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Docket Operations, M-30
United States Department of Transportation
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Room W12-140, West Building Ground Floor
Washington, DC 20590-0001

Re: Edison Electric Institute (EEI), American Public Power Association (APPA), National Rural Electric Cooperative Association (NRECA), and Large Public Power Council (LPPC) Comments on the Federal Aviation Administration, Transportation Security Administration Notice of Proposed Rulemaking “Normalizing Unmanned Aircraft Systems Beyond Visual Line of Sight Operations” [Docket No. FAA-2025-1908]

To Whom It May Concern:

The Edison Electric Institute (EEI), American Public Power Association (APPA), National Rural Electric Cooperative Association (NRECA), and Large Public Power Council (LPPC) (hereafter the “Trade Associations”) appreciate the opportunity to comment on the Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) (collectively “the Agencies”) notice of proposed rulemaking (NPRM) titled “Normalizing Unmanned Aircraft Systems Beyond Visual Line of Sight Operations.”¹ Unmanned aircraft systems (“UAS” or “drones”) play a critical role in helping electric utilities safely inspect and maintain the nation’s power grid and associated infrastructure.

The Trade Associations support the President’s effort to facilitate greater drone usage across America.² If crafted correctly, the FAA’s and TSA’s rule standardizing beyond visual line of sight (BVLOS) operations will enable utilities to help unleash American energy, and ensure grid reliability and affordability by more efficiently conducting inspections and maintenance operations, surveying storm and wildfire damage, stringing line and fiber, and removing hazardous vegetation. Utilizing drones for these operations ultimately helps us keep the lights on while reducing costs of electricity for millions of Americans, safeguarding their communities, and protecting national security.

The ability for utilities to fully leverage the benefits of large-scale BVLOS operations is dependent on a regulatory structure that streamlines requirements, eliminates unnecessary red tape, protects utility infrastructure from collision risk by non-utility drone operators, enhances

¹ Normalizing Unmanned Aircraft Systems Beyond Visual Line of Sight Operations, 90 Fed. Reg. 38212 (proposed Aug. 7, 2025) [hereinafter BVLOS NPRM].

² See Exec. Order No. 14307, 90 Fed. Reg. 24727 (June 6, 2025)

safety across utility systems, and encourages future innovation. It is important that the Agencies recognize that the electricity sector is uniquely poised in this space. Unlike many other types of commercial drone operators, electric utilities are already a highly regulated industry with strong existing physical and cybersecurity protections and liabilities, many of which are federally required and levied. Further, utilities typically only fly drones in and around their own easements, rarely venturing far from their systems.

Drones are currently used by utilities to reduce costs of keeping the lights on. As providers of an essential service, this rule's impact on utility operations and costs could affect millions of Americans in the form of increased electricity rates. To keep energy affordable, it is crucial that requirements under this rule remain reasonable, workable, feasible, and that they minimize any necessary investments and compliance costs.

Therefore, a tailored approach to certain aspects of the proposed rule for the electric utility sector is justified by the industry's distinctive characteristics and its central role in supporting the nation's economy and safeguarding national security. This is evident in the President's day one Executive Orders titled "Unleashing American Energy,"³ and "Declaring a National Energy Emergency."⁴ A targeted approach to the regulation of electric utility drone use will help ensure affordable and reliable energy across the nation.

While the Trade Associations support a workable BVLOS operational paradigm, the proposal as drafted would not allow current beneficial electric utility drone operations to continue. FAA waivers and exemptions issued over the last few years and currently in operation are more workable than Part 108 as currently drafted. Moreover, the proposal contains even stricter operational and air worthiness requirements than the current standards under which utilities currently operate, and under which they have already developed existing drone fleets.

Crucially, utilities not only use drones to operate and safeguard their systems, but they also are subject to risk exposure and untold liabilities via the collision and grid security risks potentially posed by widespread commercial use of non-utility drones around their systems. This rule should take steps to protect electric utility infrastructure from potential damage from drone use. Considering the unique risks faced by the electric utility industry—such as wildfires, outages, storms, infrastructure damage from collisions, and the resulting liabilities—we strongly urge the FAA to minimize unnecessary drone traffic near grid infrastructure.

Separately, we look forward to engaging with the federal government on drone security measures focused on rogue and criminal drones, some elements of which we recognize may fall outside the scope of the immediate rulemaking.

Below we provide background on the Trade Associations and our members as well as a more detailed overview of what we see as the strengths and weaknesses of the proposed rule.

³ See Exec. Order No. 14154, 90 Fed. Reg. 8353 (Jan. 20, 2025).

⁴ See Exec. Order No. 14156, 90 Fed. Reg. 8443 (Jan. 20, 2025).

I. Trade Associations and UAS Applications in the Electric Utility Sector

A. Background on the Trade Organizations

1. Edison Electric Institute

The Edison Electric Institute (EEI) is the trade association representing U.S. investor-owned electric companies. EEI's member companies provide safe, reliable, and affordable electricity to more than 250 million Americans in all 50 states and the District of Columbia, while supporting over seven million jobs in communities across the country.

To ensure the continued safety, security, and reliability of the electric grid, EEI members invest more than \$170 billion each year to modernize infrastructure—making it smarter, cleaner, more dynamic, flexible, and secure. These investments also enable the integration of innovative technologies and the diversification of the nation's energy mix to better serve customers.

Among the technologies transforming electric company operations, UAS play an increasingly vital role. UAS enhance electric companies' ability to inspect and maintain infrastructure efficiently and safely. Traditionally, inspections have been conducted visually from the ground or via crewed aircraft—methods that can be costly, time-consuming, and hazardous. As electric companies expand energy generation and build the infrastructure needed to connect it to the grid, the volume and complexity of inspections will continue to grow. As such, UAS play a key role in EEI members' ability to ensure the safety, security, and reliability of the nation's electric grid—and we expect that their importance in electric company daily operations will only increase.

2. American Public Power Association and the Large Public Power Council

APPA is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. Public power utilities are in every state except Hawaii. They collectively serve over 54 million people in 49 states and five U.S. territories, and account for 15 percent of all sales of electric energy (kilowatt-hours) to end-use consumers. LPPC is an association of 29 of the nation's largest municipal and state-owned utilities, representing the larger, asset-owning members of the public power community and approximately 90 percent of the transmission assets owned by public power. LPPC members are also members of APPA.

APPA and LPPC are load-serving entities, with the primary goal of providing the communities they serve with safe, reliable electric service at the lowest reasonable cost, consistent with good environmental stewardship. This orientation aligns the interests of the utilities with the long-term interests of the residents and businesses in their communities.

3. National Rural Electric Cooperative Association

NRECA is the national trade association representing nearly 900 local electric cooperatives, which power 56% of the nation's landmass, and 42 million Americans. America's electric cooperatives operate at cost and without profit incentive. They are owned by the people that they serve and comprise a unique sector of the electric industry.

NRECA's member cooperatives include 63 generation and transmission ("G&T") cooperatives and 832 distribution cooperatives. The G&Ts generate and transmit power to distribution cooperatives that provide it to the end of line co-op consumer-members. Both distribution and G&T cooperatives share an obligation to serve their members by providing safe, reliable, and

affordable electric service. Due to their unique, not-for-profit business model, cooperatives often operate on thin financial margins, and any increases in regulatory compliance costs and liabilities are necessarily passed onto the end of the line consumer-member.

Cooperatives serve 56% of the nation's landmass and more public lands and forests than any other type of utility. Many cooperatives use drones to inspect their systems in their large, often remote service territories, and would benefit from fewer regulatory burdens on utility drone use beyond the visual line of sight within their rights-of-way to more robustly inspect their systems, conduct vegetation management, and in some cases to string broadband fiber. The vast footprint of electric cooperatives across the nation also exposes them to increased liabilities and, in this case, collision risk. It is critical to cooperatives that the FAA increases cooperative ability to utilize drones for their system operations and maintenance, while protecting our electricity systems from non-utility drone collision risk and attendant liabilities.

B. UAS Applications in the Electric Utility Sector

Trade Association members are required to regularly inspect power lines and associated infrastructure to ensure the grid's safety and resiliency. The electric grid comprises approximately 200,000 miles of high voltage transmission lines and approximately 5.5 million miles of local distribution lines that connect generating resources to homes, factories, and other businesses. In response to factors such as heightened extreme weather events and evolving regulatory requirements, electric utilities have expanded the frequency and scope of these inspections. Additionally, as investments in new energy generation and grid integration infrastructure grow, inspection demands are expected to continue to increase.

Most inspections are currently performed visually, either from the ground or via crewed aircraft, but these methods face challenges such as safety risks, inefficiency, high costs, limited accuracy, and restricted access to certain facilities. As a result, many utilities have turned to UAS to meet the increased demand in inspections. Drones offer significant benefits to utilities, with some of our members recently reporting cost reductions of up to 80% compared to legacy inspection methods. The ability to fly UAS along linear infrastructure within utility owned and maintained rights-of-way (ROWS) and waterways increases worker safety and addresses liability concerns unique to utilities.⁵ UAS also enable more accurate, efficient, and repeatable inspections through automation. In challenging and inaccessible terrain, UAS provide accessibility in a way that is faster, safer, and more efficient than traditional manned crews. Drones are particularly invaluable during disaster response, where they are able to assess damage even before crews arrive, speeding up restoration efforts and reducing service outages. Where UAS are already in use pursuant to waivers, UAS have become indispensable for maintaining safe, reliable, and resilient grid operations across distribution, transmission, and generation facilities.

The adoption of UAS for asset inspections has significantly enhanced capabilities. Large-scale BVLOS operations would enable utilities to conduct more frequent and comprehensive inspections, including preventative measures ahead of wildfire season. Highly automated operations will only continue to increase—68% of recently surveyed members plan for at least 80% of their BVLOS UAS operations to be automated within the next 10 years. Standardized

⁵ The Trade Associations use the term "ROW" throughout this comment to refer specifically to a legal agreement granting utilities access to property for installing, operating, and maintaining infrastructure. When referring to "right-of-way" in the aviation context, we use the full term "right-of-way" instead of "ROW."

BVLOS operations would also offer a safer and potentially more efficient alternative to ground and helicopter methods for post-storm and wildfire, and Public Safety Power Shutoff (PSPS) restoration efforts. Overall, UAS enable utilities to deliver exceptional service while reducing costs, ultimately saving money for customers.

II. Impact and Suggestions Regarding the NPRM

The Trade Associations support the following features of the NPRM: First, we commend the FAA efforts to empower utilities to manage deconfliction risks in the vicinity of their infrastructure assets. This includes the use of shielding as a method to deconflict traffic and mitigate risk for both manned and unmanned aircraft. Second, the Trade Associations support the FAA's recognition that certifying individual aircraft for airworthiness is not a practical or scalable safety solution. The proposal's performance-based approach to manufacturing requirements promotes flexibility and fosters innovation. Third, the Trade Associations support the establishment of a standardized automated data service provider (ADSP) framework under Part 146. Doing so provides a clear and scalable regulatory roadmap for prospective service providers, and will allow for future technological advancements critical to the UAS Traffic Management (UTM) ecosystem and the safety of the National Airspace System (NAS).

The following organized objectives outline key recommendations to further enhance the rulemaking:

A. Retain a Path for Simple BVLOS Operations Under Part 107

The Trade Associations support a regulatory framework that allows for scalable, highly automated BVLOS operations. However, many of the operations conducted by electric utilities require "pilot in the loop" actions beyond simple commands regarding airspeed, altitude, and heading and do not align with the automated nature and simplified user interaction (SUI) requirements outlined in proposed § 108.810.⁶ Therefore, the Trade Associations recommend maintaining a pathway for simplified BVLOS operations under 14 CFR Part 107 that allows for manual control of aircraft. Alternatively, the Trade Associations propose adding subsections to Part 108.810 that define requirements and operational standards for graduating levels of complexity and distance from the operator. This would effectively replace the waiver/exemption structure required for special operations conducted under part 107 with normalized operations defined under Part 108.

Manual control of UAS is critical for conducting inspections of electricity infrastructure, including transmission and distribution lines, substations, and other system components during both routine and emergency operations. For instance, precise manual maneuvering allows operators to position the drone with accuracy for close-up inspections of components such as insulators, conductors, or pole tops. Similarly, real-time adaptability enables operators to immediately change flight paths based on visual observations or unexpected findings, which is particularly important as utilities conduct tasks critical to electric reliability such as vegetation management, wildfire mitigation, and assessing storm damage. These types of operations are typically short-range, manually flown missions that align well with the current framework of having a trained Remote Pilot-in-Command (RPIC), supported by an appropriate level of FAA oversight, rather than the more stringent requirements of the Part 108 proposal. In these cases, air risk is

⁶ See BVLOS NPRM at 38305.

mitigated by the pilot's active monitoring of the airspace and semi-automated safety measures to reduce the likelihood of collisions, while ground risk is mitigated through compliance with 14 CFR §§ 107.29 and 107.39.

To facilitate these operators and the widespread use of UAS to inspect and support the electrical grid and related infrastructure, the Trade Associations recommend a simplified path for pilot in the loop BVLOS operations currently under 14 CFR Part 107 to continue or under appropriate provisions outlined in 14 CFR Part 108 as described above. This pathway would eliminate or reduce reliance on waivers, similar to the evolution of night operations. A streamlined approach could incorporate the standard conditions and limitations commonly applied to § 107.31 waiver operations, such as specific UAS capability requirements, defined operating area restrictions, detailed BVLOS procedures outlined in the Operations Manual, and standardized operator training. These operations would continue to yield to all other aircraft outside of shielded operations under § 108.205, both manned and unmanned, by employing visual separation and maintaining situational awareness to ensure effective UA-to-UA deconfliction. The Trade Associations believe this approach provides a practical and efficient way to integrate critical utility provider UAS operations into the regulatory framework while upholding the FAA's broader objectives for Part 108.

B. Population Density Requirements Dictating Operations Over People Are Overly Broad and Do Not Enhance Safety (§ 108.185)

The proposed framework for classifying population density to restrict operations over people is overly broad and does not effectively mitigate ground risk. Furthermore, the proposed restrictions on permitted operations in Category 4 and 5 operational areas would significantly hinder utilities with smaller operations and budgets from conducting infrastructure inspections. The Trade Associations urge the FAA to adopt a risk-based approach to operations over people, allowing utilities to safely operate in higher-density areas while supporting critical infrastructure inspections.

The existing population density categories rely on LandScan USA data, which has not been updated since 2023 and fails to accurately reflect current population density. This issue is particularly evident in relation to electric utility UAS operations. For instance, LandScan data often misclassifies utility ROWs and other assets as high-density areas, despite their low actual population and minimal risk to people on the ground. Additionally, the Trade Associations are aware of inaccuracies in the population density data. For example, New York Power Authority (NYPA) has identified three areas—Visher Ferry Dam, Crescent Dam, and Hinckley Dam—that should be characterized as Category 2 or 3 operational areas rather than Category 4.

Restrictions on permitted operations in Categories 4 and 5 pose substantial challenges. 44% of recently surveyed members currently operate fleets of 25 or fewer aircraft, making them likely candidates for permit-based operations. However, limiting permitted operations to Categories 3 and below fails to provide the flexibility needed for most utility work, much of which takes place in higher-density areas. For some utilities, over 60% of their inspected infrastructure is located within Categories 4 and 5. This limitation is especially problematic during natural disasters or emergency power outages when rapid response is crucial to safeguard communities and restore power.

The Trade Associations thus recommend that for utility operations conducted within designated ROWs, population density classifications for Categories 4 and 5 should not apply, as

utilities can effectively manage associated risks. Precedent already exists under Part 107 waivers that utility ROWs are controlled access areas.⁷ The nature of small UAS operations allows for much more surgical airspace placement, enabling small UAS airframes to remain over these unpopulated utility right of ways. Alternatively, the FAA could recognize a category of unpopulated or inaccessible areas, as determined by the operator, with operational privileges similar to those granted under current waivers. Both recommendations would enable utilities—many of whom already have operated for years in higher-density areas under existing waivers and exemptions—to continue performing essential utility work. Operating in ROWs should also exempt utilities from Detect and Avoid (DAA) equipage requirements for higher population density areas.

Additionally, the Trade Associations suggest that the FAA consider using another source of data that provides a more accurate representation of current population density compared to LandScan USA. The FAA also should establish a mechanism to address inaccuracies in area classifications to ensure more precise risk assessments and better support for safe and effective UAS operations. Alternatively, the FAA could define only the operational limits for the population categories, but leave the identification of dynamic population densities to local authorities.

Finally, the blanket prohibition in § 108.85(d)(2) on using a Command and Control (C2) link under 47 CFR Part 15 radio frequencies for Category 2 operational areas and above is unnecessarily restrictive and disregards alternative methods for managing interference risks. Many small UAS platforms depend on ISM bands, and this requirement would render numerous proven, safety-compliant systems used by utilities non-compliant, necessitating costly replacements—costs which, in many cases, would be borne by the end of the line consumer in the form of increased electricity rates. A more balanced approach would allow the use of ISM bands with additional safeguards to address interference risks. These could include employing multiple or redundant communication links (e.g., combining unlicensed ISM with licensed cellular or point-to-point ISM) or integrating advanced onboard automation to ensure the UA can complete its mission even in the event of a C2 link failure. The Trade Associations also urge the Federal Communications Commission (FCC) to expedite the finalization of 47 CFR Part 88 to expand the range of options available to UAS operators for managing interference as operational demands grow.

C. Electric Utilities Should Have Broad Areas of Operation Approvals, Including for Corridor Operations (§ 108.165)

The Trade Associations encourage the FAA to adopt a more flexible, less burdensome approach to the area of operations approval process for utilities. Utilities work daily within the communities they serve and are well-equipped to manage the risks in their operational areas.

The Trade Associations request that the FAA clarify the definition of “area of operations” as outlined in § 108.165 and address the potential burden of requiring multiple approvals for utilities. Defining “area of operations” too narrowly, such as tying it to excessively small regions, would create significant administrative challenges for operators without meaningfully improving safety. Instead, utilities should be permitted to submit region-wide areas for approval. A single,

⁷ See, e.g., Waiver No. 107W-2024-03422, (requiring UAS operating under the critical infrastructure provision to “remain within the confines of the controlled access area”).

comprehensive approval would allow these providers to better understand and manage risks across their entire operational area while reducing the administrative burden on both operators and the FAA. Narrow definitions would also require the FAA to process hundreds or even thousands of approvals, which would be inefficient and unnecessary. Existing FAA waivers that are not site-specific illustrate the FAA's historical recognition that a site-specific approach is unworkable both for the agency as well as the industry.⁸

Additionally, the Trade Associations recommend that the FAA grant blanket approvals for corridor-based operational maps covering grid operations (transmission, distribution, and generation networks) and waterways across multiple states. These corridors share a consistent risk profile due to limited overflight of people, well documented, known terrain, and operational control by utilities of ROWs, often with restricted access. Requiring individual approvals for each corridor segment would be impractical, time-consuming, and would delay critical inspections. Conversely, a blanket approval process would streamline operations while maintaining safety and efficiency.

D. Operations in Shielded Areas Should Be Expanded for Utilities Operating in Vicinity of their Own Infrastructure (§ 108.205)

Under proposed § 108.195, UAS would have the right-of-way over manned aircraft when operating in shielded areas. The Trade Associations support this proposed change to the current right-of-way rules and believe it increases the ability for utilities to conduct inspections in a way that is safe, scalable, and deconflicted from other air traffic. However, the Trade Associations have concerns about the proposed parameters of shielded airspace and the requirement to obtain permission for operations near infrastructure.

First, the proposed definition of shielded airspace is more restrictive than what is currently permitted under Part 107 waivers. Per proposed § 108.205(a), shielded airspace is described as “areas within 50 feet of powerlines and substations, railroad tracks, bridges, and pipelines, when permission from the infrastructure owner is obtained.” By contrast, waivers issued to Pacific Gas & Electric Company,⁹ Dominion Energy,¹⁰ and other utilities define shielded airspace in the vicinity of infrastructure as extending 200 feet in all directions from the associated conductor supported on lattice structure or the ROW centerline for conductor supported on poles. To ensure consistency with existing BVLOS operational precedents under Part 107 waivers, the definition of shielded airspace in § 108.205(a) should be revised to reflect these established parameters. The safety justification for shielding remains consistent, regardless of whether the airspace is shielded by a structure, a natural obstacle like a tree, or another ground feature. Additionally, the FAA should permit shielded operations around fenced and monitored utility assets—such as substations, transmission corridors, and generation facilities—without requiring separate FAA approval. Population density restrictions are not relevant in these controlled-access areas.

Second, while it is important for electric infrastructure owners and operators to have priority access to the airspace surrounding their facilities, and while we appreciate the intent behind the

⁸ See, e.g., Waiver Nos. 107W-2024-04268, 107W-2024-03913.

⁹ See Waiver No. 107W-2024-03074.

¹⁰ See Waiver No. 107W-2025-01200.

proposal, the proposed requirement to obtain “permission” from the infrastructure owner under § 108.205(a) is problematic. Requiring such permission is impractical, as utilities are neither equipped to manage this responsibility nor should they bear the liability and increased operational costs it entails. For these reasons, the FAA should eliminate the “permission” requirement from the shielding definition to streamline operations and reduce unnecessary administrative burdens. The potential risk mitigated by this proposal is better addressed by requiring universal electronic conspicuity at low altitudes, as detailed below, and by imposing penalties for non-utility drone users who violate shielded airspace around utility infrastructure.

Third, we urge the agency to recognize and capitalize on the broader technological opportunity that Part 146 presents: the development of a highly automated UTM ecosystem in which drones autonomously deconflict from each other. The FAA should incorporate a priority-based hierarchy into the UTM framework to support automated, interoperable deconfliction. Within this framework, priority-based deconfliction could be implemented, allowing drones with lower priority to adjust to accommodate higher-priority missions such as emergency response or critical infrastructure inspection. A priority assignment mechanism—based solely on operational priority and not on identity or mission specifics—could be incorporated into the UTM architecture in a way that preserves both privacy and cybersecurity. Only a priority level needs to be broadcast; no identifying information would be necessary. This capability would not only support public safety and utility operations but would also provide a technically sound alternative to the “shielded airspace” concept currently proposed in Part 108.

If the FAA does determine that utilities should be responsible for granting permission to fly near their infrastructure, the permission-granting authority should be determined by the utilities—likely an accountable executive of the organization—to appropriately manage liability and mitigate operational risks.

E. Electronic Conspicuity Should Be Required for All Low-Level Airspace Users (§§ 108.195 & 108.825)

The NPRM's electronic conspicuity requirements fail to align with the practical needs of low-level airspace deconfliction and a risk-based approach to safety in the NAS. Transparency in airspace near utility infrastructure is critical—not only for safety but also to mitigate our liability risks, described below. Non-utility provider aircraft operating unnecessarily close to power lines increases the risk of accidents, including wildfires. Even one fire from a drone collision can bankrupt a utility, destroy a community, and jeopardize grid reliability.

Automatic Dependent Surveillance–Broadcast (ADS-B) technology has proven to be an effective solution for enhancing situational awareness and enabling timely collision avoidance, with studies showing that ADS-B usage reduces accident rates by nearly 50% and fatality rates by almost 90%.¹¹ Currently, utilities rely on manned aircraft conducting inspections to be cooperative and appropriately equipped, which is the primary method for deconflicting manned and unmanned traffic along power lines. While UAS have traditionally borne the responsibility of

¹¹ Daniel Howell and Jennifer King, *Measured Impact of ADS-B In Applications on General Aviation and Air Taxi Accident Rates* 7 (2019), <https://ieeexplore.ieee.org/document/9081643>.

electronic conspicuity through Remote ID and ADS-B, ensuring that all aircraft are conspicuous is essential for the safety of the NAS and achieving full airspace transparency.

The current NPRM also creates requirements for UAS to be equipped with non-cooperative DAA technology in Class B and C airspace per § 108.180(b), and in Category 5 operational areas per § 108.185(d)(5)(ii). The primary benefit of using shielding mitigations is that it avoids the need for technology necessary to detect noncooperative aircraft because other aircraft should not be in the shielded airspace. Mandating non-cooperative DAA technology for UAS in these environments is redundant, expensive, and unnecessary, as the primary safety mitigation should be ensuring that all aircraft in these airspaces are electronically conspicuous.

To improve safety and increase airspace transparency, the Trade Associations recommend removing the non-cooperative DAA requirements and instead ensure that all aircraft, including those operating at lower altitudes, comply with ADS-B or electronic conspicuity standards, as described in § 108.195. Many utilities already conduct corridor-specific hazard assessments as an additional mitigation, particularly for foreseeable helicopter operations. Instead, the rulemaking should:

- Codify clear right-of-way rules for manned utility and emergency aircraft in utility corridors and shielded areas, while requiring interoperable electronic conspicuity (ADS-B, Remote ID, or equivalent) for all UAS and relevant manned aircraft operating in these areas.
- Mandate that all manned aircraft operating below 500 feet AGL be electronically conspicuous to enhance NAS safety and discourage unnecessary flights near power lines or other critical infrastructure.
- Require all aircraft, both manned and unmanned—commercial, public, and recreational—to maintain a safe distance from electrical infrastructure to avoid creating hazards and reduce liability concerns for utilities.

The Trade Associations believe these recommendations would significantly enhance the safety and transparency of the NAS by ensuring better coordination between manned and unmanned aircraft and reducing risks associated with low-altitude operations near critical infrastructure.

F. The FAA Should Recognize Utilities as Civic Interest Operators for Public Benefit, Emergency Operations, and Right-of-Way Airspace Access (§§ 108.455 & 108.585)

Utilities frequently conduct activities that could be classified as “aerial surveying” during inspections, but their mission and operational needs are more closely aligned with those of civic interest operators as defined under §§ 108.455 and 108.585. The importance of protecting and maintaining energy infrastructure has been long seen as critical to our national security and prosperity.¹² This alignment is especially clear during emergencies, where utilities play a critical role in safeguarding public safety and welfare. For example, following a hurricane, wildfire, or other natural disaster, it is imperative for utilities to rapidly inspect infrastructure such as

¹² See Presidential Policy Directive 21 (PDD-21), *Critical Infrastructure Security and Resilience* (Feb. 12, 2013), https://www.cisa.gov/sites/default/files/2023-01/ppd-21-critical-infrastructure-and-resilience-508_0.pdf.

substations, transmission corridors, and buildings to assess damage and to safely initiate restoration efforts. Utilizing pre-established flight plans, operators can quickly inspect equipment, report findings, and facilitate timely maintenance and recovery. Delays in these inspections can significantly impede operational feedback and prolong restoration timelines. Moreover, drones are invaluable for delivering equipment to remote outage sites that are otherwise inaccessible due to flooding, fires, road blockages, or other challenges. In such situations, utilities work in close coordination with public safety and disaster relief agencies, which are already classified as civic interest operators under the current NPRM framework.

To ensure utilities can continue to deliver these critical services in all circumstances, the Trade Associations recommend reclassifying utilities under the civic interest category. This reclassification would better align utilities with other operators who share a similar mission and increase their ability to respond effectively to emergencies, regardless of population density. Accordingly, the Trade Associations request that the scope of §§ 108.455(f) and 108.585(d)—which currently allow operations over any population density “to the extent necessary to safeguard lives in imminent threat”—explicitly include privileges for utilities responding to emergencies. This request aligns with the FAA’s stated intent for this provision, which is to address “rare events associated with disasters and other unforeseen emergency situations where the use of UAS could help save lives.”¹³

As part of this reclassification, the Trade Associations propose granting civic interest operators specific operational privileges to support their mission:

- First, the FAA should remove the requirement that civic interest operators must be contracted with a Federal, State, local, or Tribal government to be considered a civil interest operator to facilitate utilities’ inclusion in this group.
- Second, a civic interest-specific approval process should be established for 1:many UA operations across large geographic areas. This process should include line-of-sight coordination and real-time telemetry monitoring, enabling utilities to leverage multi-UA operations for faster response times. Nearly 60% of our recently surveyed members intend to adopt 1:many BVLOS operations in the future.
- Third, the current 25-aircraft limit for permitted civic interest operators should be removed or substantially increased to accommodate large-scale utility operations and disaster response, particularly for smaller utilities.
- Fourth, small drones should be permitted to perform high-impact missions, such as storm response and infrastructure inspections, without requiring full certification. This would reduce compliance burdens while maintaining safety standards.
- Fifth, the FAA should eliminate the 50-hour workweek cap outlined in § 108.330, especially during emergencies that threaten grid security. Instead, operators should be allowed to establish FAA-approved operating standards tailored to their specific needs. For utilities, this would include the use of fatigue risk management programs (FRMP) to define rest requirements, ensuring both operational flexibility and safety.

¹³ See BVLOS NPRM at 38276.

G. Cybersecurity Requirements Should Be Harmonized and Recognize Preexisting Cybersecurity Standards (§§ 108.435 & 108.535)

The Trade Associations generally support the cybersecurity requirements outlined in §§ 108.435 and 108.535, as well as the effort to standardize these requirements for both permitted and certificated operators. However, we recommend aligning the standards in §§ 108.435 and 108.535 with the security-related reporting requirements in § 108.45(e). For instance, the definition of a “security breach” under § 108.45(e) should be consistent with the standards and definitions used in operators’ cybersecurity requirements. This alignment would help eliminate redundant reporting obligations for operators and prevent the FAA from receiving unnecessary or duplicative information. Additionally, the Trade Associations request that reporting requirements for security breaches be limited to incidents that have an aviation safety implication.

Additionally, the Trade Associations request that utilities be able to leverage their existing cybersecurity programs and industry standards to meet these requirements. Our members employ robust cybersecurity protocols to support UAS operations, ensuring data security and operational integrity. For example, the North American Electric Reliability Corporation’s (NERC) Reliability Standards (including its Critical Infrastructure Protection (CIP) Standards),¹⁴ as approved and enforced by the Federal Energy Regulatory Commission (FERC), specify a set of requirements that entities must follow to ensure the cyber and physical security of the Bulk Power System. NERC-CIP standards require utilities to identify critical data, tightly control access, and protect it in storage and transit to ensure that data supporting the Bulk Electric System (BES) remains confidential, accurate, and available when needed.

Utilities also already employ several cybersecurity measures specific to their UAS operations. Measures include processing data on air-gapped computers without direct corporate network connections, with updates conducted via standalone internet or hotspots. Cloud transfers are avoided, and local transfers are conducted using air-gapped systems. Additional safeguards include extensive cybersecurity checks, such as ISO and SOC reports, VPN requirements, and cooperative software monitoring. Metadata from flight operations is not shared, and missions are often conducted in a disconnected mode to further enhance security.

H. Utility Operators Should be Exempted from TSA Vetting Requirements (§ 108.335)

Personnel supporting UAS operations for utilities should be exempt from the proposed requirement in § 108.335 mandating that certain “covered personnel” involved in UAS BVLOS operations undergo a TSA-administered Level 3 Security Threat Assessment (STA). Most utilities already subject their employees to rigorous background checks, including criminal history and immigration records. Imposing additional vetting requirements on these personnel is redundant, creates unnecessary administrative challenges for operators, and wastes taxpayer resources without adding value.

Additionally, the Trade Associations strongly oppose any move by the TSA to expand vetting requirements to include individuals with ownership or control over entities conducting UAS BVLOS operations. TSA cites vetting requirements for indirect air carriers as justification for this proposal. Yet the purpose of this requirement is to screen carriers providing cargo to be

¹⁴ See N. Am. Elec. Reliability Corp, *CIP-002-5.1a – Cyber Security – BES Cyber System Categorization* (2025), <https://www.nerc.com/pa/Stand/Pages/ReliabilityStandards.aspx>.

transported on passenger aircraft—a scenario that does not apply to UAS, particularly those operated by utilities that do not transport cargo.¹⁵ As with other legacy aviation rules that are misapplied to UAS, implementing this requirement would fail to enhance safety and would instead impose unnecessary burdens on operators.

I. Recordkeeping and Reporting Requirements Are Overly Burdensome and Should Be Centered on Safety Rather than Information Gathering (§§ 108.40 & 108.45)

The Trade Associations recognize the value of recordkeeping requirements in fostering transparency between the FAA and UAS operators and their role in identifying and mitigating potential risks. However, it is critical that these requirements remain proportional to the actual need and intended use of the information collected and do not lead to any privacy or security concerns. For this reason, the Trade Associations urge the FAA to revise the proposed rule to ensure that recordkeeping and retention obligations are specifically tailored to situations that directly affect the safety of the NAS without compromising the privacy of our members or our national security.

As currently proposed, the recordkeeping requirements for both aircraft and personnel impose significant burdens on the industry. These challenges stem from the scope of data being requested, the extended retention periods, and the associated costs. For instance, the proposal mandates operators to document takeoff and landing locations for every flight, along with detailed flight path information, including altitude.¹⁶ Such requirements fail to account for the sheer volume of UAS flights compared to traditional manned aircraft operations. Collecting and retaining routine data for all flights at this scale is excessive and counterproductive. It risks overwhelming the FAA with an influx of routine information, diverting attention from records that could genuinely highlight anomalies or safety-critical issues. A more effective approach would be to allow operators to maintain curated records, focusing on data that is directly relevant to safety, thereby avoiding redundant and inefficient recordkeeping practices. The Trade Associations recommend that the FAA adopt an exception-based approach to recordkeeping, which would prevent an excessive collection of data with little practical use.

Additionally, the Trade Associations strongly encourage the FAA to reconsider the proposed 24-month minimum retention period for records for aircraft, mechanical irregularities, and maintenance under § 108.40(f). This timeline does not reflect the operational realities of drone operations. Unlike legacy manned aircraft, UAS airframes are often used for much shorter durations, and operational data becomes obsolete within months due to the fast-paced nature of the industry. Root cause analyses for incidents or accidents are typically conducted within hours or days, not weeks or months, allowing for swift corrective actions. A more reasonable alternative would be to require operators to retain data related to occurrences, incidents, or accidents for 6-12 months, while allowing routine operational data to be deleted after one month. This approach

¹⁵ See 14 C.F.R. §§ 1548.5(a), 1548.16 (2009); see also Air Cargo Screening, 74 Fed. Reg. 47672, 47673 (Sep. 16, 2009) (explaining intent behind vetting requirements for indirect air carriers to allow for expanded cargo inspection operations for passenger aircraft to meet requirements established by Sec. 1602 of the Implementing Recommendations Act of the 9/11 Commission Act of 2007).

¹⁶ See § 108.40(a).

would still provide the FAA with sufficient historical data for safety investigations while significantly reducing the cost and complexity of data retention, particularly for smaller operators.

Regarding reporting requirements under § 108.45, the Trade Associations believe that flight data reporting should be driven by safety priorities and focus on targeted incident reporting rather than blanket monthly disclosures. Routine reporting of flight data, such as aircraft location and altitude, raises significant concerns regarding confidentiality and data security. This is particularly problematic when the operator and the aircraft manufacturer are separate entities. Manufacturers could potentially use this data to infer sensitive business practices or proprietary technologies, creating risks related to intellectual property and privacy. For utility operators, the disclosure of such data could inadvertently reveal information about critical infrastructure, posing potential national security risks.

Given these concerns, the Trade Associations recommend that reporting requirements for utilities be significantly reduced to focus on safety anomalies. At a minimum, data sharing between operators and manufacturers should be limited to instances where it is necessary for continued operational safety (COS) and should only occur with the operator's explicit consent and when requested by the Federal government. To address this, the FAA should amend § 108.45(a) and (d) to require operators to share reliability and service difficulty data with manufacturers only as outlined in the manufacturer's operating or maintenance manuals and only with operator consent. This would allow manufacturers and operators to collaborate on COS needs while safeguarding sensitive operator data. Additionally, operators should be required to share flight data with manufacturers only in response to FAA-classified safety incidents. These measures would reduce the risk of FOIA exposure or cybersecurity incidents that could compromise the safety and integrity of the power grid and associated infrastructure.

J. Registration of UAS Should Continue Per a Web-Based System Under a Modified Part 48 (§ 108.115)

The Trade Associations urge the FAA to reconsider the registration requirements proposed in § 108.115, which would require UAS operators to follow the Part 47 registration process used for manned aircraft. The Part 47 system is inefficient and ill-suited to accommodate the scale of drone operations. As of July 2025, the FAA has registered 822,039 drones, including 433,407 commercial drones.¹⁷ Forcing hundreds of thousands of UAS to go through the paper-based Part 47 process would result in unnecessary delays and create significant administrative burdens for both operators and the FAA.

To address this issue, the Trade Associations recommend enhancing the existing Part 48 web-based registration system to include the additional data required under this NPRM to include fields for imagery, airworthiness applications, and other necessary information needed to fulfill additional requirements imposed by the NPRM. Alternatively, the FAA could collect this data through a separate system, as it currently does for Remote ID and Part 107 operations over people. Another viable option, as suggested in the NPRM preamble, would be to establish a registration process specifically tailored to Part 108.

¹⁷ See *Drones by the Numbers (as of July 2025)*, Fed. Aviation Admin. (last visited Sep. 3, 2025), <https://www.faa.gov/node/54496>.

K. Requirements that Drones Be Manufactured in the United States Should Be Removed to Ensure Operational Continuity (§ 108.700)

The proposed § 108.700(b) requirement that all Part 108 UAS be manufactured in the U.S. or a country with a Bilateral Airworthiness or Safety Agreement would significantly disrupt utilities' ability to maintain the national power grid. 26% of recently surveyed members have fleets consisting entirely of foreign-manufactured aircraft, and 59% have fleets that are at least 50% foreign-made. Given current supply chain and drone production challenges in the U.S., this provision could compel utilities to replace their current fleets within unreasonably short timeframes, hindering their ability to efficiently comply with the new rule. Likewise, we are concerned that manufacturers will struggle to produce Part 108-compliant equipment swiftly enough to meet rising domestic demand. Finally, such a requirement would restrict access to a wide range of potentially innovative products from allied countries.

There appears to be no evidence of bilateral agreements that specifically address UAS airworthiness, which is understandable given the FAA's shift away from requiring Type Certification (TC) for most commercial UAS. The restrictions in this section unnecessarily jeopardize U.S. competitiveness on the global stage by limiting opportunities for international reciprocity under other nations' regulatory frameworks. Rather than imposing these constraints, the FAA should collaborate with international counterparts to develop transparent processes for mutual recognition and acceptance of American drones that meet Part 108 Declaration of Compliance (DOC) standards. This approach would foster a more competitive and robust drone marketplace for the benefit of all operators.

Ultimately, this provision is not feasible at this time, given manufacturing constraints and existing drone fleets. Should this provision move forward, the Agencies should allow sufficient time for American manufacturing to develop and meet demand. Provisions should be created to "grandfather" operations of existing drone resources into the rule, while phasing in "Made in America" requirements for new drone acquisitions. Doing so would alleviate immediate financial and operational costs associated with this requirement, and which may otherwise be passed onto the end of the line consumer in the form of increased electricity rates.

L. The Final Rule Should Incorporate a Transition Period to Allow for Operational Continuity and Mission Enablement

The NPRM lacks sufficient detail regarding the transition from existing waivers and exemptions under Parts 91 and 107 and the new Part 108 framework. The preamble merely states that operators currently operating under waivers and exemptions "would transition to the operations under part 108 when their exemptions expire, and a reasonable transition can occur."¹⁸

To avoid ambiguity and facilitate a smooth transition between regulatory frameworks, the Trade Associations recommend a minimum of a two-year period for waivers and exemptions to remain in effect as utility operators transition to Part 108. This aligns with the timeline imposed by the FAA to comply with the Remote Identification requirement.¹⁹ This transition period is particularly important for utilities for two key reasons. First, as the rule is currently written, many

¹⁸ See BVLOS NPRM at 38225.

¹⁹ See Enforcement Policy Regarding Operator Compliance Deadline for Remote Identification of Unmanned Aircraft, 88 Fed. Reg. 63518 (Sep. 15, 2023).

of the existing waivers and exemptions are more advanced than the proposed requirements under Part 108, meaning utilities will need time to align their operations with the new framework. Second, a significant number of utility-owned aircraft currently in use do not meet the airworthiness acceptance standards outlined in the rule, which will require operators to invest in new hardware as well as adequately budget for higher annual operating costs.²⁰ A longer timeline will enable utilities to maximize the depreciable life of their existing fleet before replacing it with new equipment. A defined transition period is essential to allow utilities to maintain grid reliability and respond effectively to emergencies while adapting to the new requirements.

M. The Rule Should Provide Appropriate Safeguards for the Electric Grid and its Operators

It is critical that this rule take steps to protect electric utility infrastructure from potential damage from widespread BVLOS commercial drone use in and around electricity facilities. Given the unique risks faced by the electric utility industry from drone collisions, including wildfire and severe outages, we strongly encourage the FAA to reduce unnecessary drone traffic around grid infrastructure via shielding provisions and the imposition of penalties for drone operators who collide with utility infrastructure.

Over the past five years, 63% of recently surveyed members report at least one incident of a non-utility UAS crashing or landing near an infrastructure site. Increased BVLOS and autonomous commercial drone usage will likely significantly increase those numbers in the coming years. Collisions from drones can cause outages, system damage, and wildfires, putting entire communities in jeopardy.

Electric utilities are uniquely subject to strict liability statutes at the federal level and in many states for wildfires and other events in and around their systems, even when they are not the cause. For example, utilities can be held strictly liable for fire suppression costs and natural resource damages; in addition to federally levied strict liability caps of upwards of \$3 million for wildfires resulting from private property blowing onto a power line, or a bird dropping a fish on a power line.

Additionally, utilities often are subject to traditional, uncapped tort liability at the state level from wildfires and other events, even when the cause of the fire is undetermined. Under these existing liability schemes, utilities would be held liable for wildfires and other damage resulting from drone collisions with powerline, substation, or generation infrastructure, even if the utility is not the drone operator. Wildfires particularly can devastate entire communities, entire electricity systems, and can result in billions of dollars in damage and lost lives.

Collisions also can further damage sensitive equipment, causing outages across wide areas and disrupting the daily life of communities; while imposing costly repairs on the utility, not the drone operator. Some outages and system damage could even jeopardize national security. Given the unique liability aspects of our industry, we strongly encourage the FAA to properly deter drone operators from exceeding buffer zones, colliding with utility infrastructure, and causing fires or other damage, including through an appropriate enforcement and penalty framework. Ultimately drone operators, rather than electric utilities, should be held liable for damages caused

²⁰ The Trade Associations note that this timeline will also provide manufacturers with adequate time to ensure their products are compliant with proposed Part 108 airworthiness standards. This is critical so that utilities can replace their current fleets with new, compliant aircraft with no loss of operational continuity.

by collisions with electricity infrastructure. Thus, we also urge the FAA to do its part, via the interagency process, to coordinate with the Department of Justice and the federal land management agencies to reduce or eliminate strict liability for utilities related to non-utility operated drone collisions; and to ensure that drone operators, rather than the utility, are held liable for wildfire and other effects of their drone collisions with utility equipment.

III. Conclusion

The Trade Associations appreciate the opportunity to provide comments on this NPRM. We appreciate the hard work of both the FAA and TSA and their commitment to a rule that aims to facilitate expanded BVLOS operations for the utilities. We look forward to further dialogue with both agencies in the coming months and encourage you to reach out with any questions or if additional input would be helpful.

Respectfully submitted,

Edison Electric Institute (EEI)

American Public Power Association (APPA)

National Rural Electric Cooperative Association (NRECA)

Large Public Power Council (LPPC)