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To: West Virginia Board of Education (WVBE)

From: Sam Pauley/David Baber

Date: September 15, 2023

Re: Statewide Waiver Request for WVBE Policy 4336

Policy Title: Policy 4336, West Virginia School Bus Transportation Regulations, Procedures, and

Specifications for the Design and Equipment of School Buses

Sections: 1.4.b - 2.5.d

Time Period for Waiver Request: Extend Approval for Fiscal Year 2022-2023 to June 30, 2024

Rationale for Waiver: The West Virginia Department of Economic Development is piloting an electric school bus program. Certain sections of Policy 4336 do not apply to electric powered school buses; therefore, a request for a waiver is being submitted for the listed policy sections under **Proposed Changes/Alternative Solutions**. Approval of this waiver request will allow school bus manufacturers to meet or exceed West Virginia minimum specifications for the upcoming electric school bus pilot program. Any electric school bus manufacturer may be affected by the same restrictions.

Proposed Changes/Alternative Solutions: This section lists the requested waivers for various school bus specifications in order to have electric school buses manufactured and delivered to the State of West Virginia. Policy 4336, effective 2/21/2020, is written for traditional school buses with combustion engines using combustion engine-related requirements; battery electric vehicles (BEV) will be substantially different. This document will focus on the areas of "function" rather than "form." Requests to approve an item as equal will fit under the categories of design and manufacturing differences. Please see the following six items that include the Policy 4336 page number, section, specification, and waiver requests per item.

Item #	Page #	Section	Specification	Waiver Requests Per Item
1	44	1.4.b	Wig-Wag air pressure warning	BEV's may utilize warning lights and buzzers to warn of low air pressure.
2	46	1.11.a.1	Three Group 31 batteries (1950 CCA) on Type D	BEV's may utilize low voltage batteries to operate accessories on the vehicle. Extra starting power (CCA) is not necessary.

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3	46	1.11.a.1	Two Group 31 batteries (1300 CCA) on Type A mounted in skirt	BEV may utilize a low voltage battery(s) to operate accessories on the vehicle. Extra starting power is not necessary. Additionally, the battery may be mounted in the forward compartment rather mounted in the forward compartment rather than the skirt.
4	47	1.11.b.1	Alternator	Alternator may not be needed.
5	56	2.5.c	Colorado Rack test	BEV's must meet all Federal Motor Vehicle Safety Standards.
6	56	2.5.d	Interior height at center aisle of 77 inches-Type D	BEV interior height may be determined by the manufacturer.
7	53	1.29f	Aluminum Wheels	BEV's may utilize aluminum wheels to decrease weight.
8	56	2.7.a.1	Front door emergency release located below the windshield	Temporary waiver for switch to be located above door. This will continue to meet Federal Motor Vehicle Safety Standard (FMVSS) Regulations.
9	57	2.8.a.2	Full handgrip roof hatch handle	Temporary waiver to permit push release roof hatches. These will continue to meet FMVSS regulations.

Policy 4336 is in the process of being amended to incorporate the provisions of this waiver request.