
September 10, 2024

National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Ave. N.W.
Washington, DC 20220

VIA EMAIL
BEAD@NTIA.gov

RE: Proposed BEAD Alternative Broadband Technology Guidance Notice

COMMENTS OF THE
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

I. INTRODUCTION

The National Rural Electric Cooperative Association (“NRECA”) appreciates the opportunity to provide the following comments in response to the Proposed BEAD Alternative Broadband Technology Guidance (“Policy Notice”) released by NTIA on August 26, 2024.

NRECA is the national service organization for nearly 900 not-for-profit rural electric cooperatives that provide electric power to 56% of the nation’s landmass, approximately 42 million people in 48 states, or approximately 13 percent of electric customers. Rural electric cooperatives serve 88% of the counties of the United States, including 327 of the nation’s 353 persistent poverty counties, which is 92% of these persistent poverty counties. Electric distribution cooperatives are small business entities under the U.S. Small Business Administration’s legal and regulatory framework.

The nation’s rural electric cooperatives are committed to promoting the deployment of advanced telecommunications capabilities within the rural communities and areas in which they serve, and electric cooperatives are expected to play a crucial role in the development of broadband infrastructure to serve rural unserved and underserved locations. Over 200 rural electric cooperatives currently are working to provide these much-needed broadband services themselves or through partnerships with affiliated or unaffiliated ISPs. Another 100 such projects are being considered.

NRECA is keenly interested in NTIA’s guidance regarding BEAD support for alternative technologies, including LEO satellite and unlicensed wireless service. We anticipate that many NRECA member cooperatives will seek BEAD funding support for rural broadband projects, and many NRECA members also currently receive broadband support from other federal and/or state funding sources. Other NRECA members do not provide broadband infrastructure or services and may have no plans to do so, but nevertheless are eager to ensure that BEAD funding effectively supports the broadband needs of their members.

NRECA fully supports NTIA's conclusion in the BEAD NOFO that broadband service provided by satellite or entirely unlicensed spectrum does not meet the criteria for "Reliable Broadband Service" (RBS). The NOFO and the draft Policy Notice recognize that such services are substandard, and that BEAD funding should be available to support such services only in very limited circumstances.¹

NRECA supports the use of BEAD funding for alternative technologies as a stopgap measure only. While NRECA agrees that some extraordinarily remote broadband serviceable locations (BSLs) might be serviceable in the near term only through LEO satellite or unlicensed wireless, NRECA urges NTIA to tighten and clarify the Policy Notice in multiple important respects to promote development of Priority and Reliable Broadband Service (RBS) as much as possible. As a general matter, NRECA is concerned that the Policy Notice may enable use of BEAD funding to support alternative technologies well in excess of what is anticipated or proper.

The final Policy Notice should recognize that BEAD support for alternative technologies will disincentivize investment of RBS network infrastructure to serve those locations. BEAD support for alternative technology to serve a given location should therefore last only as long as RBS is unavailable at that location. As the nation's rural electric cooperatives have been demonstrating since the 1930s, it is feasible to provide essentially all BSLs – no matter how remote – with electricity, which of course is not delivered via satellite or wireless. Ubiquitous Priority or RBS broadband should be similarly achievable, over time.

Our comments include five main suggestions, summarized as follows:

1. **Clarify the circumstances under which Eligible Entities may provide BEAD support for alternative technologies.** The BEAD NOFO suggests that alternative technologies may only be funded in areas where all RBS proposals exceed the Extremely High Cost Per Location Threshold (EHCPLT). Other NTIA guidance and the draft Policy Notice, however, suggest that alternative technology subawards can be made for even more locations – *i.e.* ones that do not receive an offer to serve from any RBS provider. The final Policy Notice should clarify this. NRECA is concerned that more BSLs than anticipated will be in areas that receive no RBS proposals, and that LEO satellite in particular will be an all-too-easy fallback for Eligible Entities.
2. **Ensure that BEAD support for alternative technologies is "stopgap" only.** BEAD support for alternative technologies should end when a location is able to be served by Reliable Broadband Service. In addition, locations served by BEAD-supported alternative technologies must remain eligible for support through other federal and state programs, such as ReConnect, so that those locations may in time receive more robust and reliable broadband service.
3. **Provide further guidance on required technical capabilities of LEO satellite service.** The final Policy Notice should provide further guidance for Eligible Entities on verification of LEO service technical capabilities.

¹ In addition to being a substandard service, the monthly service charge for LEO satellite is more expensive than what electric cooperatives generally charges their rural subscribers for gigabit level residential fiber service. Starlink residential service is \$120 a month which does not include the cost of customer premise equipment, see <https://www.starlink.com/residential>. A review of about seventy electric cooperative websites found prices predominantly at \$100 a month for 1 gigabit over FTTH.

4. **Clarify BEAD-eligible costs for LEO service.** Additional guidance is needed on LEO Capacity Subgrants, particularly with respect to what costs are BEAD-eligible, the allocation of costs, and how costs are demonstrated.
5. **Eligible Entities' Subaward Processes Should be Structured to Maximize RBS, and Minimize Alternative Technologies.** NTIA should encourage, if not require, Eligible Entities to prioritize subaward decisions regarding Priority and RBS service proposals before making decisions about support for alternative technologies. This will give Eligible Entities the opportunity to entice RBS providers to expand their proposed project areas, thus reducing areas that might otherwise receive substandard alternative technologies. To further encourage RBS participation in hard-to-serve areas, NTIA should also encourage flexibility in Eligible Entities' prescribed bidding areas.

II. COMMENTS

1. NTIA Should Clarify the Circumstances Under Which Eligible Entities May Provide BEAD Support for Alternative Technologies.

The BEAD NOFO uses the term “alternative technology” only once, suggesting that it can be funded only when other submitted proposals exceed the EHCPLT:

(k) Extremely High Cost Per Location Threshold— an “Extremely High Cost Per Location Threshold” is a BEAD subsidy cost per location to be utilized during the subgrantee selection process ... above which an Eligible Entity may decline to select a proposal if use of an alternative technology meeting the BEAD Program’s technical requirements would be less expensive.²

More recently, NTIA indicated that Eligible Entities can select alternative technologies to receive BEAD funding in additional areas – *i.e.*, where there are no RBS bids at all.³

The draft Policy Notice is less than clear on this crucial point. Page 4 provides:

Where the cost to deploy exceeds the EHCPLT ... Eligible Entities may...fulfill their obligation to serve all unserved and underserved locations within their jurisdiction through the use, in part, of alternative technologies.⁴

Only on Page 6 does the Policy Notice acknowledge that alternative technologies may be selected for project areas that receive no RBS proposals at all:

[A]n Eligible Entity may find itself with project areas for which no prospective subgrantee has submitted an offer to deploy Reliable Broadband Service or ... only at subsidy amounts that exceed the EHCPLT. In this situation, Eligible Entities

² BEAD NOFO, at 13.

³ NTIA, Reliable Broadband Service Alternative Technologies Guidance, January 2024.

⁴ Policy Notice, at 4; *see* p. 10 (“Eligible Entities may select a proposal for an Alternative Technology *only* where there is no Reliable Broadband Service technology...deployable for a subsidy of less than the EHCPLT at a given location.”)

may consider Alternative Technologies to fulfill their BEAD program obligations....⁵

NRECA urges NTIA to be more explicit in the final Policy Notice as to when Eligible Entities may provide BEAD support for alternative technologies. In particular, NTIA should more directly address whether alternative technologies may receive BEAD support to serve BSLs in areas where no RBS proposal is received.

NRECA is concerned that many more BSLs than expected will find themselves located in project areas that receive no RBS proposals at all. The reasons for this may vary: Providers may balk at the administrative burden of applying for and complying with BEAD; they may wish to avoid overextending their capabilities; they may be unable to generate a cohesive project area (*e.g.*, sporadic BSLs may be stranded in a “swiss cheese” configuration created by other support mechanisms, particularly RDOF); and providers may withdraw, or be disqualified, or go out of business. If alternative technology is simply the default fallback in such situations, it could end up serving considerably more than the “small percentage of locations, in the hardest-to reach-parts of the country”⁶ envisioned by the program.

To be clear, it may make sense as a policy matter to enable BEAD support for alternative technologies to provide service to BSLs for which no other proposal was received. Unserved BSLs should receive the best service possible as soon as possible. Where no RBS offer is received, there is no obvious alternative that would enable Eligible Entities to meet their BEAD universal coverage obligations. But there remains a significant risk that alternative technologies will be used more widely than anticipated. NTIA should therefore ensure that BEAD funding for alternative technologies is provided only as a stopgap, as discussed in the following section.

2. NTIA Should Ensure that BEAD Support for Alternative Technologies is “Stopgap” Only.

NRECA believes that BEAD support for alternative technology serving a given location or project area should terminate when the location or project area is able to be served by Reliable Broadband Service. Continuing BEAD support for sub-par technologies for a set, long-term period will disincentivize investment by providers who may be able to deliver Priority service (end-to-end fiber), or other Reliable Broadband Service.

NRECA recognizes that providers will make significant investments to participate in BEAD and to undertake BEAD-funded network projects. In the case of LEO satellite in particular, though, a reduction in BEAD support would have little adverse effect, as the capacity installed with BEAD support could be readily repurposed.

In the case of unlicensed wireless, the prospect of losing BEAD support at some point to an RBS provider would actually have the beneficial effect of encouraging unlicensed wireless providers to upgrade their own service. For example, if such providers were to transition to licensed or licensed-by-rule wireless, or even to fiber, they would convert the service to RBS, effectively protecting their investment.

⁵ Policy Notice, at 6.

⁶ [Choosing the right mix of technologies to achieve Internet for All | National Telecommunications and Information Administration \(ntia.gov\)](https://www.ntia.gov/publications/2019/03/Choosing-the-right-mix-of-technologies-to-achieve-Internet-for-All)

Finally, NTIA should work with other federal agencies to ensure that other federal or state broadband funding may be used to support development of Reliable Broadband Service for locations served by BEAD-supported alternative technologies. Many NRECA members receive broadband development funding through the U.S. Department of Agriculture's ReConnect program, for example. ReConnect and other federal and state programs in general may not allow funding for locations served with existing federal support. NRECA suggests that such ReConnect and other federal and state funding should continue to support RBS in hard to reach areas even if BEAD funding has already been made available for alternative technologies in that area. BEAD-funded LEO satellite service, for example, should not foreclose the use of federal funding to deploy superior end-to-end fiber connections, for example. Federal funding for alternative technologies could shackle locations to substandard service in perpetuity, unless NTIA takes steps to enable the potential deployment of something markedly better.

3. NTIA Should Provide Further Guidance on Required Technical Capabilities of Alternative Technologies.

The draft Policy Notice explains that prospective subgrantees seeking to deploy alternative technologies must comply with all BEAD technical requirements. They must meet speed (100/20 Mbps) and latency (sub-100ms) requirements, and satisfy network outage limitations.⁷ In the case of proposed LEO service, however, the Policy Notice is unclear as to how an Eligible Entity can or should verify this information. Rather than take the provider's word for it, can the Eligible Entity require reference to a particular measurement tool for LEO satellite broadband? And how can the Eligible Entities effectively gauge service characteristics within the specific project location?

The Policy Notice also specifies that a proposed BEAD project relying on LEO service "must include a certification or other documentation" that the subgrantee is able to provide at least 5 Mbps of simultaneous capacity (based on industry network dimensioning practices), or 2 TBs of usage per month, to each BSL in the project area. State broadband offices may need to rely on the LEO provider's assertion for purposes of the BEAD application, but they should be encouraged to conduct periodic verification of such assertions throughout the BEAD support term.

Additional questions are raised with respect to LEO Capacity Subgrants. Prospective LEO service subgrantees can seek funding for additional capacity to serve the targeted BSLs, but how will Eligible Entities judge such a claim? State broadband offices may not have the technical expertise or the time to make this determination, especially in the midst of running a statewide grant program. Again, it seems likely that the LEO satellite applicant must simply be taken at its word.

The final Policy Notice should provide further guidance for Eligible Entities on these points. In particular, the Policy Notice should explicitly encourage Eligible Entities to spot check these assertions over the course of the BEAD support term, with noncompliance leading to loss of ongoing BEAD support and potential claw back.

4. NTIA Should Clarify BEAD-Eligible Costs for LEO Service.

NTIA should strictly limit LEO satellite BEAD funding to the marginal cost of enabling qualifying service to the specific proposed BSLs in the project area. NRECA commends NTIA for recognizing that BEAD

⁷ Policy Notice, at 11; BEAD NOFO, at. 64-65.

funding for LEO satellite service must correlate to the additional capacity required to serve the proposed BSLs, but NRECA is concerned about implementation of this limitation by the various Eligible Entities.

While sensible in theory, the complexities of the calculation, and the inevitable reliance on data and methodology provided by the LEO subgrantee applicant, opens the door to manipulation and abuse. As a foundational matter, NRECA questions whether additional LEO capacity will actually be needed in order to meet BEAD technical requirements, given the presumably small number of rural locations for which alternative technologies would be authorized.

LEO providers will have a strong incentive to use BEAD-funded upgrades for “capacity” that can be used more broadly than just to serve the specified project area. Indeed, it may be functionally impossible to separate out the capacity, as a technical matter or financial matter, and it is difficult to envision a LEO service provider being explicitly *prohibited* from using upgraded capabilities for anything other than service to BSLs in designated BEAD project areas. In addition, certain Eligible Entities may be more inclined than others to enable BEAD funds to be used broadly for LEO satellite services.

Against that backdrop, NRECA questions the assumption in the draft Policy Notice that a LEO satellite provider will have an incentive to “demonstrate” that it presently serves certain areas, in order to fend off BEAD support being made available to a competitor. LEO satellite service is not a competitive industry, and the prospect of market entry by unlicensed wireless service is highly speculative.

In short, a LEO satellite company may view BEAD as an opportunity to obtain funding for generally applicable system upgrades, which would be an improper use of BEAD funds. NTIA should carefully police this issue, and should take steps to ensure that Eligible Entities do so as well.

5. Eligible Entities’ Subaward Processes Should be Structured to Minimize Use of Alternative Technologies.

Section 4.1 of the draft Policy Notice describes the selection mechanism for alternative technology subgrants. An Eligible Entity may generally choose its own means to competitively select subgrantees, but the final Policy Notice should explicitly encourage – if not require – Eligible Entities to adopt selection processes that will maximize support for Reliable Broadband Service, and minimize use of alternative technologies.

As drafted, the Policy Notice enables Eligible Entities to run a single subgrantee selection process open to all types of eligible providers and technologies, including alternative technologies.⁸ NRECA is concerned that this approach will not give Eligible Entities ample opportunity to “engage with existing providers and/or other prospective subgrantees to find providers willing to expand their existing or proposed service areas.”⁹ As noted above, if a given project area (or even a single BSL) receives no proposals, the Eligible Entity apparently may make a subaward to an alternative technology provider. In practice, it seems that a LEO satellite provider potentially could submit an application proposing to serve all locations of the state for which an RBS proposal is not made, and an Eligible Entity in such case could well default to providing BEAD support for LEO service rather than proactively engage to expand RBS service to more unserved locations.

⁸ Policy Notice, at 10.

⁹ *Id.*

If Eligible Entities can too easily default to LEO service, too many locations will end up being served by LEO satellite only.

The Policy Notice acknowledges that Eligible Entities *can* run a second subgrantee selection round seeking only alternative technology proposals,¹⁰ but this does not go far enough. NTIA should encourage – or even require – Eligible Entities to complete a subgrantee selection process involving Priority and Reliable Broadband Service before opening up BEAD funding for alternative technologies. This would be consistent with the NOFO provisions encouraging Eligible Entities to creatively engage with RBS providers, including by providing inducements such as the use of state funding toward match requirements, and others.

A bifurcated selection process also avoids a scenario where viable Priority and RBS projects are held up while issues involving alternative technologies are sorted out. NTIA should encourage Priority and RBS awards to be awarded and released before an Eligible Entity may move forward with alternative technologies.

Similarly, NTIA should also encourage or require Eligible Entities to be flexible in their imposition of minimum bidding areas. Eligible Entities should be required to seek bids for RBS that may deviate from the established bidding areas, if not in the initial bidding round then in subsequent rounds, in order to minimize the area(s) that would need alternative technologies. For example, if no RBS bids were received for a bidding area that covered all of a particular county, Eligible Entities should be required to solicit RBS bids for only a portion of the county.

NRECA appreciates the opportunity to offer our perspectives, and we hope our comments prove useful as NTIA develops the final Policy Notice. If you have any questions about the above or if we can be of further assistance, please do not hesitate to contact me.

Respectfully submitted,

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¹⁰ “[F]ollowing a subgrantee selection process open to Priority Broadband Service and Reliable Broadband Service projects, [an Eligible Entity may run] a competitive subgrantee selection round seeking only Alternative Technology proposals.” Policy Notice, at 10.