. Moreover, the slower than expected HHL population growth has been offset significantly by rapidly-increasing demand by households, schools and businesses for broadband services and capacity. Very recently, the State of Hawaii has committed an infusion of funds to the HHL which is very likely to result in a significant increase in HHL homesteads and population, with likely resulting increases in

demand and usage on SIC's network, including the Paniolo Cable.[7] SIC needs to be mindful of these considerations in its refinancing plans and must prudently reserve capacity in the rate base to meet the expected demand increases. In sum, the record shows that the investment in the Paniolo Cable was prudent and appropriately designed in light of the information and projections available at the time it was built regarding HHL population growth and broadband capacity and service needs.

Third, the SIC network has fully satisfied the objectives that it was designed to meet. The Paniolo Cable has provided the communities in the HHL with access to information and services that was previously unavailable with the fully intended economic and social benefits that such access to the outside world is intended to achieve. The cable has equally contributed to inter-island route diversity and has been used by other service providers during periods when their networks have been out of service. Last, but by no means least, the Paniolo Cable has enhanced both public and private security by connecting the homelands regions with the rest of the Hawaiian archipelago and the US national and regional security systems that are based throughout the Pacific region.

For these reasons, which we more fully develop below, SIC maintains that the Bureau should bring this matter to a final end. It should find that the arguments advanced in the petitions by NECA and AT&T are without merit on their own terms and in any event unresponsive to the changed conditions which now exist. The Bureau should require NECA to approve the revised revenue requirement and lease payment arrangement when submitted by SIC and, at that time, dismiss SIC's long-pending Petition for Reconsideration as moot.

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[7] See *infra,* note 44 (citing the recent First Circuit ruling finding Hawaii in violation of its constitutional duties to the extent it has consistently failed to provide adequate funding to the DHHL, and mandating that DHHL receive $28 million annually; the ruling has since been revised to exclude the precise figure, but the Governor of Hawaii has subsequently promised DHHL roughly $18 million per year going forward).

III. THE FACTS

A. DESIGN AND RUS APPROVALS

The Paniolo Cable is a 48-fiber, 10-gigabit, digital, fiber-optic submarine cable that was planned by SIC in 1998 as a means to connect the Hawaiian Home Lands and bring high-speed telecommunications service to otherwise isolated, rural communities. Most of these communities, until SIC's inception, had suffered from the utter absence of modern, reliable telecommunications access.[8] The cable consists of roughly 350 miles of undersea cable running between cable landing stations on Oahu, Kauai, Molokai, Maui and the Big Island of Hawaii.[9] The cable network includes approximately 780 miles of terrestrial fiber running from the landing stations on each island to points of presence on SIC's terrestrial fiber network.[10] The terrestrial legs of the network were substantially completed by October, 2004.[11] The Paniolo Cable was commissioned in 2007 and became operational in 2009. SIC is its exclusive lessee. SIC's lease costs are currently in excess of $24 million per year, a fact NECA has understood since it originally approved the project.[12]

The Paniolo Cable would not have been built absent explicit encouragement and support from the federal government. This began with the FCC's 1998 Order granting SIC's petition for the waiver necessary to permit it to receive high-cost loop support for the 1998-1999 period on the basis of its projected costs ("1998 Waiver Order").[13] This was the *first* of three separate occasions where the

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[8] See Letter from Megan Strand, counsel for Sandwich Isles, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 09-133 at 3 (filed June 4, 2010) (SIC White Paper).

[9] See Sandwich Isles Communications, Final Environmental Assessment/Finding of No Significant Impact: Submarine Fiber-Optic Cable Project (April, 2004) **(SIC EXHIBIT 2)**

[10] See David Cosson, Sandwich Isles Comments, WC Docket No. 09-133 (August 28, 2009) (SIC Comments)

[11] See e.g. Andrew Walden, Sandwich Isles Communications, Hawaii Free Press (May, 2005) ("Sandwich Isles had completed about $160 million worth of construction, bringing its network to all the islands except the Big Island, when in October, 2004 the FCC suddenly acted on a six-year old complaint from [a] telecom rival...")

[12] Although SIC's costs are appropriately described as "lease costs," SIC has provided its cost accounting to NECA in compliance with applicable rules and case law, and has accounted for the Lease Costs on an "as-if-owned" basis. (See SIC Exhibit 3)

[13] Sandwich Isles Communications, Inc., Petition for Waiver of Section 36.611 of the Commission's Rules and Request for Clarification, Order, AAD 97-82, 13 FCC Rcd 2407 (Acct. Aud. Div.) (Feb. 3, 1998)(1998 Waiver Order)

FCC concluded that robust, federal support for SIC's HHL service was rightful and in the public interest.[14]

Based on the 1998 Waiver Order, SIC applied to RUS for loans to construct its entire HHL local exchange and interoffice network in phases, and received RUS approval. Specifically, RUS agreed to a $416 million financing package consisting of several phases of loans.[15] RUS approved SIC's "A" Loan for $27,682,050 in September, 1997 (the A Loan provided for the construction of infrastructure to serve HHL areas on Oahu); in 1999, RUS approved SIC's "B" Loan application for $41,581,700 (to construct new telecommunications facilities for the HHL areas on the neighboring islands of Kauai, Maui, Molokai and the Big Island); in October, 1999, SIC filed its "C" Loan application for $338,395,400 (to finance a statewide transport network). RUS approved this "C" Loan on November 30, 2000.[16] $97,485,400 was provided up-front through the "C" Loan, and the remaining amount was set to be provided by supplemental RUS loans. The "C" Loan was intended to cover the construction of facilities outside of HHL to connect SIC service areas with a fiber-optic network, including the 48-fiber submarine cable. Construction began in 2000 shortly after RUS's final approval. Originally, the full build-out was intended to be underwritten by RUS. NECA indicated that it was "reasonable" to conclude that the entire project including the submarine leg would be eligible for cost recovery from the NECA pool and/or high cost loop support (whichever was relevant).[17]

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[14] See 1998 Waiver Order; See also *In the Matter of Sandwich Isles Communications, Inc.; Petition for Waiver of the Definition of "Study Area" Contained in Part 36, Appendix-Glossary and Sections 36.611, and 69.2(hh) of the Commission's Rules*, 20 FCC Rcd 8999 (May 16, 2005); *See also,* Sandwich Isles Communications, Inc. Petition for Declaratory Ruling, WC Docket No. 09-133, Declaratory Ruling, 25 FCC Rcd 13647 (Sept. 29, 2010).

[15] In letters to Sandwich Isles in September and November, 2000, RUS approved SIC's proposal, agreeing to a $338,339,400 package, consisting of an immediate loan of roughly $100,000 to be followed by subsequent supplemental loans for the remaining sums. See Letters from Ken B. Chandler, RUS, to Albert S.N. Hee, Sandwich Isles, September 29 and November 30, 2000 (cited from SIC Comments at 10) **(SIC Exhibit 4)**

[16] See SIC White Paper (citing letter from Ken Chandler, Southwest Area Director, RUS, to Albert Hee, President, SIC (Nov. 30, 2000). This letter was a follow-up to a prior letter in which RUS extended preliminary approval of the project costs.

[17] See SIC Comments, supra note 9 at v (referencing NECA's 2002 reassurance to SIC that "it is reasonable to assume that Sandwich Isles Communications will receive the estimated NECA settlements…")

B. REGULATORY REVIEW PROCESS

In its February, 1998 decision, the Common Carrier Bureau granted SIC a waiver of section 36.611 of the Commission's rules to the extent necessary to permit SIC to receive high-cost loop support for 1998-1999 (1998 Waiver Order).[18] Additionally, the Common Carrier Bureau waived the incumbent LEC requirements of part 36 and 69 of the Commission's rules to allow SIC to receive high-cost loop support for the 1998-1999 period based on its projected costs. Finally, the Common Carrier Bureau resolved that "for regulatory purposes, we will recognize Sandwich Isles' service territory in Hawaii as a study area."[19] GTE's Opposition to SIC's 1997 Petition for Waiver was denied consideration due to its delinquent filing.

This proved to be only the start of the regulatory review process. A month later, GTE filed an Application for Review by the full Commission, contending that the study area at issue was within its serving territory.[20] In October, 2004, the full Commission decided the GTE Appeal of the 1998 Waiver Order.[21] It reversed the Bureau's determination. The Commission found that the Bureau had erred by ignoring evidence in the record that the areas SIC proposed to serve were not, in fact, "unserved" for purposes of the study area waiver requirement.[22] The Commission concluded that the exchanges served by SIC were indeed within GTE's study area.

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[18] Id.

[19] Sandwich Isles Communications, Inc., Petition for Waiver of Section 36.611 of the Commission's Rules and Request for Clarification, Order, AAD 97-82, 13 FCC Rcd 2407 (Acct. Aud. Div. 1998).

[20] See GTE Hawaiian Telephone Company, Application for Review of an Order Granting in Part a Petition for Waiver by Sandwich Isles Communications, Inc. (March 5, 1998). In its Application for Review, GTE essentially reiterated the arguments it made in its initial Opposition to the SIC Petition. SIC filed an Opposition to GTE's Application for Review within the month, also making the same core arguments it made in its initial Reply to GTE's Opposition to SIC's Petition.

[21] *GTE Hawaiian Telephone Company, Inc., Application for Review of a Decision by the Common Carrier Bureau, Petition for Waiver of Section 36.611 of the Commission's Rules and Request for Clarification*, AAD 97-82, Memorandum Opinion and Order, 19 FCC Rcd 22268, para. 1 (2004).

[22] A study area is a geographic segment of an incumbent LEC's telephone operations. Generally, a study area corresponds to an incumbent LEC's entire service territory within a state. The Commission froze all study area boundaries effective November 15,

The Commission did not, however, call into question the eligibility of the Paniolo Cable for cost recovery from the NECA traffic sensitive pool. On the contrary—implicitly reaffirming the conclusion that the project was consistent with the purposes of the USF and part 69—the full Commission only required SIC to seek and obtain a study area waiver in order to secure continued treatment as an incumbent LEC for purposes of receiving USF support and part 69 access cost recovery. The FCC explained that this study area waiver petition required to be filed by SIC would give the full Commission the occasion to consider whether creating a high-cost study area in Hawaii would have an adverse effect on the USF program, and whether it would serve the public interest.

In the wake of the Commission's 2004 decision requiring SIC to seek a study area waiver, RUS withdrew its approval of the remaining portion of the C loan, the loan which was anticipated to support construction of the submarine cable linking the islands and through such links providing interconnectivity with the world beyond the HHL.[23] RUS did not otherwise revise or limit its established commitments to SIC, and work on the terrestrial leg continued until completion.

In response to the Commission's 2004 study area waiver order—and in hopes that RUS would reconsider its position once the waiver had been secured—SIC submitted a petition in December 2004 for a study area waiver and for eligibility to participate in the NECA tariffs and pools ("2004 Petition for Waiver"). Of particular relevance here, SIC showed therein, and the Commission relied upon, the facts that: as a result of $166 million in capital funding from RUS, plus cost-recovery through NECA access pools, and USF support, SIC had been able to extend service to more than 4,000

1984. A carrier must therefore apply to the Commission for a waiver of the study area boundary freeze if it wishes to buy/sell additional exchanges, or create a novel study area from within an existing one.

[23] Shortly after the Commission's decision requiring Sandwich Isles to request a study area waiver, RUS notified Sandwich Isles that the FCC order "calls into question SIC's ability to receive universal service support as an incumbent ILEC and, consequently, SIC's ability to repay its outstanding debt obligations to the Rural Utilities Service (RUS)…. Therefore, effective immediately…RUS suspends further advance of any loan funds….Once a final determination has been made on SIC's qualification to continue to receive universal service fund support, RUS will re-evaluate its decision to stop loan fund advances." See SIC Comments (citing letter from Roberta D. Purcell, RUS, to Albert Hee, Sandwich Isles (Nov. 10, 2004);

new home sites and had already installed nearly 1,200 access lines in 20 new communities across the HHL, and expected to expand service to an additional 14 communities during 2005.[24] The Commission specifically noted SIC's plans to deploy backbone switching and transport infrastructure, finding that "[c]onstruction of backbone infrastructure begin in earnest in 2000, with RUS approval of funding for a comprehensive network design that will connect all of the Hawaiian home lands on all six of the major Hawaiian Islands" and that "[w]ith continued RUS loan funds, [SIC] expects to complete the majority of its terrestrial network by the end of 2006."[25] Noting that it was difficult to assess the number of potential subscribers in the HHL, the Commission stated that "the Department of Hawaiian Home Lands has a waiting list of approximately 20,000 native Hawaiians who have applied for lots." [26] The Order specifically recited that "these waivers will permit Sandwich Isles to continue being treated as an incumbent LEC for purposes of receiving universal service support and participating in the NECA tariffs and pools."[27]

The 2004 Petition for Waiver set forth in full detail the engineering design of the cable, the source, nature and amount of the funding and the reasons for continuing with the original design plan. So for the *second* time in six years (and *second* of three separate occasions) —and again over vigorous competitor-dissent—the FCC granted SIC the waivers it needed to be permitted access to federal funding. The Bureau emphasized that:

> "because Sandwich Isles has made large capital investments to provide service, its company-specific rates have the potential to be extremely high over the long term. Therefore, it is in the public interest to permit Sandwich Isles and its customers to benefit from the cost savings and lower rates available through NECA participation."[28]

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[24] DA 05-1355 at para. 11 and 19

[25] Id. at para 19.

[26] Id. The waitlist now exceeds 29,000 Hawaiians.

[27] *In the Matter of Sandwich Isles Communications, Inc.; Petition for Waiver of the Definition of "Study Area" Contained in Part 36, Appendix-Glossary and Sections 36.611, and 69.2(hh) of the Commission's Rules*, 20 FCC Rcd 8999 (May 16, 2005);

[28] Id.

Despite SIC's favorable outcome with the Commission regarding its 1998 study area waiver, RUS did not lift its suspension of SIC's submarine cable funding following the Commission's grant of the waiver ("2005 Waiver Order"). Minimal explanation was provided. This unforeseeable decision by RUS to permanently withdraw its funding commitment—specifically, the balance of the C Loan on which SIC had reasonably relied to complete its submarine cable construction—confronted SIC and its parent company with a serious dilemma. The terrestrial legs of the system, fully funded by RUS, were well on their way to completion by fall 2004—that is, several months prior to the RUS decision to cancel the planned funding. The terrestrial legs were built according to the specifications approved by RUS which by definition included, as it had to, the specifications for the submarine legs.

The system was designed as a single integrated unit and any change in the specifications for the submarine leg would have necessitated substantial re-construction of the terrestrial legs adding to the total cost of the project and equally to substantial delay and cost in re-engineering and rebuild of the central offices and facilities of the terrestrial legs. It was plainly essential that the submarine leg of the network be technologically compatible with the terrestrial legs, which were themselves—by the time the Commission remanded the 1998 Waiver Order—well on their way to completion and built out in accordance with the design reviewed and approved by RUS. Ethernet technology, allowing transport of multiple applications at different speeds and requiring smaller amounts of capacity, was not the standard being employed by telephone companies in 2007, much less in 1998 when work on the terrestrial legs began. The interoffice trunking of the terrestrial elements was based on the SONET/TDM design (in common with the technology then used by telephone companies for T-1 lines) and essentially required a minimum of a pair of dedicated fibers.

In full accordance with standard service-provider policy at the time, the Paniolo Cable was designed with a second "lit" fiber pair as a backup. Thus the system required 4 fibers for a single application. As a result, the system could never have been built with less than 24 fibers except at the cost of

entirely rebuilding the terrestrial legs. Moreover, in the course of working out the financing of the Paniolo Cable after the RUS rescission of a portion of Loan C, SIC learned that the incremental cost of additional fiber would be nominal; and that the 48 fiber system would cost only 2% of the total cost of constructing the Paniolo Cable. These engineering and economic considerations dictated the design of the Paniolo Cable. As a result, SIC concluded that the prudent course of conduct was to secure private funding for the submarine portion of the system, but otherwise to build out the system in accordance with the original specifications, which were industry standard at the time. The rationale behind this decision—and its positive effects on overall cost—were repeatedly explained to the Commission in the pleadings and ex parte submissions made to the Bureau and the Commission over the past ten years.[29]

C. NECA'S REFUSAL TO INCLUDE SIC'S INVESTMENT IN THE TARIFF POOL

In mid-2007, SIC informed NECA that it was in the process of arranging a finance lease arrangement in the wake of RUS's unforeseeable withdrawal of its funding commitments.[30] Prior to executing its exclusive lease of the Paniolo Cable system, SIC worked closely with NECA, the bank financing the network, and its consultant to review the financing arrangements necessary for Paniolo Cable Company ("Paniolo") to successfully complete the undersea network and its associated terrestrial transport segments.[31] SIC also advised NECA of its intention to include new cable lease costs in its NECA submissions under the 2005 Waiver Order.[32] NECA and SIC discussed at length the factors relevant to whether SIC's lease payments qualified for NECA pool reporting, after which NECA

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[29] See e.g. Petition for Declaratory Ruling of Sandwich Isles Communications, Inc., (filed June 26, 2009); see also SIC White Paper, supra note 6; See also, Hawaii House of Representatives, Opposition to Application for Review, CC Docket No. 96-45 (urging the dismissal of the Application for Review of the 2005 FCC Order granting SIC's Study Area Waiver Petition) (SIC Exhibit 1)

[30] See SIC White Paper, supra note 6 (citing Emails between Alan Pederson, General Manager, SIC and Susan Barrett, Director-Pacific Region, and Barbara McCarron, Member Service Management, NECA (Jun. 28, 2007)

[31] See SIC Comments, *supra* n. 6 at 9.

[32] Id.

informed SIC that its costs would be covered.[33] Based on NECA's representations, SIC finalized its lease agreement with Paniolo with respect to the Paniolo Cable. NECA was fully aware that SIC's lease costs began at $15 million annually, graduating over time to now approximately $24 million for 2016.[34]

It was not until SIC submitted its proposals for the 2008 NECA Tariff that NECA announced its opposition to the Paniolo Cable project and its apparent disagreement and unwillingness to comply with the terms and purpose of the 2005 Waiver Order. In February, 2007, NECA sent a letter to SIC expressing, for the first time, "serious concerns about the amount of the proposed costs and requesting specific details of the proposed cable system."[35] In the three years between the Commission's approval of SIC's lease/construction costs for inclusion in the NECA pools (in 2005), and when NECA voiced its first reservations (in 2008), the system's cost-profile never changed. The details of the cost profile and the specifications had been disclosed in the SIC second Petition for Waiver—which drew no objection from NECA—and had not changed. It was difficult for SIC to understand why NECA had suddenly done an about face in derogation of a Commission ruling on precisely the issue in dispute. Reluctant to draw the Commission into an intramural dispute, SIC continued to discuss the points of disagreement with NECA for approximately 12 months.

However, in early May, 2009, NECA escalated its objections. It notified SIC that the costs for its submarine cable transaction did "not appear to meet the standards of the 'used and useful' doctrine" and that as a result, NECA may not be able to accept SIC's proposed costs in the upcoming tariff filing

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[33] See Letter from Susan M. Barrett, NECA to Judi Ushio, Sandwich Isles, Feb. 18, 2000 (where NECA affirmed that "based on the information shown to us…we believe it is reasonable to assume that [SIC] will receive the estimated NECA settlement and High Cost loop Fund throughout the projected period.")

[34] See e.g. Letter from Susan M. Barrett, NECA to Judi Ushio, Sandwich Isles, Feb. 18, 2000 (explicitly acknowledging, without objection that SIC was projecting investment over $400 million.); See also EXHIBIT 3 (Paniolo Lease Payment Schedule).

[35] See Letter from Susan M. Barrett, NECA to Alan Pederson, Sandwich Isles (Feb. 1, 2007)

or for pool reporting.[36] Two weeks after that, NECA formally notified SIC by letter of its decision not to include the disputed costs in the upcoming tariff filing or for NECA pool reporting.[37] This collateral attack on the 2005 and earlier FCC Orders was largely devoid of fact and ignored the Commission's prior determinations that the investment was both prudent and necessary to the provision of quality service to the HHL. SIC filed a Petition for a Declaratory Ruling, requesting a determination by the Bureau that its cable lease costs were "used and useful"; and additionally requesting that the FCC direct NECA to accept such costs for inclusion in and settlement from its traffic-sensitive pools.

Chief among SIC's Petition salient points were (and remain):

1) **Excess capacity represented a minor, incremental cost—particularly relative to the scale of the project—and did not materially affect the cost of construction:**

   NECA's principal and repeated concerns center on the unjustifiable degree of excess capacity SIC built into the system with a 48-fiber cable. In response, SIC highlighted the following: the measure of the excess capacity at issue is not linear to funds attributable to that capacity. Construction cost varies only marginally with the number of fibers in a sheath, since cost-of-materials represents a minor portion of the total cost of installing the facilities. So the vast majority of SIC's investment was up-front and invariable – particularly considering the under-water installation required, and at depths measured in miles, not feet. Other high, fixed costs for SIC's facilities that would not vary materially with fiber-count are: (1) engineering and permitting; (2) cable-laying ship; (3) ocean beach boring and related costs; and (4) terrestrial fixed costs, including but not limited to directional boring through volcanic rock for underground fiber placement, terminal building construction and circuit equipment. SIC estimated the difference between constructing the network with 12-fibers (the lower end of the industry-standard) and 48 fibers to be roughly

[36] See SIC White Paper at 7 (citing NECA's indication that it "may not accept" the pooling of SIC's anticipated costs)

[37] See Letter from James W. Frame, NECA, to Alan Pedersen, Sandwich Isles (May 5, 2009).

2% of its total costs. In fact, a proper means of "excess capacity" is not the difference between a 12 and 48 fiber system. The TDM standard (on which the design is—and must be—based) sets out that "excess capacity" should be measured by the difference between a 24 and 48 fiber system, resulting in an incremental cost-differential even more trivial than the 2% additional cost projected by SIC.[38]

2) **FCC has acknowledged that some spare capacity is reasonable:** The FCC has acknowledged that it was "logical here to include some spare capacity in the cable."[39] As the Alaska Telephone Association aptly noted in its comments, "the incremental cost of additional capacity is miniscule. It would be poor planning and irresponsible to construct facilities with no anticipation for increased demand over the life of the infrastructure."[40] It is an obvious fact that it is far less expensive to add extra fibers to an undersea cable before it is deployed compared to deploying a second cable later or trying to add further fibers to a deployed undersea cable (if even that were technically and physically possible).

3) **The Condition of Existing Infrastructure Supports the New Cable's Utility:** The two intrastate submarine cable systems serving portions of Hawaii prior to the construction of the Paniolo Cable are now both 20+ years old. Predictably, there have already been multiple instances of outages associated with this aging infrastructure.[41] Both of these cables are fast approaching their end of

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[38] Footnote referencing Commission's acceptance of this figure

[39] See Sandwich Isles Communications, Inc. Petition for Declaratory Ruling, WC Docket No. 09-133, Declaratory Ruling, 25 FCC Rcd 13647 (Sept. 29, 2010)

[40] See Jim Rowe, Comments of the Alaska Telephone Association in Support of the Petition for Declaratory Ruling by Sandwich Isles Communications, WC Docket No. 09-133 (Aug. 12, 2009)

[41] In July, 2010, for example, roughly 400,000 customers statewide were left off-the-grid when an undersea fiber-optic cable suffered a break. The cable was severed in open ocean, between islands, nearly 3,000 feet below sea level. It took over three weeks to repair. In 2014, a tree rubbed through a fiber-optic cable, causing massive outages across a 97 mile swath from Waikoloa to Pahala. Both cell phones and landlines were out in Pahala, where fire-fighters were enlisted to patrol the area and police officers were stationed at every school to provide radio contact in case a student was injured or became ill. These are the types of disruptive—and often dangerous—outages that the enhanced redundancies and improved route diversity provided by the Paniolo Cable can help combat. See e.g. Nancy Cook Lauer, Cable Outage Exposes Island-Wide Flaw, West Hawaii Today (March 2, 2014);

days. There are several other factors which demonstrate the Paniolo Cable's utility: (1) the cable has enhanced the quality of service available across the HHL due to its cutting-edge technology and robust back-up capacity; (2) since the Paniolo Cable lands at different places than Hawaii's other two submarine cables, restoration and reliability have been improved by these newly-diversified routes; (3) the older, pre-existing cables did not then, and do not now extend access to the areas served by the Paniolo Cable, which is precisely why the DHHL licensed SIC in the first place – to serve the areas left dark by other service providers; and (4) all of the foregoing is consistent with recent joint Commission and Department of Homeland Security actions to promote diverse and redundant submarine cable capacity.

4) **SIC was transparent regarding its dependence on federal support to make this project viable:** SIC made clear from the outset that the system could not be built without cost recovery from the USF *and* the NECA pool, and it reasonably relied on representations by the FCC and NECA that the full cost of the cable would be covered.

5) **Because of the timing of NECA's objections, SIC had no choice but to complete construction:** By the time construction started, the cable had been repeatedly approved by the Commission as a prudent investment - no concerns about the cable's utility were raised until the terrestrial leg had already been completed, and build-out of the full system was the only way forward.

6) **Public Interest:** The Paniolo Cable plainly serves the public interest. It provides essential, redundant and diverse submarine cable capacity for HHL. It thereby exclusively serves the telecom needs of high-cost and otherwise underserved, rural and isolated American communities. This is precisely the demographic the USF was established to serve.

On September 29, 2010, the Bureau issued a Declaratory Ruling responding to SIC's Petition ("2010 Declaratory Order"). Therein, the Bureau concluded that 50% of SIC's lease expenses, as well as

certain one-time engineering expenses, should be included for recovery in the NECA pool. In reaching its determination, the Bureau applied its traditional "used and useful" standard, as mediated by a number of additional factors related to balancing the equities.[42] The Bureau considered NECA's arguments regarding the cable's current excess capacity, and the lack of substantial record evidence re: future demand, as well as a number of countervailing considerations that it deemed "equitable factors."[43] The Bureau's conclusion was unequivocal: "50% of the Paniolo Cable lease expenses subject to dispute should be included in the revenue requirement." SIC sought reconsideration of the 50% solution order; AT&T appealed to the full Commission.

D. The SIC Network/Paniolo Cable Has Achieved its Objectives, Honoring Its Commitment to Serve Rural and Otherwise Isolated Native Communities in Need

SIC's terrestrial and submarine systems, including the Paniolo Cable, are now in place and operational, as has been true for the past seven years. The real world experience has shown the cable's utility, not just for today, but for tomorrow. The cable has already been instrumental in:

1) **Enhancing Service.** No party can deny the cable has enhanced the quality of service available across the HHL due to its advanced technology and robust back-up capacity.

2) **Improving Route Diversity:** Since the Paniolo Cable lands at different places than Hawaii's other two submarine cables, restoration and reliability have been improved by the newly-diversified routes; in fact, the Paniolo Cable has been used by other service providers experiencing outages.[44]

3) **Enhancing Security, Public and Private:** Hawaii, by virtue of its location in the middle of the South Pacific, is a sensitive location with respect to homeland security issues, particularly those

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[42] See Sandwich Isles Communications, Inc. Petition for Declaratory Ruling, WC Docket No. 09-133, Declaratory Ruling, 25 FCC Rcd 13647 (Sept. 29, 2010)

[43] Id.

[44] See *Cable Outage Exposes Island-Wide Flaw,* supra n. 37

associated with the Asian and Pacific regions. Just as the personal security of HHL residents and island-visitors has been served by the Paniolo Cable network, residents of the continental United States also benefit, from the secure communications infrastructure and protection it represents.

4) **Serving Rural, High-Cost Populations in Need:** SIC and the Paniolo Cable plainly serve the public interest. More specifically, SIC and its submarine cable exclusively cater to the telecom needs of decidedly high-cost and otherwise under-served or unserved, isolated and indigenous American communities. SIC's cable network now provides essential, redundant and diverse submarine cable capacity for regions of Hawaii that were previously under-served, or completely dark. Indeed, in certain rural portions of Maui, where there is no electricity, the SIC Network is the singular means by which residents and public safety authorities can exchange critical public safety information. This is precisely the demographic the USF was established to serve. The FCC should honor its own aspirations—not to mention its commitments—to these rural communities in need, and reverse any action that may jeopardize the security or viability of SIC or its essential infrastructure going forward.

5) **Satisfying Soon-to-be Rising Regional Demand:** In November, 2016, a First Circuit judge found Hawaii in violation of its constitutional duties by continually failing to provide adequate funding to the DHHL. Specifically, the judge noted that "this failure includes every fiscal year since at least 1992."[45] And over the course of her 40-page opinion, Judge Castagnetti repeatedly emphasized that "DHHL suffers from a lack of funding and staffing, which adversely affects beneficiaries of the Hawaiian Home Lands Trust."[46] Initially, the Judge directed that DHHL was owed more than $28 million in general funds for the fiscal-year 2015-2016, by Constitutional mandate. She

[45] See Richard Nelson III, et al., v. Hawaiian Homes commission, et. al., Civil No. 07-1-1663-08 (Declaratory Judgment) (June 29, 2015)(finding Hawaii in violation of its constitutional duties to the extent it has consistently failed to provide adequate funding to the DHHL).
[46] Id.

amended her order in March, 2016, clarifying that "the Court is not ordering an appropriation. The Court is ordering that the state must comply with its constitutional duty to make sufficient sums available to the Department of Hawaiian Home Lands."[47] As a result, Governor Ige recently proposed that DHHL's $9.61 million in general appropriations for FY2016 would be replaced with $17.4 million. Next year, that number jumps to $23.5 million. This major capital injection means that DHHL will be able to allow beneficiaries much greater access to the homesteading program already in place with respect to the Hawaiian Home Lands. In short, the region can expect an influx of residents in the near future, which for SIC means a surge in demand.

IV. THE NECA CLAIM THAT SIC DESERVES NO NECA POOL SUPPORT FOR ITS PANIOLO CABLE INVESTMENT IS UTTERLY WITHOUT MERIT AND DISHONORS THE OBJECTIVE OF THE FUND

The "used and useful" test is an economic approach to analyzing whether a certain cost or expense should be included when setting the rate that may be charged by a public utility. "Used and useful" is not a binding rule.[48] The concept of "used and useful" is now "often used interchangeably with other equitable ideas and modern risk allocation concepts."[49] Indeed, the Supreme Court has found "used and useful" to be flexible enough to embrace the varied considerations inherent in agency rate making.[50] In opposing the Commission's 2010 Declaratory Order directing NECA to apportion 50% of SIC's operating expenses to its traffic-sensitive pool, both NECA and AT&T grossly oversimplify—and thereby misstate—the purpose and nature of the "used and useful" analysis.

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[47] Id.

[48] *See Jersey Cent. Power & Light v. FERC*, 810 F.2d 1168, 1175 ("[W]ith the demise of 'fair value,' 'used and useful' ceased to have any constitutional significance, and the [Federal Energy Regulatory] Commission has at times departed from this standard. It is now simply one of several permissible tools of ratemaking, one that need not be, and is not, employed in every instance." *id.* at 1191 (Starr, J., concurring).

[49] James J. Hoecker, *"Used and Useful": Autopsy of a Ratemaking Policy*, 332 Energy L. J. 303, 333 (1987).

[50] FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944); see Wash. Gas Light Co. v. Baker, 188 F.2d 11, 14, 18–19 (D.C. Cir. 1952) (stating that Hope permits agencies to adopt "any method of valuation for rate base," even if that includes retention in rate base of the originally prudent but now obsolete plant until its costs are recovered).

The Commission has adopted the economic-based "used and useful" approach as a "tool" to assess the proper risk allocation of investments and costs by eligible telecommunication carriers or ETCs. Investments and costs which further the purpose of the USF program—including subsidization of the provision of quality communications services to high cost areas—are deserving of support; investments and expenditures which solely benefit the service provider are not. In light of this unimpeachable purpose, the Commission has historically evaluated several factors in determine whether a project or investment is "used and useful," including:

- The need to compensate a utility's owners for the use of their property and the expenses incurred in providing the regulated service;
- Whether the expense was necessary to the provision of interstate telecommunications service;
- Whether a carrier's investments and expenses were prudent; and
- Whether the benefit from the investment will be realized in a reasonable period of time.[51]

In analyzing these factors, the Commission relies heavily on the specific facts of each individual case.[52] ("The particular facts of each case must be ascertained in order to determine what part of a utility's investment and expenses are used and useful" (internal quotation omitted)). Thus, no two projects or investments are the same—each will include facts and variables that affect the Commission's application of "used and useful." This case-by-case approach is entirely consistent with the basic purpose of the "used and useful "principle: the provision of reasonable rates that balance investment in the utility with the public benefit. Such an analysis does not lend itself to prescriptive rules.[53]

The Commission incorporates a "prudent investment" consideration into its "used and useful analysis.[54] Other regulators have recognized that a "reasonable opportunity" for a utility to recover

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[51] In the Matter of Connect Am. Fund, Report & Order on Recon. & Further NPRM, FCC 16-33, WC Dkt. No. 10-90 ¶¶ 335 (Mar. 30, 2016).

[52] Id.

[53] *See Consol. Gas Supply Corp. v. FPC*, 520 F.2d 1176, 1185 (D.C. Cir. 1975) ("The legal system does not compel rigidity, or bureaucratic inflexibility, least of all in the area of energy policy where flexibility may be essential to the public interest.")

[54] *Connect Am. Fund*, FCC 16-33 ¶¶ 334–35; *1990 AT&T Tariff Revisions Order*, 5 FCC Rcd at 5695, ¶ 17.

its prudently incurred investment is part of a "regulatory compact" between utility investors and regulators.[55] As a component of a "used and useful" analysis, the prudent-investment test allows a utility to recover its investment, through allowed rates, if its investment decision was prudent in light of the information reasonably available to the utility ***when that decision was made***.[56] The economic concept of "prudence" deals with analysis by foresight and the principle recognizes that foresight is rarely, if ever, precise. As a result, regulators permit costs of investments to be recovered through the rate base, even if subsequent circumstances reduce the investment's usefulness. The prudent investment test is particularly applicable when considering excess capacity—which often represents an investment by the utility in its future capacity to meet growing demands or to reflect other considerations such as the practical difficulty of equipment installation or replacement.[57]

As a result, economists have explicitly recognized that "Where an investment is lumpy, one cannot legitimately infer from the existence of excess capacity alone that the investment is not 'used and useful.'"[58] That is, there is a fundamental difference between excess capacity that a utility chooses to build into a system, and excess capacity that exists through the technological, physical, and structural elements of a project. The latter is sometimes called a "lumpy investment" and represents a tiered or stepped increase in the cost to obtain additional capacity, rather than a linear increase or smooth curve. Undersea cables are manifestly lumpy. Given the ease and minor expense of adding fibers to an undersea cable before it is deployed versus the major costs and difficulties (or impossibilities) of adding fiber capacity after deployment, the most rational economic and technical decision is to

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[55] *See, e.g.*, *FERC·Opinion and Order, New England Power Company*, Docket Nos. ER85-646-001, et al (Jan.1988).

[56] *See Jersey Cent. Power & Light Co. v. FERC*, 768 F.2d 1500, 1504 n.4 (D.C. Cir. 1985.*)*

[57] *See City of Batavia v. FERC*, 672 F.2d 64, 74–75 (D.C. Cir. 1982) (upholding inclusion in rate base of 30.8% excess generating capacity); see also, Illinois Cities v. FERC, 670 F.2d 187, 200-01 & n. 59 (D.C.Cir.1981) (sustaining inclusion of 30.2% excess capacity in rate base in the absence of any showing of "managerial imprudence").

[58] William Baumol & J. Sidak, The Pig in the Python: Is Lumpy Capacity Investment Used and Useful?, 23 Energy L. J. 283, 288 (2002)

provision an undersea cable at the outset with all the fiber capacity that it may reasonable be expected to need during the course of its expected 25-year useful life. Thus, excess capacity can be considered "used and useful" if "deemed necessary at the start but not actually put into use."[59] Investing in excess capacity can be both prudent and useful when it not only ensures uninterrupted service in response to growing demand, but also allows the utility to meet increased need for a fraction of the cost of more alternative measures.[60]

Rapid changes in the industry and usage patterns in connection with the explosion of internet usage and broadband services around the turn of the century made it reasonable to expect, in the near future, SIC's customers would substantially increase their traffic volumes. Seeking validation, SIC commissioned a study to investigate projected demand growth over the next decade.[61] The Discovery Institute study projected that bandwidth requirements for broadband services would increase 50-fold during the 10 years between 2005 and 2015. Researchers were confident in their figures, explaining that "the consumer of tomorrow will want their information, communication and entertainment delivered to them wherever they may be and on the device that they choose." Thus, the study concluded that, "a minimum of 144 fibers of undersea cable would allow sufficient bandwidth in the upcoming 20 years."[62]

All of this is entirely ignored in the NECA letter and subsequent appeal. NECA's refusal to allow all but $1.8 million of the investment in the Paniolo Cable rests entirely on the proposition that there is too much excess capacity in the cable and that there were other, less costly alternatives to

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[59] *Commc'ns Satellite Corp. v. F.C.C.*, 611 F.2d 883, 893 (D.C. Cir. 1977) (citing *FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575 (1942))

[60] See Town of Norwood v. FERC, 80 F.3d 526, 532 (D.C. Cir. 1996) (quoting Mid-Tex Elec. Coop. v. FERC, 773 F.2d 327,346 (D.C. Cir. 1985)) (recognizing that "because consumers 'derive a present benefit-assurance of adequate future service-from construction work in progress,' including some of the plant's costs in the rate base [does] not conflict with the 'used and useful' principle").

[61] See Inter-Island Bandwidth Projection Study, 3-13, CHR Solutions (Feb. 3, 2008) (SIC EXHIBIT 5).

[62] Id.

construction of the cable that should have been chosen.

This profoundly oversimplifies the principles that should apply and thus serves to entirely defeat the purposes of the NECA cost recovery program. More importantly, the empirical data adduced during this long proceeding, and almost completely ignored by NECA, leaves no room for doubt that, under a proper application of the principles the Commission has historically applied, SIC is actually entitled to receive *considerably more* NECA support than the Commission allowed in the 2010 Order and certainly not less. The Paniolo Cable is not merely "used" or "useful," it is, in fact, indispensable to the public safety and security of the HHL residents, schools, small businesses who depend on the SIC Network.

1. **The Paniolo Cable is Both Used and Useful.** The Paniolo Cable is used for its intended purposes. This is not an extreme case in which a service provider seeks recovery of assets that never were put into service. The Paniolo Cable is clearly currently "used"—it provides vital connectivity directly and specifically to the HHL while the other existing Hawaiian submarine cable systems are not only designed to serve non-HHL areas, but are also aging-out. The Paniolo Cable is also "useful," since it enhances the quality of service, and provides much needed back-up capacity and route-diversity to guard against service interruptions in both HHL and non-HHL areas. In fact, the Paniolo Cable is much more reliable than its competitor cables, and has been used by Time Warner and others when extended outages on the other line has occurred. This enhanced citizen safety benefit is not to be understated. Additional undersea fiber transport capacity will not only facilitate the deployment of advanced telecommunications and information services, but will also "enhance the reliability of basic telecommunications capability in emergencies."[63]

2. **The Paniolo Cable Was a Prudent Investment.** SIC's investment in the Paniolo Cable was then (and is now) a reasonable investment based on expectations (in fact, the waiting list for HHL

[63] Letter from Richard Cameron for Hawaiian Telcom to Marlene Dortch, FCC, WCC Noc. No. 08-4 (Sept. 25, 2008)

homesteads presently exceeds 29,000 applicants). Plus, the reliably geometric curve of growing broadband capacity and service needs. If anything, as we have described above, the subsequent failures of the older submarine cable systems demonstrate that SIC was correct to get Paniolo to build a new and reliable system designed specifically for the unique needs and geography of the HHL. Unfortunately, NECA has penalized SIC for allowing other service providers to use the Paniolo Cable when their systems have been down for temporary periods. In such circumstances, NECA has treated payments received by SIC for temporary, emergency use as if the payments had been permanently withdrawn from the rate base, resulting in a reduction in revenues to SIC by approximately $700,000 per year.[64] Finally, as we have also explained and as NECA has persistently ignored, this is the classic case of a lumpy investment. The fixed costs are front-loaded and unavoidable.

3. **The Paniolo Cable's Capacity is Justifiable.** In general, broadband capacity needs have grown exponentially during recent years with the current Commission standard of 25 Mbps downstream/3 Mbps upstream likely to be superseded at an early date as more and more carriers offer Gigabit services. Given the economics of the deployment of undersea cable (that is, where the costs of laying the cable are massive and the costs of additional fibers are minimal in comparison), the only rational choice was to include a large number of fibers in the cable. As the "used and useful" test has developed, it has become clear that, far from representing a rigid, inflexible rule, the test may be molded by regulators to conform to the unique facts and circumstances of individual rate making decisions. Where fixed costs of a vital service are high, costs of additional capacity are low, and the potential for increased demands almost without limit, an investment such as SIC's in the Paniolo Cable is clearly "used and useful."

[64] See text at note 68, *infra*

4. **The Paniolo Cable Was Specifically Designed for and Specifically Services High-Cost, Rural Regions:** The TDM/SONET system was state of the art in 2005 and remains the telecommunication industry standard in Hawaii. Moreover, as we have also explained and as NECA has persistently ignored, this is the classic case of a lumpy investment. While the initial forecasts by DHHL, upon which SIC relied, may have been optimistic, that can change very quickly, especially in light of such developments as the recently announced infusion of $19 Million dollars into the HHL development fund.[65] Moreover, for a system designed and built to serve areas like HHL, it makes no sense to measure utility solely or even substantially by the number of lines served. In the first place, demand is at best a poor proxy for usage; and, in fact, usage in certain areas of HHL where there are commercial customers, is quite high and growing. The entire point of the SIC system is to provide high quality reliable service to the rural, unserved and underserved areas; and that is exactly what the Paniolo Cable accomplishes.[66]

5. **The Additional Capacity-Related Construction Costs Were De Minimis.** In the final analysis, the entirety of the NECA position comes to rest on the proposition that the demand forecasts have not come to fruition and that therefore the entire cable is, itself, excessive. This implies—although NECA certainly does not say so—that NECA would be more willing to provide pool dollars to SIC had it built a12 fiber system. This is irrational because it ignores the incremental cost of sizing and constructing a submarine fiber network. As the ex parte submissions made in this Docket show—and as neither NECA nor AT&T has ever denied—investments in submarine cable are lumpy and cannot be measured in a linear fashion. The complained-of "excess capacity" at issue regarding the Paniolo Cable is represented by the undersea fiber-optic cables connecting the

[65] See *supra,* Section III, D (5)

[66] It bears emphasis that in the rural HHL, the high quality reliable service is a lifeline for public safety considerations. For example, in rural Kahikinui on the island of Maui, without the phone service provided by SIC, there would be no communication to alert public safety officials of mountain fires that begin and many times threatened both HHL lands and homes, but adjoining other public and private landholder lands. Kahikinui has no electricity but has phone and DSL because of SIC. The more remote the areas, the more dependent and lifesaving simple phone service provides to HHL residents.

islands, and providing the necessary bandwidth for telecommunications. Each additional fiber represents an additional amount of bandwidth. However, SIC was unable to scale the number of fibers it needed in a linear manner—rather, SIC could only select from predetermined tiers of numbers of fibers.

At the time the system was designed and built, the type of scalability permitted by Ethernet applications was simply unavailable for a system of this type. The relative cost of the excess capacity must be included in the fact-intensive "used and useful" analysis. Just as SIC could not incrementally add fibers to reach an optimum capacity, the cost of leasing 48 fibers versus 12 fibers did not rise linearly. Given the unique challenges involved with laying undersea cables, the bulk of the cost of the Paniolo cable was not determined by the number of fibers, but rather by permitting, preparation, and other fixed costs. Indeed, 98% of the cost of the project represents "sunk costs"—costs that SIC would need to have paid regardless of the number of fibers involved. The actual "excess capacity" (the 36 additional fibers) represents only 2% of project's cost. This investment allowed SIC to achieve significant future capacity at an insignificant increase in total costs.

Thus, with regard to the Paniolo Cable, the vast majority of the expense (98%) was "necessary to the provision of interstate telecommunications services"; SIC's investment in the Cable and any "excess capacity" (representing 2% of the project costs) was prudent, and the benefits are currently being realized, through the direct provision of services, protections from gaps in service, and the ability to scale services to meet potentially rapidly-growing demand.

V. SIC Proposes to Restructure its Paniolo Lease in a Way that Moots the NECA Issue and Reduces the Annual Charge to the NECA Pool

As we have shown, the applicable legal and economic principles that should govern this case establish

that SIC is entitled to cost recovery from the NECA pool for the Paniolo Cable at levels that are, in fact, significantly higher than approved by the Commission in the 2010 Declaratory Ruling Order.[67] However, SIC has recognized that for reasons that are not within its control or within the control of the residents or governing body of the HHL, usage of the entire network has grown much more slowly than anyone projected 11 years ago when the project was first launched.

Several factors have contributed to the slower than expected demand. First, although the project was launched during a period of relative prosperity, by the time construction of the submarine cable began in 2007, the country was sliding into what is now known as the Great Recession – inarguably the most severe financial downturn in the past 75 years. The negative externalities associated with the Great Recession were particularly severe in rural and isolated areas such as the HHL. While the effects of the financial crisis have largely receded in the more industrialized portions of the country, weak and vulnerable economies have persisted far longer in remote and rural areas like the HHL, to their great detriment. Second, for several reasons—some of which may have been related to the economic downturn—funding of the HHL project by the State of Hawaii came into question, resulting in litigation which was not concluded until 2016.

In sum, the Paniolo Cable came on line (in 2009) right in the face of the worst of the economic and legal turbulence since the Great Depression. It ought not to be surprising, then, that the demand in the past 5 years did not live up to the originally, perhaps overly optimistic, projections. None of this, of course, negates in any respect the legitimacy, and equally importantly, the benefit to the residents of the HHL of the SIC network as built. Faced with these realities, SIC began to explore means of spreading the investment costs of the Paniolo Cable lease.

Discussions with RUS as the lender with the largest share of SIC's debt began in 2013 and an

[67] See Discussion, supra at Sections C + D; see also SIC Exhibit 6.

agreement in principle was reached in late 2014; that agreement would have the net effect of reducing annual payments due to RUS and extending the maturity date of the RUS loans and the length of the repayment term. As a condition of approving the extension of the RUS amortization period, however, SIC agreed to renegotiate the terms of its Paniolo Cable lease. Accordingly, in 2014, SIC entered into discussions to restructure the Paniolo Cable lease and an understanding in principle, meeting the terms of the RUS restructure agreement, has been reached. Under that understanding, the annual lease payments under the Paniolo Cable lease would be reduced from the current annual amount of approximately $24 Million to $8.1 Million.

The $8.1 Million annual payment was not arbitrarily reached. SIC performed a comparative market analysis to determine what the cost to use an alternative submarine cable system would likely be. The comparability analysis was performed using publicly available data for leased lines from other carriers, including Hawaiian Telephone, that offer service in the area. The data was obtained from the LATTIS system. An exact comparison of course was not possible because no service provider other than SIC reaches the HHL or areas contiguous to the HHL in the same way that SIC does; however, the comparison was performed on a segment by segment basis to achieve as close to comparability as possible.

The analysis also fails to take into account engineering and interconnection costs that would be incurred if the Paniolo Cable were entirely replaced; and these costs would add approximately another $6 Million to annual operating costs. RUS, which reviewed the analysis, concurred that the fair market value cost of the submarine cable—entirely without regard to the additional benefits the Paniolo Cable provides to the HHL—is $8.1 Million per annum. SIC therefore submits that its lease restructuring plan which would reduce the cost of the Paniolo Cable to $8.1 Million should be permitted to go forward precisely because it would reduce the Paniolo Cable's draw on federal funds, while permitting SIC to continue to provide and to expand the essential and beneficial service it now

provides to HHL.

A primary obstacle to implementation of these arrangements is NECA's refusal to recognize the Paniolo Cable lease as eligible for cost recovery from the NECA traffic-sensitive pool under the used and useful principles.[68] We have shown that position to be without merit on its own terms. In fact, it is difficult to avoid the conclusion that what NECA is really seeking is to get the Bureau to reverse itself and the full Commission and now hold that the Paniolo Cable never should have been built in the first place. There are simply no grounds in law or policy for such an action.

VI. CONCLUSION

For these reasons, the Bureau should promptly issue an Order directing NECA to include 100% of the Paniolo Cable lease cost in the NECA pool immediately. More precisely, the Order should direct NECA to release funding in such a manner as to generate $8.1 million of cost recovery per year to SIC, with the understanding that a portion of the Paniolo Cable lease costs will be removed from the SIC rate base and used for other purposes. Furthermore, the proposed funds should be released only after submission to NECA of evidence indicating that the Lease has been amended as specified herein.

We have shown that the Paniolo Cable fully satisfies the economic and equitable principles that underlie the used and useful evaluation. It follows *a fortiori*, that SIC's restructured Paniolo Cable

[68] NECA filed in February 2015 a Petition for Clarification and/or Declaratory Ruling, to which SIC has responded. As SIC has advised NECA, SIC's payments on its Paniolo lease have substantially exceeded the total support payments that it has received from NECA with respect to the lease. In light of the proposal made by SIC herein, it is not necessary for the Bureau to resolve the issue in dispute in NECA's Petition for Clarification. SIC proposes a revised treatment of the Paniolo lease that moots this issue. SIC believes it is important to state for the record that NECA has been improperly deducting amounts from SIC's NECA support payments since 2011. In July 2010, SIC at the request of Oceanic Time Warner, which had experienced a break in its undersea cable, requested a one-time use of the Paniolo Cable. As an accommodation, SIC agreed to this use in order to assist Oceanic Time Warner and its customers. Notwithstanding that this was a one-time (lasting approximately 6-7 weeks) non-regulated use of the cable, NECA has continued to deduct that one-time usage from SIC's NECA support payments on an on-going basis, year after year. SIC estimates that this has cost it in excess of $700,000 per year beginning in 2011. This treatment of SIC by NECA continues to this day.

lease—which will reduce the annual pool cost recovery without impairing the ability of SIC to meet the current and future needs of the citizens in the HHL—is equally consistent with Commission policy and should be adopted. Acceptance by the Commission of this result would moot SIC's petition for reconsideration of the 2010 Declaratory Order as well as AT&T's application for review and NECA's Petition for Clarification and/or Declaratory Ruling. Most importantly however, it would bring an end to this decade-long saga, and permit SIC to devote its energies and resources to the purposes for which SIC was created: the provision of modern, high quality telecommunications and broadband service to the HHL.

Respectfully Submitted,

/s/_____

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