

**BEFORE THE  
RURAL UTILITIES SERVICE  
DEPARTMENT OF AGRICULTURE  
WASHINGTON, DC 20250-1560**

<b>In the Matter of</b>	)	
	)	
<b>Request for Public Comment on Proposed Rule</b>	)	<b>Docket No. RUS-06-Agency-0052</b>
	)	
<b>Rural Broadband Access Loan and Loan Guarantee Program</b>	)	

**To: Michele Brooks  
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USDA Rural Development  
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Washington, DC 20250-1522**

**COMMENTS OF THE  
NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE**

The National Rural Telecommunications Cooperative (“NRTC”) respectfully submits these comments pertaining to and in support of proposed improvements to the Rural Broadband Access Loan and Loan Guarantee Program (“Broadband Loan Program”) administered by the Rural Utilities Service (“RUS”).<sup>1</sup>

**I. INTRODUCTION**

NRTC’s interest in the Broadband Loan Program relates primarily to satellite-based technology through which NRTC is providing broadband Internet access to Americans who do not have access to DSL, cable modem, fiber optic, or fixed wireless networks. Consumers living on farms and ranches, small towns, and other communities, no matter how remote or

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<sup>1</sup> See, *Rural Broadband Access Loans and Loan Guarantees; Proposed Rule*, (“Notice”), 72 Fed. Reg. 26,742 – 26,759 (Released May 11, 2007).

isolated, can now access broadband Internet service, just as Americans take for granted in urban and suburban markets.

Through satellite technology, rural Americans, unserved by terrestrial broadband services, can enjoy high-speed Internet access and thereby utilize such functions as online banking, e-commerce, Web-browsing, email, streaming video, and similar services that are difficult – or impossible - to access over a dial-up modem connection. Satellite technology, with ubiquitous coverage, reaches rural and remote areas in the most cost-effective manner available. It is, at present, the *one* technology that can provide broadband service to virtually every unserved market in the United States.

Satellite systems offer Internet connections that are up to 30 times the speed of a typical dial-up service, but generally not as fast as terrestrial broadband services. Nonetheless, NRTC has observed many instances where always-on, fast satellite services – even though at somewhat lower speeds than terrestrial broadband - open new businesses, expand personal and educational opportunities, and offer quality-of-life advances for those previously unserved in rural America.

The WildBlue satellite broadband service offered by NRTC and other WildBlue distributors<sup>2</sup> now reaches nearly 200,000 customers throughout the Continental United States. All of those consumers have gained WildBlue broadband access without the support of the Broadband Loan Program, the federal Universal Service Fund or any other federal assistance programs. NRTC believes that WildBlue and other satellite broadband providers' accomplishments merit the support of the Broadband Loan Program and will be assisted by the proposed Rules. Satellite broadband providers' eligibility for assistance through the

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<sup>2</sup> In addition to NRTC, WildBlue is distributed by EchoStar Corporation (Dish Network), DIRECTV, and AT&T.

Program would allow satellite broadband to become a more effective and more affordable tool for reaching virtually all unserved and underserved Americans.

## **II. BACKGROUND**

NRTC, founded in 1986, is a non-profit cooperative with more than 1,400 member companies in 47 states. Member organizations include rural electric cooperatives, rural telephone cooperatives, independent rural telephone companies, and other entities that work with NRTC to develop or acquire, deliver and operate telecommunications products and services in rural areas. NRTC's mission is to strengthen members' businesses while at the same time promoting economic development and improving the quality of life in rural America. For two decades, NRTC has worked with its members to maximize the value of satellite technologies for unserved areas, beginning with C-Band "big-dish" video services in the 1980s, later leading to NRTC members' distribution of DIRECTV programming via Direct Broadcast Satellite ("DBS") technology. Today, along with WildBlue satellite Internet service, NRTC is involved with the latest advances in satellite technology as it works with SES Americom and the National Telecommunications Cooperative Association ("NTCA") to distribute MPEG-4 compressed digital video to headends for rural Internet protocol television (IPTV) services.

Most pertinent to the topic at hand, NRTC has extensive experience with satellite-delivered high-speed Internet services. In 2001, many NRTC members distributed early versions of the first two-way high-speed satellite broadband services – Hughes Network Systems' DIRECWAY (now known as HughesNet) and the StarBand service. In 2003, NRTC became an equity investor in WildBlue Communications, Inc. along with Liberty Media and Intelsat. NRTC members were initially the sole distributors of WildBlue's

broadband service when it launched in June 2005. WildBlue provides broadband service to customers predominately in rural markets from two Ka-band satellites in geosynchronous orbit. WildBlue offers both residential and enterprise services specifically designed for rural users, with download speeds up to 1.5 megabits per second (“Mbps”) and upload speeds up to 256 kilobits per second (“kbps”).

### **III. COMMENTS**

#### **Service to Unserved Markets is Foremost Goal**

Typically, satellite broadband competes directly only with dial-up Internet because other forms of broadband access tend to operate at greater speeds. WildBlue concentrates on service to homes and businesses in areas that other broadband providers do not reach. By facilitating the availability of satellite broadband through the Broadband Loan Program, RUS can truly help bring high speed Internet access to the unserved, fulfilling the goal often iterated by Congress and the Federal Communications Commission. Through funding of satellite broadband, RUS can be sure that loans to service providers such as WildBlue will go toward reaching unserved households and small office and home office businesses.

There remains a significant portion of the United States wherein terrestrial broadband services are not available. According to the Pew Internet & American Life Project<sup>3</sup>, among individual residential Internet users, nationwide 70% have a broadband connection. In rural America only 55% of Internet users have broadband connectivity at home and 38% of rural adults have access to broadband at their place of employment. At

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<sup>3</sup> Pew Internet & American Life Project, Home Broadband Adoption 2007, see: [http://www.pewInternet.org/pdfs/PIP\\_Broadband%202007.pdf](http://www.pewInternet.org/pdfs/PIP_Broadband%202007.pdf)

the same time, among urban and suburban Internet users, 73% have broadband access at home and 55% at their place of employment.<sup>4</sup> Satellite broadband service can and will be a major factor in correcting that imbalance.

### **RUS Loan Support for Satellite CPE Will Expand Broadband Service**

WildBlue's goals of extending broadband to unserved households, enabling local businesses to grow, and providing more effective communications tools for police and public safety officials in rural America clearly are in the public interest. NRTC urges that RUS ensure that its new Rules support WildBlue's and local providers' purchase and installation of satellite broadband customer premises equipment (CPE) for all unserved customers.

WildBlue's network consists of two satellites – Telesat Canada's Anik F2 and WildBlue's own WildBlue-1. Between them, the satellites have capacity to serve approximately 750,000 rural customers throughout the 48 continental United States. The two satellites link home broadband users to six regional "gateway" Earth stations, which send and receive information from the Internet cloud.<sup>5</sup> In anticipation of reaching capacity on the two existing satellites, WildBlue is now in the initial planning for the construction and launch of a third satellite – "WildBlue-3". Ownership of the space assets, including uplink and satellite, enables WildBlue to provide a higher quality of service at lower price points.

The principal expense for the WildBlue service providers and their customers is for the purchase and installation of the CPE, not the least of which is the outdoor satellite dish antenna. This piece of network equipment is every bit as crucial to the overall network as the fiber, twisted pair and coaxial cables that complete a standard DSL or cable modem

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<sup>4</sup> Ibid. p. 4

<sup>5</sup> See, "How Does it Work?" online diagram of the WildBlue network ([http://www.wildblue.com/aboutWildblue/how\\_it\\_works\\_demo.jsp](http://www.wildblue.com/aboutWildblue/how_it_works_demo.jsp)).

service and it is a cost that must be borne upfront by the service provider or the customer. By providing RUS funding to support CPE, the systems will become more affordable and reach even more unserved homes. This factor is especially critical in the rural areas that WildBlue serves where median incomes are significantly lower than in urban and suburban markets.

### **Broadband Speed Requirements for Loan Eligibility Should Not be Changed.**

Since the creation of the Broadband Loan Program and dating back to the earlier Pilot program, RUS has used the Federal Communications Commission (“FCC”) definition of “advanced service” – downstream and upstream speeds exceeding 200 kbps – to determine eligibility for loans. The FCC currently is reviewing whether it should rewrite that definition to a faster standard that more closely reflects the current state of wireline Internet service speeds.<sup>6</sup> NRTC believes there is no need to alter the current definition for purposes of RUS financing. Prematurely requiring faster speeds could prove a major barrier to RUS’s core goal of extending assistance to truly unserved areas. If the speed minimum for the definition of broadband is increased, WildBlue and other satellite broadband providers may be disqualified from the Broadband Loan Program with the end result being that many rural consumers will actually be forced to stay at dial-up speeds.

WildBlue offers three tiers of service – (1) 512 kbps downstream/128 kbps upstream, (2) 1 Mbps/200 kbps and (3) 1.5 Mbps/256 kbps. The only alternative in unserved rural areas of focus to WildBlue is dial-up Internet access. All packages delivered by WildBlue provide service in speeds significantly greater than dial-up. Increasing the definitional speed of broadband in a manner that impedes the expansion of satellite

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<sup>6</sup> Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All American in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Notice of Inquiry, GN Docket No. 07-45 (Apr. 16, 2007) (NOI).

broadband service would not serve the public interest. As we have demonstrated earlier in these comments, WildBlue provides faster-than-dial-up service to unserved and underserved communities throughout the continental United States.

The value that WildBlue brings to unserved homes and businesses – even if at speeds slower than a terrestrial broadband system - is clearly reflected in the customer comments that WildBlue has received and posted on its Website.<sup>7</sup> Among them are the following:

"No DSL here, no cable here, only very slow dial up available until now. Thanks to WildBlue for giving me broadband in a remote location. I can finally enjoy the Internet at home!" (Evergreen, CO)

"My wife and I have been using WildBlue for about a month now and it's been an unbelievable change. Living out in the country, we could only get dial up Internet service and it would literally take hours to do what now takes minutes. Downloading upgrades, surfing the web and paying bills online is now a joy! Thanks WildBlue!" (Okarche, OK)

"I never thought we would ever get this great a service out here in the boondocks! A+ on speed, customer service and installation. You cannot go wrong with this service. It's head and shoulders above the rest." (Bandera, TX)

"I have high speed Internet!!! I live 7 miles out of Parker on 40 acres. Comcast™ and Qwest™ both have high speed Internet access at the end of my driveway. Both companies would not bring their service up the 1 ½ miles of my driveway, so I was limited to dial up access. Your service is something that I've been waiting for!! (Parker, CO)

While anecdotal, these customer comments clearly reflect the appreciation that a consumer has migrating from dial-up to satellite broadband. In its comments to the FCC in reply to the question of raising the speed threshold, NRTC notes that simply comparing the speeds of various broadband services without considering the context of their deployments

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<sup>7</sup> <http://www.wildblue.com/wildblueReachesMe/> (July 10, 2007)

does not make practical sense.<sup>8</sup> “The state-of-the-art of satellite broadband Internet service should not be grouped together with terrestrial, fixed wireless and other broadband technologies. Different technologies serve different needs, and satellite broadband providers are serving the needs of isolated, unserved rural and underserved communities. Access to a broadband Internet connection increasingly means access to education, health care, business and government services,” NRTC wrote. Such factors should be at the forefront of any RUS consideration on whether to use a revised FCC definition of advanced services.

### **WildBlue as a Public Service Tool in Rural America**

In addition to its value for consumers and businesses in unserved areas, WildBlue broadband also offers critical, life-saving services. As a prime example, days and sometimes weeks after Hurricane Katrina hit in September 2005, many parts of the Gulf Coast had no electricity, telephone, cellular, cable, or broadcast communications. NRTC members Ouachita Electric Cooperative of Camden, AR and Covington Electric Cooperative of Andalusia, AL actively assisted in the disaster response, providing WildBlue link-ups for electric workers scrambling to restore power to the area. The WildBlue links were often the only functioning Internet connections in the region. At one critical time, a WildBlue connection provided the warning to workers that yet another hurricane (Rita) was on the way and allowed them to safely evacuate. More recently, on Feb. 24, 2007, a tornado devastated the town of Dumas, AR. Again using WildBlue broadband service, Ouachita Electric

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<sup>8</sup> See, “Reply Comments of the National Rural Telecommunications Cooperative,” Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, GN Docket No. 07-45, May 31, 2007.



Cooperative provided command center communications during the several days when other communications were out.

### **New Legal Notice Requirements to Increase Transparency**

NRTC strongly supports the planned promulgation of rules applicable to satellite broadband that permit notification on the RUS website. The existing Rules mandate the publication of notice of the intent to fund a RUS program in any affected market, thus allowing comment by interested parties. As presently written, the Rules do not accommodate satellite delivered broadband which, of course, blankets the entire continental United States. Satellite broadband, while universal in its coverage, is targeted at unserved individuals and businesses, on a customer-by-customer basis. It is simply not feasible to impose a requirement of market-by-market notice on a satellite broadband applicant for RUS funding.

Furthermore, an unserved customer may, by address, appear to be in a served community when in actuality they reside beyond the reach of the local terrestrial provider. There are, in fact, WildBlue customers residing in communities where terrestrial high speed broadband is widely deployed, and yet who are just beyond the reach of that service. (Note, for example, the comment above from the WildBlue customer in Parker, CO, who literally had terrestrial broadband at the foot of his driveway, but could not access it.) Thus, a system of national notification with a determination of “unserved” eligibility on a customer-by-customer basis is essential to promote the reach of satellite broadband with RUS funding. The revised Rules permitting publication on the RUS Website will greatly facilitate the availability of the Broadband Loan Program for satellite providers.

## **Financial Requirements**

Under the existing RUS Broadband Rules, there is a burdensome application requirement where the applicant must demonstrate that it has a minimum equity position equal to twenty percent of the requested loan value and a year's worth of operating capital in the bank. The NPRM calls for reducing that requirement to ten percent if the applicant promises to cover forty percent of its service area. NRTC supports this reduction in the equity requirement and urges that this factor be applied to pending applications under the existing rules in the interest of expanding the reach of satellite broadband and thus bringing broadband access to the unserved.

## **IV. CONCLUSION**

Broadband connectivity has become a vital part of everyday American life and as new technologies and faster speeds become available, new economic opportunities, educational programs and life-saving medical and public safety applications assuredly appear. While those advancements exist or are emerging today in rural America, it is simply a fact that they are emerging much more slowly, if at all, in the more remote areas of our country. There is no reason for the reach of broadband service to be inhibited or delayed in any corner of America, not matter how isolated. The technology exists *today* to serve virtually every home and business that does not have access to terrestrial broadband service. Such broadband service is ubiquitously available through satellite Internet. WildBlue, the current state-of-the-art in satellite Internet to the home, is the technology that can provide that near universal coverage. It does not compete directly with other broadband technologies but greatly improves the lives of people living where those other technologies are unavailable.

NRTC commends and supports RUS for the effort it has undertaken to revise the Broadband Loan Program Rules to better allow satellite providers to benefit from the program and thereby reach more consumers residing in unserved areas of America. NRTC urges RUS to implement Rules and that clearly recognize the potential of satellite Internet and to do everything reasonably possible to help this technology expand to every American consumer who is otherwise deprived of broadband access.

Respectfully submitted,

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