

BEFORE THE
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Remote Identification of Unmanned
Aircraft Systems

Docket No. FAA–2019–1100

**SUPPLEMENTAL COMMENTS OF THE
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION**

The National Rural Electric Cooperative Association (NRECA) respectfully submits the following comments on the notice of proposed rulemaking (NPRM) in this docket.¹ NRECA is joining with the Edison Electric Institute and the American Public Power Association in separately filed comments by the electric utility industry. NRECA submits the following supplemental comments to address the proposed rule’s economic and operational impact on rural electric utilities—nearly all of which are small entities—and to recommend certain alternative measures to mitigate that impact.

The Interests of America’s Electric Cooperatives in this Rulemaking

NRECA is the national trade association representing nearly 900 local electric cooperatives and other rural electric utilities. America’s electric cooperatives are owned by the people that they serve and comprise a unique sector of the electric industry. From growing regions to remote farming communities, electric cooperatives power 1 in 8 Americans and serve as engines of economic development for 42 million Americans across 56 percent of the nation’s landscape.

¹ Remote Identification of Unmanned Aircraft Systems, 84 Fed. Reg. 72438 (Dec. 31, 2018) (notice of proposed rulemaking).

Electric cooperatives operate at cost and without a profit incentive. NRECA's member cooperatives include 62 generation and transmission (G&T) cooperatives and 831 distribution cooperatives. The G&Ts generate and transmit power to distribution cooperatives that provide it to the end of line co-op consumer-members. Collectively, cooperative G&Ts generate and transmit power to nearly 80 percent of the distribution cooperatives in the nation. The remaining distribution cooperatives receive power directly from other generation sources within the electric utility sector. Both distribution and G&T cooperatives share an obligation to serve their members by providing safe, reliable, and affordable electric service.

For purposes of this proposed rule, it is critical for the FAA to recognize that electric cooperatives own and maintain 2.6 million miles, or 42 percent, of the nation's electric distribution lines. Moreover, cooperatives serve an average of eight consumers per mile of line and collect annual revenue of approximately \$19,000 per mile. All other utilities, by contrast, average 32 customers per mile of line and collect \$79,000 in annual revenue per mile.²

The joint electric industry comments explain the important ways the industry uses unmanned aircraft systems (UAS) to help ensure the safety, security, and reliability of the nation's electric grid. The FAA notes how the electric industry employs UAS in power line inspections today. *See* NPRM at 72493. Electric cooperatives are using UAS for inspections of power plants, substations, and distribution and transmission lines; storm recovery efforts; vegetation management; terrain mapping; and many other purposes.³ NRECA has identified UAS as a key technology that will enable cooperatives to plan and operate a future energy grid

² See <https://www.cooperative.com/programs-services/bts/Documents/Data/Electric-Co-op-Factsheet-Update-February-2019.pdf>.

³ John Lowrey, "The Era of the UAS: Drone use gets a boost from 2017 hurricane recovery efforts," *Rural Electric Magazine* (Jan. 2, 2018), <https://www.cooperative.com/remagazine/articles/Pages/electric-co-ops-drone-uas.aspx> (last visited Feb. 25, 2020).

with many more distributed energy resources.⁴ An important factor for cooperatives will be a supportive UAS regulatory framework.

Supplemental Comments of NRECA

NRECA and its member cooperatives recognize the need for, and support FAA efforts to ensure, remote identification (or Remote ID) for UAS, both to enable expanded UAS deployment by cooperatives and to ensure public safety in the airspace and on the ground. While NRECA supports the FAA's objective, NRECA has several concerns about the proposed rule's implementation mechanisms and compliance schedule insofar as they would apply to rural electric utilities.

NRECA also takes this opportunity to document the number of electric cooperatives that are small entities for purposes of the FAA's compliance with the Regulatory Flexibility Act of 1980, 5 U.S.C. §§ 601-612.

1. The FAA should provide more flexible compliance options for rural electric utilities.

Cooperatives have told NRECA that they anticipate operating both standard and limited remote identification UAS. Standard remote identification UAS will be important for many purposes, including power line inspections in rural areas. But cooperatives could use limited remote identification UAS, consistent with the proposed rule's 400-foot and visual line-of-sight operating limits, for some purposes, such as substation inspections.

The problem for cooperatives, however, is that many of them operate in rural areas where wireless internet connectivity is limited or absent. In such remote areas, UAS could prove especially invaluable to a cooperative's planning and operations.

⁴ Reed Karaim, "10 Key Technologies: Essential tools and devices for enabling the distributed energy grid," Rural Electric Magazine (Nov. 30, 2019), <https://www.cooperative.com/remagazine/articles/Pages/2019-essential-tools-technologies-distributed-energy-grid.aspx> (last visited Feb. 25, 2020).

The FAA acknowledges the lack of internet connectivity in rural areas. *See* NPRM at 72465. But the proposed rule only provides a partial solution for rural electric cooperatives. Under the proposed rule, a standard remote identification UAS can take off if internet connectivity is absent, so long as the unmanned aircraft is able to broadcast the required identification information. *See id.* NRECA *strongly supports* this provision of the proposed rule: without the ability to take off while using only broadcast capability, many cooperatives would have to ground their UAS operations in all or part of the areas they serve.

Nonetheless, a limited remote identification UAS cannot take off without internet connectivity under the proposed rule. *See id.* at 72465–66. This means that many cooperatives would not be able to use limited remote identification UAS, even for purposes where the proposed 400-foot operating-distance and visual-line-of-sight restrictions would pose no problem and permit them to be used. Under the proposed rule, these cooperatives would have to invest in more costly standard remote identification UAS for all purposes, even when a less expensive limited remote identification UAS would suffice for some uses. In other words, such cooperatives would be forced to pay for the added cost of a standard remote identification UAS with useless internet connectivity.

Therefore, NRECA encourages the FAA to allow for another compliance option—a broadcast-only limited remote identification UAS. That would permit safe UAS operation in remote areas, consistent with the proposed rule’s safety requirements, but without unnecessary investment in more expensive standard remote identification UAS with useless internet connectivity. Moreover, NRECA believes that this broadcast-only capability would be more likely to be available via retrofit, further reducing the compliance costs for cooperatives.

If the FAA does not provide this third compliance option for all UAS owners and operators, then NRECA requests that the FAA provide a means for cooperatives to obtain this compliance option through a waiver process whereby the cooperative can attest to the lack of internet connectivity for limited remote identification UAS operations.

2. The FAA should take additional steps to regulate the adequacy of service and the price of service by Remote ID USS in rural areas.

The proposed rule relies not just on internet connectivity, but also on a “network of Remote ID UAS Service Suppliers (Remote ID USS) that would collect the identification and location in real time from in-flight UAS” and perform this service under contract with the FAA. NPRM at 72439. *See also id.* at 72467-68, 72491-92.

Under the proposed rule, no standard or limited remote identification UAS can take off if the UAS can connect to the internet but cannot transmit identification information to a Remote ID USS. *See* NPRM at 72466, 72467–68. Thus, if no Remote ID USS is available, no remote identification UAS can take off. The FAA envisions an arrangement under which the UAS operator would connect to a Remote ID USS, but if that Remote ID USS were unavailable, the UAS operator would be able to connect to another Remote ID USS. *See id.* at 72467, 72469. The NPRM gives an example of a UAS operator that has a subscription agreement with a Remote ID USS that provides a “roaming” feature allowing the operator to connect to another available Remote ID USS “free of charge” to provide “uninterrupted” service. *See id.* at 72469.

The NPRM describes the Remote ID USS business model, but it proposes no requirements to regulate the services these companies provide to UAS owners and operators or the prices they will charge for their services. *See id.* at 72467, 72483–85, 72491-92, 72497, 72,499, 72504, 72508. “The FAA intends to provide oversight of the Remote ID USS through

contractual agreements and is therefore not proposing specific rules related to how the Remote ID USS offers services.” NPRM at 72483. The FAA states that its contract with a Remote ID USS would require the contractor “to meet quality-of-service metrics that would establish the minimum requirements for providing remote identification services, including availability of the service and what happens when various failures occur.” *Id.* at 72442. But the proposed rule does not explain these metrics or minimum service requirements and does not propose to codify them in regulations.

Moreover, the FAA “assumes” that multiple Remote ID USS will come forward and make remote identification services publicly available to UAS operators, “assumes” this service will be at a reasonable price, and “believes that operators will choose a Remote ID USS that best meets their operational needs.” *See* NPRM at 72467–68, 72504, 72508. *See also id.* at 72483-85, 72491-92, 72497, 72,499. Specifically, the FAA assumes that it will approve nine Remote ID USS companies the first year of implementation and one additional company each year. *See* NPRM at 72491, 72499. The basis for these market-entry projections is unclear, however. Equally unclear is the assumption that these companies will face competitive pressure to offer their services at a reasonable, yet unregulated market price, in geographical markets throughout the nation.

The FAA’s Regulatory Impact Analysis “assumes (while acknowledging significant uncertainty) that the average publicly available Remote ID USS will charge \$2.50 as a monthly subscription (\$30 annually) cost to users of its service.” NPRM at 72468. *See also id.* at 72492, 72497. But it is not clear that the Remote ID USS business model is analogous to the Low Altitude Authorization and Notification Capability (LAANC) business model, as the FAA claims in making this assumption. *See* NPRM at 72439, 72484, 72504, 72508. Although both models

use a memorandum of agreement between a private company and the FAA, Remote ID USS appears to be a far more complicated business, since it would require a Remote ID USS to provide uninterrupted, redundant, real-time service and data exchange of the remote identification information for thousands of UAS.

NRECA and its member cooperatives are concerned that FAA's assumptions may be too rosy, and its regulatory requirements too lax, at least for the rural areas of the country where many cooperatives operate and provide service. Cooperatives are concerned that Remote ID USS will provide spotty and expensive service in rural areas if few companies step up to provide the service, especially at the outset. Cooperatives are also concerned about paying expensive "roaming" charges to multiple Remote ID USS if a cooperative's principal provider has a service outage.

It seems wishful thinking that cooperatives will have choices between multiple, competing companies offering these services in rural areas, including roaming arrangements at no additional charge. Moreover, it seems over-optimistic to assume that these companies will constitute a Remote ID USS "network" providing reliable, redundant remote identification service suitable for use by an electric utility industry that may need UAS to operate during emergencies following storms or other natural disasters. Finally, it seems unrealistic to expect that the unregulated market prices for these services will be reasonable, especially at the outset.

Cooperatives know all too well that relying on market forces to provide essential services in rural America does not always work. Cooperatives were formed to fill the gap when investor-owned utilities would not provide electric service to rural areas. Today, providing rural broadband access is presenting a similar set of challenges. Rural areas of the country should not receive second-class remote identification services.

NRECA urges the FAA to re-think this portion of the proposed rule. First, the only alternative the FAA appears to have considered is FAA-provided remote identification service. *See NPRM* at 72504, 72508. This alternative may be a necessary option, at least in some areas of the nation, even if it is not the exclusive service model nationwide. Moreover, an FAA-provided service option can provide “yardstick” competition for private-sector Remote ID USS and help discipline their prices and ensure service quality.

Second, the FAA should consider a longer implementation timetable to ensure that an adequate Remote ID USS “network” does come forward. A pilot program may necessary during the roll-out.

Third, the FAA should use notice-and-comment rulemaking to establish “quality-of-service metrics” and “minimum requirements for providing remote identification services, including availability of the service and what happens when various failures occur.” *See NPRM* at 72442. These requirements should be codified in legally binding regulations for Remote ID USS that become effective simultaneously with the rest of the proposed rule.

Fourth, the FAA should provide a means for UAS operators to complain and seek redress if no Remote ID USS is offering service, or is offering inadequate service, or is charging unreasonable rates for services. It is unclear what redress would be available to an UAS owner or operator other than an action for breach of contract, and such an action might be met with a defense that the FAA is the exclusive regulator of Remote ID USS. Again, the FAA should use notice-and-comment rulemaking to codify these substantive requirements and procedures in regulations that become effective with the rest of the proposed rule.

Finally, NRECA supports the proposed rule insofar as it would allow a Remote ID USS to provide service to a limited fleet rather than to the public generally. *See NPRM* at 72467,

72484. Electric cooperatives have a long tradition of cooperating with other cooperatives, which in some cases means forming cooperatives to provide technical services to multiple electric cooperatives. NRECA requests that the FAA clarify that this would be a compliance option for electric cooperatives—in other words, that the “fleet” could consist of the UAS of multiple cooperatives that have formed a cooperative that provides remote identification services for the member cooperatives’ UAS. This clarification, however, does not moot NRECA’s concerns with the remainder of the Remote ID USS proposal as set forth above.

3. The FAA should provide UAS owners/operators with more ability to retrofit existing UAS rather than completely replace the existing fleet.

The FAA proposes that all UAS would have to comply with the proposed remote identification requirements within three years of the rule’s effective date. *See* NPRM at 72439. Manufacturers would have two years to comply, and owners and operators one more year thereafter. *See id.* In setting this compliance timetable and projecting compliance costs, the NPRM relies on an expected three-year UAS service life. *See* NPRM at 72503–04, 72508.

Cooperatives operate at cost and seek to provide safe, reliable service at the lowest cost. For some cooperatives, especially smaller distribution cooperatives, UAS represents a significant investment cost. NRECA understands that many cooperatives expect more than a three-year service life from their UAS. The FAA should not assume that all cooperatives will be turning over their UAS fleets in three years. The rule will require many cooperatives to scrap otherwise serviceable, valuable UAS.

Under the proposed three-year compliance schedule, cooperatives need better retrofit options. The FAA should require UAS producers to provide reasonable retrofit options for existing UAS fleet.

Alternatively, the FAA should reconsider the compliance schedule for small entities. As noted next, nearly all electric cooperatives are small entities for purposes of this rule.

4. The proposed rule will have a significant economic effect on rural electric utilities, nearly all of which are small entities

The RFA requires that a notice of proposed rulemaking have an initial regulatory flexibility analysis that describes the economic impact of the proposed rule on small entities and regulatory alternatives that minimize any significant economic impact on small entities. *See* 5 U.S.C. § 603. In the NPRM and the accompanying regulatory flexibility analysis, the FAA has determined that the proposed rule would have a significant economic impact on a substantial number of small entities. *See* NPRM at 72,489, 72505. NRECA concurs in this determination.

The Small Business Administration (SBA) Office of Size Standards publishes the numerical size definition for small businesses in various sectors. *See* 13 C.F.R. § 121.201 (2019). The SBA size standards for utilities are based on the number of employees. These standards divide electric utilities into several categories. Electric cooperatives can be grouped into three of these categories: (1) electric power distribution, (2) electric power generation and bulk power transmission, and (3) fossil fuel electric power generation. Distribution cooperatives with 1,000 employees or fewer meet the SBA small-entity standard. G&T cooperatives that generate with fossil fuel and have 750 or fewer employees also meet the standard. G&T cooperatives that do not generate with fossil fuel and have 500 employees or fewer meet the standard.

As noted above, NRECA's members include 831 distribution co-ops and 62 G&T co-ops. Based on its review of EIA and member information, NRECA estimates that all the distribution cooperatives and 59 of the 62 G&T cooperatives fall below the threshold for small entities under the SBA's employee-based size standards. *Thus, NRECA estimates that the proposed rule would*

affect about 890 cooperatives that are classified as small entities. Thus, in the utility industry alone, the proposed rule would have a significant economic impact on a substantial number of small entities.

Under the RFA, a final regulatory flexibility analysis must include, among other things, an estimate of the number of small entities to which the rule will apply, plus

a description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.

5 U.S.C. § 605(b). The FAA can go a long way towards demonstrating compliance with the RFA's requirements and reducing the economic impact on small electric utilities by reconsidering the implementation mechanisms and timelines in the proposed rule and adopting the modifications described above.

Respectfully submitted,

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February 28, 2020