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

In the Matter of	)	
	)	
Space Data Spectrum Holdings, LLC	)	File No. 0004451589
AWS Station WQIA880	)	
A Block, Alaska 1–Wade Hampton CMA	)	
	)	
Request for Waiver and Extension of Time of	)	
Tribal Land Bidding Credit Construction	)	
Requirement	)	

MEMORANDUM OPINION AND ORDER

Adopted: March 31, 2014 **Released: April 1, 2014**

By the Deputy Chief, Broadband Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this *Memorandum Opinion and Order*, we grant the above-captioned request by Space Data Spectrum Holdings, LLC (Space Data) for an extension of time to meet its construction requirement for the Native Village of Atqasuk (Atqasuk Village), located in Alaska. Grant of this extension will facilitate the provision of wireless service to the Atqasuk Village under the Commission's Tribal Lands initiative.

II. BACKGROUND

2. Space Data was the winning bidder in Auction No. 66 for three Advanced Wireless Service (AWS) licenses, including WQIA880, the Alaska 1–Wade Hampton (CMA 315) A-Block license that is the subject of its *Extension Request*.[1] On December 12, 2007, the Wireless Telecommunications Bureau (Bureau) granted Space Data a license for this market.[2] As part of its license grant, Space Data received a tribal land bidding credit (TLBC) of $366,500 (half of the gross winning bid) in exchange for its agreement to construct and operate within three years of its initial license grant (*i.e.,* by December 12, 2010) a system capable of serving 75 percent of the population of the qualifying tribal land (*i.e.*, Atqasuk Village) for which the credit was awarded.[3]

3. Atqasuk Village lies on the Meade River in Alaska's North Slope Borough, over 270 miles north of the Arctic Circle. The closest larger communities are Barrow, approximately 55 miles to the north-northeast, Prudhoe Bay, 215 miles to the east, and Fairbanks, 465 miles to the southeast.[4]

[1] Auction of Advanced Wireless Services Licenses Closes, Winning Bidders Announced for Auction No. 66, *Public Notice*, 21 FCC Rcd 10521 (WTB 2006).

[2] Wireless Telecommunications Bureau Market-Based Applications Action, *Public Notice*, Report No. 3672 (WTB 2007).

[3] 47 C.F.R. § 1.2110(f)(3)(iii), (iv), (vii). The Native Village of Atqasuk lies within the geographic area encompassed by the Alaska 1–Wade Hampton CMA.

[4] *See* Rand McNally Commercial Atlas & Marketing Guide 2004, vol. 1 at 124 (2004).

According to Space Data, "transportation to the Atqasuk Village is possible only by bush plane, snowmobile, all-terrain vehicle, or dogsled."[5] The most recently published U.S. Census listed a population of 223, with 215 being American Indian or Alaska Native.[6] The U.S. Department of Commerce, Bureau of Indian Affairs recognizes Atqasuk Village as a tribal entity,[7] and the Village is a "qualifying" tribal land as defined by section 1.2110(f)(3)(i) of the Commission's rules[8] due to its wireline subscription rate of 74.5 percent.[9] At the time it filed its Extension Request, according to Space Data, the only commercial wireless services available to the Village were GSM voice and GPRS/EDGE data services provided in the cellular band by ATSAC Wireless LLC, a wholly owned subsidiary of the Arctic Slope Telephone Association Cooperative, and in the PCS band by GCI Communication Corp., a wholly owned subsidiary of General Communication, Inc.[10]

4. The construction performance provisions of the TLBC rule required Space Data to complete construction and begin operation a system capable of serving 75 percent of the population of Atqasuk Village by December 12, 2010, the third anniversary of its initial license grant, and to file within fifteen days thereafter a post-construction certification of compliance with that requirement.[11] If Space Data did not provide this post-construction certification, the penalty provisions of the rule required Space Data to repay the TLBC amount in its entirety, plus interest, within thirty days of the third anniversary of its initial license grant, or its license would terminate automatically.[12]

5. Space Data was unable to satisfy the three-year TLBC construction requirement. Arguing that there was good cause for the delay, however, Space Data filed a timely request to extend the TLBC construction period on November 12, 2010.[13] It supplemented its request on December 9, 2010, to seek suspension of the trigger date for the TLBC performance penalties pending Commission action on its *Extension Request*.[14] On December 15, 2010, the Bureau sought comment on Space Data's *Extension Request*.[15] Space Data further supplemented its request on March 29, April 7 and November 16, 2011; and on September 10 and October 16, 2012 to provide updated information about its efforts to construct facilities serving Atqasuk Village; and on October 16, 2012 to report completion of construction and initiation of service as of October 6, 2012.[16] No comments have been filed in response to Space Data's request, and we have received no opposition to the request from Atqasuk tribal authorities.

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[5] File No. 0004451589, Request for Waiver and Extension of Time (filed Nov. 12, 2010) (*Extension Request*) at 5.

[6] 2010 U.S. Census, *available at* http://2010.census.gov/2010census/popmap/ipmtext.php?fl=02:0204500.

[7] *Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs*, 65 Fed. Reg. 13298, 13302 (Mar. 13, 2000).

[8] 47 C.F.R. § 1.2110(f)(3)(i).

[9] *See* FCC, List of Federally Recognized Tribal Lands and Telephone Penetration Rates (if available) at 1, *available at* http://wireless.fcc.gov/auctions/default.htm?job=tribal_bidding.

[10] *Space Data Third Supplement* (filed Apr. 7, 2011) at 4.

[11] 47 C.F.R. § 1.2110(f)(3)(vii).

[12] 47 C.F.R. § 1.2110(f)(3)(viii).

[13] *Extension Request.*

[14] *Supplement to Request for Waiver and Extension of Time* (filed Dec. 9, 2010) (*Space Data Supplement*).

[15] Wireless Telecommunications Bureau Market-Based Applications Accepted for Filing, *Public Notice*, Report No. 6455 (WTB Dec. 15, 2010) at 2.

[16] File No. 0004451589 (amendments filed Mar. 29, 2011 (*Space Data Second Supplement*); Apr. 7, 2011 (*Space Data Third Supplement*); Nov. 16, 2011 (*Space Data Fourth Supplement*); Sept. 10, 2012 (*Space Data Fifth Supplement*); and Oct. 16, 2012 (*Space Data Sixth Supplement*)).

III. DISCUSSION

6. While Space Data casts its request as one for a waiver of the TLBC rules under section 1.925 of the Commission's rules,[17] our starting point here must be section 1.946 of the rules,[18] which governs extensions of construction periods for stations in the wireless radio services. Section 1.946 provides that construction deadlines may be extended for good cause beyond the licensee's control,[19] if filed before the expiration of the original deadline.[20]

7. Space Data claims its inability to timely construct facilities serving Atqasuk Village was due to the unavailability of suitable base-station AWS radios and switches. Space Data says that its original plan was to provide service based on a system it had developed "that utilizes free-floating, balloon-borne [picocell] transceivers called SkySite® platforms that function as repeaters . . . ,"[21] but that it was unable to find a manufacturer willing to produce the specialized AWS radios required, given their initial focus on producing conventional terrestrial equipment for this new spectrum band.[22]

8. Space Data met similar problems when it explored the feasibility of deploying a conventional terrestrial base station to serve Atqasuk Village, using satellite backhaul to its switch in Anchorage.[23] "Infrastructure manufacturers have focused on developing AWS equipment to meet the demand for 4G [Fourth Generation] wireless services in large urban areas with very high population densities. The infrastructure solutions for large urban areas, however, are not necessarily appropriate to meet the needs of small, remote areas in Alaska like the Atqasuk Village. In addition, what 4G infrastructure may be available is in short supply as vendors ramp up production."[24]

9. According to Space Data, the terrestrial 4G option also presented other problems in acquiring suitable equipment. "Space Data has discovered . . . that the satellite backhaul solution creates an additional issue with regard to a suitable AWS base station. Specifically, the latency issues inherent in satellite communications create operational challenges for AWS base stations. Existing AWS base stations do not tolerate the latency of the satellite link between the base station and the switch, which can create a lag time of up to one full second. This latency issue prevents the provision of service through available AWS base stations."[25]

10. In an attempt to overcome the latency problem, Space Data asserts that it investigated the availability of either radios that might overcome the latency problem or, alternatively, a low-capacity switch that could be co-located with the base station radios, but during the three-year TLBC period found

[17] 47 C.F.R. § 1.925. *Extension Request* at 1.

[18] 47 C.F.R. § 1.946.

[19] 47 C.F.R. § 1.946(e)(1). The rule prohibits granting extensions based on a failure to obtain financing, failure to obtain an antenna site, failure to order equipment, or because of a transfer of control of the licensee.

[20] 47 C.F.R. § 1.946(e).

[21] *Extension Request* at 3. "The SkySite platforms facilitate the provision of economical and efficient service to underserved geographic areas – such as Native American and Alaska Native lands – that are often too remote to be served economically by ground-based terrestrial wireless systems." *Id*.

[22] *Id.* at 3-4. Auction No. 66 was the first offering of broadband AWS spectrum.

[23] *Extension Request* at 4. "Space Data has determined that backhaul transmission in Alaska's North Slope region can be provided only through geostationary satellite links because the remote location and challenging terrain prevent the use of traditional wireline fiber backhaul or wireless microwave facilities." *Space Data Third Supplement* at 2.

[24] *Extension Request* at 4.

[25] *Space Data Third Supplement* at 2. *See also Extension Request* at 4-5 n.9.

nothing available that would solve the problem. It argues that "[i]t simply is not cost-effective for manufacturers to develop and build a base station that is tolerant of large backhaul latencies for a service provider that requires one base station to serve fewer than 230 people. As is typical in the wireless industry, manufacturers first focus on developing equipment for the largest market segments before directing resources to small niche markets."[26] "Space Data, a small company, . . . does not have the leverage or financial resources of a larger carrier to persuade manufacturers to develop the type of AWS equipment needed to serve the Atqasuk Village."[27]

11. In its update of September 10, 2012, Space Data reported that Lemko Corporation had developed a 4G LTE distributed mobile wireless network solution that met Space Data's needs, but which used a base radio that was only type approved for use in the United States in early August 2012.[28] Space Data stated that it "had scheduled training, installation and testing of the base ratio (sic) for late August and early September, so that its network would be operational by September 12, 2012."[29] However, the base station was being shipped from overseas, and had not been released by U.S. Customs as of September 10, 2012.[30] Space Data subsequently reported that it had received the base station and as of October 6, 2012 had completed construction of a facility covering 90 percent of the population of Atqasuk Village.[31]

12. Space Data argues that despite its inability to secure key equipment and complete construction "within the allowed timeframe . . . due to circumstances beyond its control",[32] it made diligent, ongoing efforts to construct facilities to serve Atqasuk Village.[33] It asserts that it took what steps it could under the circumstances to timely construct the station. It began construction planning efforts soon after the November 2007 grant of its license application, including an initial trip to the Village in February 2008 "to consider possible locations to site facilities and to discuss other construction logistics."[34] During the period when suitable 3G or 4G equipment was not available, Space Data says, it "obtained the currently available technical components necessary to construct a terrestrial site, including rack space, tower space, backhaul capabilities, and access to switching services, and . . . anticipates that it will be able to initiate services quickly once AWS equipment becomes available."[35] Counsel orally advised Commission staff on April 25, 2011 that Space Data had installed the base station antenna system to serve Atqasuk Village. And as described above, as of October 6, 2012, Space Data completed construction of its station serving more than 75 percent of the population of Atqasuk Village.[36]

13. Space Data argues that under these circumstances, "strict adherence to the TLBC construction

[26] *Space Data Third Supplement* at 2-3.

[27] *Extension Request* at 8.

[28] *Space Data Fifth Supplement* at 2.

[29] *Id*.

[30] *Id*.

[31] *Space Data Sixth Supplement* at 1.

[32] *Extension Request* at 7.

[33] *Id.* at 3-5, 8; *Space Data Third Supplement* at 2-3.

[34] *Extension Request* at 2.

[35] *Id.* at 6.

[36] *Space Data Sixth Supplement* at 1. Space Data also notes that it is a "long term, active participant in the Commission's TLBC program and previously satisfied the TLBC construction requirements for four other tribal lands." *Extension Request* at 2. And it observes that "[t]he remote location of and severe weather conditions around the Atqasuk Village have presented unique challenges with regard to the construction of facilities." *Id.* at 7-8.

deadline in this case would not serve the underlying TLBC program's public interest rationale of bringing badly needed telecommunications services to Alaska Native communities that have been passed over in the race to serve lucrative urban markets."[37]

14. The record here establishes that AWS base station radios and switching equipment suitable for use in the small, isolated Native Village of Atqasuk were not available to Space Data during its three-year build-out period. These are critical components. Without them, it would be impossible to construct an AWS station. This lack of equipment availability appears to have been beyond Space Data's control, and attributable to a combination of unusual circumstances: a new spectrum band requiring development and manufacture of new radios, heavy demand by major carriers for state-of-the-art, high capacity equipment, and the unique technical requirements dictated by Atqasuk Village's size and remote location.[38] The record also establishes that Space Data diligently sought to remedy the availability problem by investigating alternatives to its original SkySite plan, and to proceed with construction when possible. There is no indication that Space Data was simply warehousing its spectrum.

15. Moreover, we find that the extension Space Data seeks would not appear to frustrate the purpose of the Tribal Land Bidding Credit rule, which is "to promote deployment of wireless services on tribal lands."[39] In the proceeding adopting the TLBC rule, the Commission "strongly encourage[d] parties to seek waivers of specific rules or file other requests for regulatory relief in those instances where greater flexibility than the rules allow would facilitate the provision of service to tribal lands."[40] The construction impediments described above and Space Data's diligence in overcoming them illustrate the kind of situation the Commission surely contemplated when it noted that flexibility in applying the build-out rule could facilitate the provision of service to tribal lands.[41] We conclude, therefore, that the underlying purpose of the TLBC rule would best be served[42] by extending the three-year build-out period as Space Data proposed in its timely filed *Extension Request*.[43]

16. In addition to seeking an extension of the construction deadline as described above, Space Data requested a waiver of section 1.2110(f)(3)(viii) to suspend the trigger date for the TLBC penalty provisions until the Commission acts on the underlying construction extension request.[44] While the rule does not expressly provide that the grant of a construction extension automatically extends the trigger

[37] *Extension Request* at 10.

[38] *See* Applications Filed by Licensees in the Local Multipoint Distribution Service (LMDS) Seeking Waivers of Section 101.1011 of the Commission's Rules and Extensions of Time to Construct and Demonstrate Substantial Service, *Memorandum Opinion and Order*, 23 FCC Rcd 5894 (WTB 2008) (difficulties in obtaining viable and affordable equipment warranted an extension).

[39] Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Report and Order and Further Notice of Proposed Rule Making*, 15 FCC Rcd 11794, 11796 (2000).

[40] Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Third Report and Order*, 19 FCC Rcd 17652, 17656 ¶8 (2004).

[41] *Id. See also* Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Report and Order and Further Notice of Proposed Rule Making*, 15 FCC Rcd 11794, 11809 ¶41 (2000); *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd 4775, 4783 ¶22 (2003).

[42] More recently, the Commission noted the woeful lack of broadband access in tribal lands. "Available data, which is sparse, suggest that less than 10% of residents on Tribal lands have broadband available." Connecting America: The National Broadband Plan, prepared by the staff of the Federal Communications Commission (Mar. 2010) at 152. The 4G equipment Space Data installed provides broadband service to Atqasuk Village.

[43] In light of our conclusion that Space Data meets the standard under section 1.946 of the Commission's rules for an extension, its alternative request for a waiver of section 1.2110(f)(3)(vii) is moot.

[44] *Space Data Supplement* at 1-4.

date for performance penalties that otherwise would apply for failure to satisfy the three-year TLBC construction requirement, such parallel treatment is necessary in order not to thwart the objectives of the TLBC rules.[45] Given our decision that extension of the construction deadline is warranted, therefore, we waive section 1.2110(f)(3)(iii) such that the trigger date for TLBC penalty provisions shall be based on the extended construction deadline.

IV. CONCLUSION AND ORDERING CLAUSE

17. Space Data has demonstrated that an extension of its TLBC construction deadline is warranted under the standards contained in section 1.946 of the Commission's rules. In order to preserve the incentives of the TLBC rules, we also waive section 1.2110(f)(3)(viii) of the Commission's rules and establish the extended construction deadline specified below as the trigger date for TLBC penalty provisions for AWS Station WQIA880.

18. Accordingly, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and sections 0.331 and 1.946 of the Commission's rules, 47 C.F.R. §§ 0.331, 1.946, IT IS ORDERED that Space Data's Request for Extension of its tribal land bidding credit construction deadline for AWS Station WQIA880 is GRANTED, and its request for waiver of 47 C.F.R. § 1.2110(f)(3)(viii) IS GRANTED. The new construction deadline and trigger date for TLBC penalty provisions is November 12, 2012.

FEDERAL COMMUNICATIONS COMMISSION

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[45] *See Ronan Telephone Co.*, 22 FCC Rcd 972 (Mob. Div. WTB 2007) ("strict application of the TLBC construction requirement in this case, which would result in Ronan's repayment of its TLBC or if the TLBC is not repaid, automatic termination of its license, is not warranted").