January 28, 2022

Submitted electronically via cleanschoolbus@epa.gov

Re: **EPA's Clean School Bus Program**

To Whom It May Concern:

The National Rural Electric Cooperative Association (NRECA) respectfully submits the following comments to the U.S. Environmental Protection Agency (EPA) in response to its request for public comment on the design of the new Clean School Bus Program that has been authorized and will be funded through the bipartisan infrastructure law (BIL).

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.

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.

We appreciate the opportunity to provide NRECA's perspective to EPA as it designs its new Clean School Bus Program. The funding provided through the BIL will play an important role in assisting the communities served by electric cooperatives to transition all or portions of their school bus fleets to zero emission buses to realize significant public health advantages and cost savings over the total life of the vehicles. This program is critical because the upfront cost of zero emission buses remains a major barrier to school districts transitioning their fleets given that these buses are typically three times more expensive to purchase than comparable diesel school buses. The program will also provide important financial support to assist the school districts in investing in the necessary charging infrastructure to support these new buses.

We strongly support the BIL's provision for EPA to prioritize funding for rural or low-income communities. Electric cooperatives serve both rural and underserved or disadvantaged communities and thus know well the barriers facing (1) electric vehicle (EV) adoption in general, (2) publicly available EV charging infrastructure in the areas they serve, and (3) transitioning school bus fleets to zero emission buses. Some of our members are investing in public charging to benefit their consumer-

members and provide economic development opportunities in the communities they serve. In some communities, if the electric cooperatives do not step in to provide this infrastructure, it is not clear that rural districts will be allocated clean school buses because they tend to receive less funding. In addition, this topic is important to electric cooperatives because co-ops serve many less affluent communities. In 2019, the median household income for electric cooperative consumer-members was 11% below the national average and cooperatives serve 92% (364 of 395) of the persistent poverty counties in the United States. Electric cooperatives serve an average of eight customers per mile of line and collect annual revenue of approximately $19,000 per mile; while the other utility sectors average 32 customers and $79,000 in annual revenue per mile.

The funding provided in the Clean School Bus Program to EPA via the BIL will be an important down payment to ensuring rural communities are not left behind in the electrification of the transportation sector. It is important that EPA ensure rural communities have equitable access to these zero emission buses consistent with the access provided to urban and suburban communities.

Electric cooperatives have valuable experience and insights from partnering with school districts on transitioning to zero emission buses.

Electric cooperatives have been partnering in recent years with school districts interested in transitioning to zero emission buses to date and have already learned important lessons that help make them excellent partners for recipients of grants or rebates through the Clean School Bus program.[1] Our members' experiences to date reflect the growing interest in zero emission buses across the country as school districts and citizens alike see benefits from improved local air quality and lower fuel and maintenance costs over the life of the vehicle.

The upfront cost of zero emission buses remains a major barrier to adoption. Electric cooperatives partnering with school districts thus far have gotten creative to solve this challenge. In many cases, the school districts have been able to cover most of the cost differential of the bus via state programs established to distribute Volkswagen (VW) settlement funds. Where these funds were not sufficient to cover the total cost of the bus purchase and associated charging infrastructure, electric cooperatives have stepped in to contribute funding for part of the cost of the new buses and provided the charging infrastructure at no cost to the school districts. In other examples, electric cooperatives have partnered with school districts to appropriately site and install the charging equipment and associated electric service upgrades.

Our members' experiences to date also suggest a significant barrier to adoption is education for the school districts. As expected, school officials have important questions about zero emission buses ranging from cost to performance of the vehicles in difficult terrain or weather conditions that must be answered before they are willing to commit to transitioning their fleets. Electric cooperatives can be vital partners in addressing this challenge as well – by first meeting to understand the school district's goals and then making recommendations about the best ways to achieve them. Often times, the school district is the largest customer for the electric cooperative, so there is a pre-existing relationship as a foundation for cooperation.

[1] For more information, review NRECA's December 2021 report "Here Comes the (Electric) School Bus! Early Experience at Electric Co-ops" at https://www.cooperative.com/programs-services/bts/Documents/TechSurveillance/Surveillance-Electric-School-Buses-Dec-2021.pdf

Electric cooperatives can work with school districts to understand managed charging options and how rates can be tailored to manage costs for the school districts and avoid charging them during peak demand which could harm reliability on the distribution grid. Although the strategy for control and the optimal time to charge varies across the country, it is clear that leaving the load unmanaged could cause negative impacts as both zero emission buses enter service and EV adoption grows, making coordination between the electric co-op and their local school districts critical. In some ways, charging infrastructure and managing peak load for rural school districts may be easier than in urban and suburban settings. In some rural areas, the buses are parked at the local high school (or other schools) which can be spread far apart compared to the central locations for parking all buses that are more commonly used by urban and suburban areas. In other districts, buses still go home with the driver at the end of the day – an approach that may need to evolve or be addressed in order to efficiently use charging infrastructure resources.

Electric co-ops can also work with districts to train drivers and mechanics on the unique aspects of the zero emission buses. Terrain is also difficult in many areas served by electric cooperatives and they can help school districts assess the needs for their bus fleets.

Electric cooperatives recommend provisions that will help ensure the Clean School Bus Program will serve the needs of rural and underserved communities.

Electrification of the transportation sector creates both opportunities and challenges for the electric sector, and electric cooperatives will play a critical role in the success of the transformation now underway. As part of that transformation, zero emission school buses must be integrated in a way that does not impair the reliable or cost-effective delivery of electric power that Americans have come to expect and rely on every day.

Electric cooperatives will make excellent partners to the states and local entities receiving funds through the Clean School Bus Program as they have the knowledge and expertise to support robust planning and implementation of projects that will ensure federal dollars are expended efficiently, projects appropriately sized to account for current and planned charging needs, and reliability of the electric grid maintained. In general, upgrades to transmission and distribution grid infrastructure by co-ops and other electric utilities will be required over time to handle the increased load and changing patterns of electric demand that result from widespread EV adoption. Involving electric cooperatives in projects funded through the BIL will help to ensure that these infrastructure upgrades adequately account for reliability and cost considerations, all while being good stewards of federal taxpayer money.

It is important that EPA be inclusive of serving rural and underserved communities in selecting projects funded by the Clean School Bus Program. The program should not inadvertently exclude rural areas by designating "priority" areas for investment that surround urban centers, for example, as has been done in other programs funded outside the federal government. Doing so could risk leaving children in these rural communities out of the benefits provided by zero emission buses.

Additional program considerations that we urge EPA to consider as it implements the Clean School Bus Program include:

- **Encourage Early Utility Coordination:** It is critical that close coordination occur with the local utility. Early and often communication with the electric utility will be critical for

maintaining grid reliability and managing costs as new loads are added to the system to support EV charging. Applicants to the program should explain how they intend to engage with their utility in their project. Electric cooperatives and other utilities need to be integrated at the very beginning of planning for such facilities by the school districts or other applicants to avoid unintended consequences.

- **Consider Grid Reliability and Costs:** Charging infrastructure for the buses should balance the desire for fast charge with grid reliability and reasonable infrastructure upgrade costs. We encourage EPA to not ignore Level 2 chargers over direct-current fast chargers (DCFC) since they will be much more cost effective and allow the program's funds to benefit more school districts and thus more students. School buses have a predictable schedule and charging can be managed over a set window of time that make DCFC unnecessary for school buses in most cases.
- **Consider Allowing Buses to be Retrofitted, Rather Than Just Replaced:** We understand the BIL focuses on bus replacement, but allowing for retrofitting to battery electric buses would lower the overall cost per bus to the program. Such an approach would spread the grant monies to a lot more buses and enable more districts and schoolchildren to benefit.
- **Prioritize Projects That Keep Benefits Local:** EPA should consider prioritizing funds or rebates in a way that will keep the benefits of the projects in the local communities, such as for buses owned by local small business owners or by the school districts or states themselves. In doing so, EPA can help ensure that federal funds going to local communities will stay in these communities for their benefit, such as through the maintenance skills learned by local technicians, rather than those funds leaving the local area to support third party company operations.
- **Carefully Consider V2G/V2B:** Applicants should be allowed, but not required, to explain how their projects could support vehicle-to-grid (V2G) or vehicle-to-building (V2B) applications to show how the zero emission buses purchased with program funds may be used as grid assets both for energy cost savings and emergency back-up. The electric utility can help the school districts to develop V2G or V2B options where it makes sense, but this will vary widely across localities. V2G and V2B applications are just now being developed and should not be required. Incorporating V2G or V2B applications with schools will require careful planning and coordination with the school district's electric utility, in addition to a more costly DCFC since Level 2 chargers are not V2G capable. It will also be important to consider what state laws will apply to the charging and discharging of any school bus batteries. Some state laws may consider V2G activities as net metering, but projects should not be limited to that structure—flexibility should be part of any program to allow for a variety of offtake and charging arrangements.
- **Do Not Require Integration of Renewable Energy/Energy Storage:** While projects with plans to incorporate the use of renewable energy sources to power school bus charging and energy storage may be encouraged by EPA, we would strongly recommend that it <u>not</u> be a requirement. Incorporating renewables and/or storage may not be feasible or cost effective depending on the specific circumstances of a school district's charging location. As such, the lack of these resources as part of applicants' projects should not preclude them from participating in the Clean School Bus Program. As part of the planning process it should be determined if the use of onsite generation and potential benefits such as microgrids could be advantageous to the

local utility and surrounding community. This requires planning and extensive stakeholder engagement to meet local conditions.

- **Establish a Simple, Uniform Application Process:** EPA should make the application process simple and use a uniform application template if possible. Applying to the program should not be overly burdensome or require project partners, including electric cooperatives, to hire consultants to complete the application process. If EPA ultimately delegates program administration responsibilities to the states, we encourage EPA to allow the states flexibility to use processes in existing programs that are already working well for stakeholders if they find it desirable.
- **Identify Potential/Non-Traditional Partners:** We strongly encourage EPA to clearly state and explain to eligible applicants in the program's outreach materials the significant value in partnering with the electric utilities, including electric cooperatives, in their states to serve the needs of the communities they serve. It is important that applicants be made aware of the role of electric cooperatives and the value they can bring in successfully implementing the funds from the Clean School Bus Program even if they have not been traditional partners to date.
- **Allow for Flexible Partnerships:** Electric cooperatives interested in partnering on projects funded under the Clean School Bus Program should be eligible to provide some or all of the operation and maintenance (O&M) needs of the charging infrastructure that will support the zero emission buses funded through the BIL, including networking fees and warranties for charging stations; however, they should not necessarily be required to. They could also serve as valuable partners in providing the make-ready infrastructure to support the electric connection needs and leave the rest of the O&M to other project partners. Applicants should have the flexibility to design project partnerships using different models that best suit their specific needs.
- **Provide a Reasonable Cost Share:** Every effort should be made to require reasonable cost share. Not-for-profit electric cooperatives are often unable to participate in federal programs when cost share is greater than 30%. Requiring a higher cost share could disadvantage rural and underserved communities served by electric cooperatives. We encourage EPA to fund 100% of the cost of the bus and associated charging infrastructure in rural areas, especially if it is the first electric bus in that district. Doing so will help ensure these communities are not disadvantaged in the adoption of electric school buses.

Summary

Electric cooperatives look forward to partnering with school districts and other applicants through EPA's new Clean School Bus Program to support their communities in transitioning to zero emission buses. Electric cooperatives will make excellent partners as they have the knowledge and expertise to support robust planning and implementation of projects that will ensure federal dollars are expended efficiently, infrastructure appropriately sized to account for current and planned charging needs, and reliability of the electric grid maintained. Electric cooperatives are eager to partner on projects funded through the Clean School Bus Program to ensure that rural communities are not left behind in the electrification of the transportation sector. It is vital that EPA provide rural communities with comparable access to zero emission buses as the opportunities provided to urban and suburban communities so all can benefit in the lower lifecycle costs and cleaner air that these buses can provide.

Thank you for considering our comments. Please contact me at 703-907-5732 if you have any questions regarding these comments.

Sincerely,

Stephanie Crawford

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