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

In the Matter of	)	
	)	
Partitioning, Disaggregation, and Leasing of Spectrum	)	WT Docket No. 19-38
	)	

To: The Commission

COMMENTS OF
THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

The National Rural Electric Cooperative Association ("NRECA") hereby submits these Comments in response to the Commission's Second Further Notice of Proposed Rulemaking regarding changes to the partitioning, disaggregation, and leasing rules to facilitate increased availability of wireless services, particularly in rural areas.[1] NRECA's members increasingly serve a key role in bringing advanced communications services to rural America. NRECA previously participated in this proceeding to suggest methods of assisting rural spectrum deployment and supports the Commission's further efforts to refine its spectrum policies. NRECA recommends the Commission adopt rule changes consistent with these comments to maximize the ability of rural electric cooperatives to make use of wireless spectrum for the benefit of their communities.

I. BACKGROUND

NRECA is the national service organization for more than 900 not-for-profit rural electric cooperatives that provide electric energy to approximately 42 million people in 48 states --

[1] Partitioning, Disaggregation, and Leasing of Spectrum, *Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 19-38, FCC 22-53 (Rel. Jul. 18, 2022) ("Second FNPRM").

approximately 12 percent of all U.S. electric customers. Rural electric cooperatives serve 88% of U.S. counties, including 327 of the Nation's 353 "persistent poverty counties."

NRECA and its members are intensely interested in the deployment of advanced communications capabilities within the rural communities and areas in which electric cooperatives provide electric service. Over 200 NRECA members provide, or are working towards providing, commercial fixed broadband service today, deploying fiber-based, fixed wireless or combination fiber and fixed wireless networks to fill gaps not met by traditional telecommunications providers. Recently, rural electric cooperatives secured over $250,000,000 in support in the Commission's Connect America Phase II ("CAF II") auction[2] and over $1,100,000,000 in support in the Commission's Rural Development Opportunities Fund ("RDOF") auction.[3] To assist the substantial efforts of its members, NRECA recently launched its NRECA Broadband Program providing specific enhanced resources to help electric co-ops succeed as telecommunications providers to their rural communities.

In addition to deploying wireless communications networks to serve their members, electric cooperatives make use of a wide variety of wireless communications services to meet the private, internal requirements of operating the electric grid. Traditionally heavy users of site-based spectrum licensed under Part 90 and Part 101 of the Commission's rules, NRECA's members have increasingly sought to acquire auctioned spectrum, particularly through the secondary market. This spectrum is used for supervisory control and data acquisition systems ("SCADA") to remotely monitor and control substation and field devices, teleprotection to

[2] *See Connect America Fund Phase II Auction Closes*, WC Docket No. 10-90, Public Notice, FCC 18-887, Attachment A (rel. Aug. 28, 2018) *(Auction 903 Results).*
[3] *See Rural Digital Opportunity Fund Phase I Auction Closes*, AU Docket No. 20-34, Public Notice, DA 20-1422, Attachment A (rel. Dec. 7, 2020) *(Auction 904 Results).*

guard against potentially hazardous faults, distribution automation to intelligently route power through the grid, metering, mobile radio, video, security, and other applications. Wireless communications are critical to the safe, reliable, and effective electric services NRECA's members provide to rural America.

II. COMMENTS

NRECA supports the Commission's efforts to close the digital divide by facilitating "increased availability of advanced wireless services in rural areas."[4] As the Commission is well aware, rural America lags behind urban areas with respect to availability of fixed, terrestrial 25 Mbps download/3 Mbps upload (25/3 Mbps) broadband. In fact, the Commission recently found 17 percent of Americans in rural areas lack coverage from fixed terrestrial 25/3 Mbps broadband compared to only 1 percent of Americans in urban areas.[5] Notably, the Government Accountability Office believes rural broadband access has been overstated and the gap is even larger than reported by the Commission.[6] Many of NRECA's electric cooperatives have undertaken to address the digital divide in their communities by committing resources to deploy fixed broadband services.

The absence of robust fixed broadband services in rural communities imposes a high economic cost on rural communities. A recent nationwide study performed by NRECA staff concluded that the lack of fixed broadband in 6.3 million electric co-op households translates to more than $68 billion in lost economic value measured over 20 years.[7] A USDA report found

[4] Second FNPRM at 2.
[5] Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, Fourteenth Broadband Deployment Report, FCC 21-28 at 19 (rel. Jan 19, 2021).
[6] U.S. Government Accountability Office, *Broadband, National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide*, GAO-22-104611 at 6 (May 2022).
[7] NRECA, Business & Technology Report, *Unlocking the Value of Broadband for Electric Cooperative Consumer-Members*, at 3 (Sept. 2018) *available at* http://www.electric.coop/wp-content/uploads/2018/09/Unlocking-the-Value-of-Broadband-for-Co-op-Consumer-Members_Sept_2018.pdf (*NRECA Broadband Report*).

that rural broadband e-connectivity would drive the equivalent of up to $23 billion in annual economic improvements for our nation through enhanced digital agriculture technologies.[8] A 2018 Purdue University study calculated a 4:1 return on broadband infrastructure investment in rural communities.[9] This strongly supports the Commission's efforts to develop rules to promote the availability of wireless spectrum in rural areas.

In its Second FNRPM, the Commission asks about changes to two specific areas related to its Enhanced Competition Incentive Program ("ECIP"). NRECA's comments regarding each are below:

ECIP Eligibility Expansion – The Commission asks whether to expand eligibility for the ECIP small carrier/tribal nation prong to include entities other than small common carriers and tribal nations. NRECA supports this expansion.[10] As the prong currently stands, requiring small carriers to provide common carrier services to participate in ECIP limits the effectiveness of the program to promote non-common carrier services such as broadband Internet access. Given that the purpose of the MOBILE NOW Act, from which the ECIP receives its authority, is to expand opportunities for broadband, it is incongruous to limit small carrier participation to common carrier providers. The Commission should expand the prong to allow eligibility for small providers of non-common carrier services, including broadband Internet access.

[8] USDA, *A Case for Rural Broadband* at 23 (Apr. 2019) available at https://www.usda.gov/sites/default/files/documents/case-for-rural-broadband.pdf.
[9] Purdue University, *Research & Policy Insights: Estimation of the Net Benefits of Indiana Statewide Adoption of Rural Broadband* (Aug. 2018), *available at* https://www.pcrd.purdue.edu/files/media/006-RPINsights-Indiana-Broadband-Study.pdf (*Purdue Broadband Study*).
[10] NRECA expects most of the spectrum acquisition activity of its members to fall under the ECIP's rural-focused prong. However, given that the small carrier/tribal nation prong includes relatively small towns of 20,000 inhabitants and areas contiguous and adjacent to cities and towns urban areas with a population of more than 50,000 inhabitants, it is possible that NRECA's members could serve such areas.

NRECA opposes the suggestion that eligibility should be limited to entities that have filed an FCC Form 477 for census blocks that overlap or are adjacent to the license area to be disaggregated, partitioned, or leased for at least two calendar years preceding the ECIP transaction. Such a metric would exclude new market entrants, an important cohort given that the goal is to bring services to areas not currently served by existing carriers. NRECA's members are seeking to provide broadband services to areas unserved by existing providers. The FCC's ECIP program should not competitively disadvantage new market entrants trying to meet broadband needs of otherwise overlooked communities.

The metric would also exclude private, internal users, which do not file the FCC Form 477. NRECA's electric cooperative members rely on communications technologies to support their provision of electric service to rural Americans. Applications and devices are continuously evolving to enhance the safety, reliability, and efficiency of the electric grid. This is commonly referred to as the "Smart Grid" and includes advancements in metering, sensing, and grid management that benefit the public. These capabilities are provided through a combination of wired (typically fiber) and wireless communications. The use of private, internal communications provides the ability to control reliability and restoration, which are critical to electric utilities. In addition, commercial carrier services often do not adequately cover the rural and remote areas served by electric coops or are intended to cover population centers and not utility infrastructure such as substations and transmission and distribution lines. The Commission should include private, internal services in any rule revisions to promote the availability of spectrum in rural areas for advanced telecommunications.

Alternative Construction Requirements for Private Networks - NRECA strongly supports the Commission's proposal to adopt an alternative non-population-based construction

requirement for private networks. The Commission is correct that population-based construction metrics often do not align with the intended area of operation for a private network, increasing the difficulty in meeting population coverage requirements. With respect to rural electric cooperatives, private, internal uses of spectrum often are not intended to cover population centers. For example, spectrum may be obtained for the remote monitoring and control of transmission networks or for video to support security at substations. These and other critical infrastructure applications may not directly cover residential areas, but are of vital importance to the people in the communities served by the utility.

NRECA supports the Commission's proposal to evaluate construction of private internal networks by measuring coverage to a "core usage zone", with allowances for areas of expansion and an interference buffer. This is an improvement compared to evaluating construction of private networks based on a percentage of total license-area population. NRECA is concerned, however, that the Commission states it would require all spectrum in the core usage zone to be actively used to meet construction. The Commission should consider that all spectrum may not be deployed at each site in the core usage zone because of network design factors, including channel re-use. Currently, the Commission does not require commercial providers to show that all spectrum is in use under a given license in order to justify construction. The Commission should afford similar treatment to private, internal networks.

III. CONCLUSION

NRECA supports the Commission's efforts through the ECIP to promote the availability of spectrum in rural areas. NRECA urges the Commission further refine its ECIP rules consistent with these comments.

Respectfully submitted,
National Rural Electric Cooperative Association

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Dated: October 20, 2022