

December 13, 2019

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Ms. Dortch,

Re: WC Docket 19-126, The Rural Digital Opportunity Fund

On December 11, 2019 a coalition of companies and associations met with staff of WCB, OEA, and the Rural Broadband Auctions Task force to urge the FCC to add a tier at 50Mbps/5Mbps and modify service weightings to ensure that the Rural Digital Opportunity Fund (RDOF) delivers broadband to truly rural areas of the country.

Attending the meeting from the FCC were Alex Minard, Michael Janson, Lauren Garry, Katie King, Eliot Maenner, Jonathan McCormack, Heidi Lankau, Kirk Burgee, Nathan Eagan, Jesse Jachman, Margaret Wiener, and Ian Forbes. Attending the meeting from the coalition were John Badal and Bob Silverman (Sacred Wind), Mary Henze and Brendan Haggerty (AT&T), Steve Coran (WISPA), Thomas Whitehead (Windstream), Michael Saperstein (USTelecom), Nicole Tupman (Midco), and Ted Osborn and Bill Baker (Nextlink).

The coalition does not oppose favoring the Gigabit tier but believes it is unrealistic to expect such fiber winners to close the digital divide through the RDOF program. Other technologies that can readily provide 25/3 Mbps and 50/5 Mbps service are critical to reaching the truly high-cost areas in a cost effective way and should not be overly disadvantaged against Gigabit service. Doing so could leave consumers in these largely agricultural areas waiting, possibly, decades for a costly Gigabit solution when their immediate broadband needs can be served with a 25/3 Mbps or 50/5 Mbps option today.

An analysis of the public results of the CAF II auction indicate that fiber-based Gigabit service made economic sense in more populated areas where geography was not a barrier to deployment. CAF II Gigabit winners favored Census Block Groups (CBGs) with an average of over 68 locations and fourteen such winners targeted CBGs with over 100 locations. The population density of areas with Gigabit winners averaged nine locations per square mile and ranged as high as 28 and 41 locations per square mile. Many Gigabit winning bidders logically chose to expand their reach with CAF II funding; 75% of Gigabit winners bid on CBGs adjacent to their existing service territory. This is rational economic behavior when deploying an expensive technology.

However, much of rural America is sparsely populated with expansive geography and difficult terrain. Farm land and farm businesses are by definition spread out for miles instead of being close to large towns that may already have fiber-based services. In the CAF II auction, providers of 25/3 Mbps low latency service prevailed in CBGs with an average density of just three locations per square mile where they were only able to win an average of \$1,425 per location. This is significantly less than the \$2,331 per location that the FCC estimates is the cost for rate-of-return carriers to deploy 25/3 Mbps broadband in unserved areas with a density of 4 or less. It is also less than the \$1,896 estimate for

deploying in areas with 4 to 10 locations per square mile (DA 19-373). In other words, by weighting the 25/3 Mbps service in CAF II at 45, the FCC appears to have made it very difficult for terrestrial providers willing to serve the truly high-cost areas to compete and receive enough support to do so.

The analysis of CAF II results matters for the RDOF because 25% of the eligible census blocks (CB) that will be up for bid have five or fewer locations per square mile. 40% of RDOF CBs have fewer than ten locations per square mile. These areas are where the digital divide is not just a catch phrase but a daily reality. And the CAF II auction results suggest that these areas are unlikely to attract Gigabit bidders.

To increase the chance of the RDOF reducing the digital divide, the coalition urged the Commission to add a new RDOF service tier between 25/3 Mbps and 100/20 Mbps and specifically at 50/5 Mbps. The proposed RDOF line up of just three tiers with an increased weighting for 25/3 Mbps (from 45 to 50) will make it uneconomic for many providers, both wireline and fixed wireless, to successfully bid in the RDOF. If the only other option is a 100/20 Mbps tier fewer companies are likely to participate successfully. Fixed wireless providers that can guarantee 100/20 Mbps speed cannot do so in all types of terrain or over vast service areas. Speeds and usage at that tier also significantly increase spectrum costs when using licensed spectrum.

For example, in the CAF II auction, Sacred Wind—which provides service to Tribal and rural areas in New Mexico through a mix of technologies including fiber and fixed wireless—originally sought to provide 100/20 Mbps to the portions of various CBGs where such deployments were feasible. However, Sacred Wind could not commit to providing 100/20 Mbps speeds in the sparser populated portions, which in some cases have fewer than four households per square mile. Consequently, Sacred Wind was compelled to lower its bids for those areas from 100/20 Mbps to 25/3 Mbps and in other areas abandoned its bidding entirely. The bid weighting adopted for 25/3 Mbps significantly reduced support amounts to levels that could not cover the costs of the microwave infrastructure needed to support fixed wireless service to these unserved areas. With an additional tier of 50/5 Mbps and appropriate weighting for that tier, Sacred Wind believes that it could reach larger underserved and unserved areas with speeds greater than the baseline.

Midco, a Midwestern cable, fiber, and telecommunications provider, uses its Midco Edge OutSM strategy to edge out our broadband from our wired network to more rural areas using an upgradable LTE fixed wireless network. In the CAF II auction, Midco limited its bids to be within close proximity to its fiber routes to guarantee quality of service to our customers at the 100/20 Mbps speed tier. A middle tier of 50/5 Mbps would allow us to provide high-speed and scalable wireless broadband deeper off our fiber without sacrificing quality of service to the customer. A wireless customer base would then support Midco building out fiber in the future to those more remote, rural areas.

The coalition urged the Commission to retain the 25/3 Mbps tier because consumers will benefit from service providers having the flexibility to offer the service most suited to the geographic area. For example, a 25/3 Mbps fixed wireless or wireline service may be the best choice in a heavily forested area that might otherwise go unserved. More service options and reasonable weightings will make the RDOF auction feasible and successful for more providers which in turn will increase the chances of rural consumers being served with quality terrestrial broadband.

In addition to adding the 50/5 tier, the Commission should also modify its proposed service weightings. The RDOF is a much larger auction than CAF II and the Commission will need all types of

providers using multiple technologies to step up to participate and deploy in areas that are by definition uneconomic to serve. Ironically the Commission’s proposed weightings risk preventing the highest cost areas from getting adequate high-cost support. The analysis of CAF II results and Sacred Wind’s own experience point to the CAF II weighting of 45 for the 25/3 tier as being too high to support service in low density areas. Instead of increasing the weight to 50 for the RDOF, the FCC should lower the 25/3 weight to help overcome the reality of the geography and insert a 50/5 tier with a reasonable weight of 25 to provide a realistic option at a higher speed. There is also no reason to increase the weighting on the 100/20 tier. The coalition believes the service and weighting structure presented below will do a better job of getting high quality broadband to the truly rural sections of the country.

| <i>Tier</i> | <i>FCC Proposed</i> | | | <i>Coalition Proposal</i> | | |
|-------------|---------------------|--------------|---------------|---------------------------|--------------|---------------|
| | <i>Speed</i> | <i>Usage</i> | <i>Weight</i> | <i>Speed</i> | <i>Usage</i> | <i>Weight</i> |
| Minimum | | | | 25/3 | 150/Median | 40 |
| Baseline | 25/3 | 150/Median | 50 | 50/5 | 150/Median | 25 |
| Above Base | 100/20 | 2TB | 25 | 100/20 | 2TB | 15 |
| Gigabit | 1G/500 | 2TB | 0 | 1G/500 | 2TB | 0 |
| Low Latency | | | 0 | | | 0 |
| Hi Latency | | | 40 | | | 55 |

Sincerely,

/s/

John Badal, Sacred Wind
 Steve Coran, WISPA
 Mary Henze, AT&T
 Ted Osborn, Nextlink
 Michael Saperstein, USTelecom
 Nicole Tupman, Midco
 Thomas Whitehead, Windstream

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