

The European Association for Electromobility

History

AVERE – Passion to electrify since 1978

Vision

AVERE's electromobility vision for Europe is:

- A strong electromobility industry;
- Clean, quiet and healthy cities;
- Energy efficient transport;
- Independence of fossil fuels.





GTR Issues

Gap is widening between initial regulatory objective and proposed technical solution

- Overly aggressive requirements could negatively affect the EV market and prohibit some solutions
 - Less expensive/ easily recycled batteries based on cost/ application
 - Increases to "reserve SOC"
- MPRs become de facto warranty obligations with added compliance risk
 - Warranties are business decisions sometimes often used to increase customer acceptance at the expense of the manufacturer (should not be used to set MPRs)
 - Warranty resolution is a business function (MPRs come with legal ramifications)

Timing pressure

- Use the 1-year EVE WG mandate extension
- Need to consider other regulatory efforts, e.g at California Air Resources Board (ACC2 workshops soon)

Test Burden

Design technical components of rules in a way that limits unnecessary testing burden



Part A

Part A Monitor Families

- Monitor families appear to apply across possibly several vehicle families
- Monitor family application across model year
- Cross- vehicle family application does not match proscriptive part B battery durability family definition

Part A Testing

- Full WLTP/ EPA range testing, even with short-cuts, is exhaustive
- No flexibility for CP approved alternate procedures
- Two-year increment on testing should be re-examined
- Testing burden would increase as the number of available EV models increase dependent on clarification of monitor family definition

Part A testing burden example: 500 Models in 2022, 667 in 2023+ Monitor families per model: 2 in 2022, 4 in 2025, 6 in 2030 5 tests per family



Revisit Part A Monitor Family Definition, Test Interval, and CP Flexibility



Part B

Part B Battery Durability Families

As written, the draft GTR requires a separate battery durability family for any change in energy consumption or certified range. The battery durability families are also a subset of the Part A verification monitors and must be identical in other areas that do not battery durability such as drive axles and n/v ratios. The specificity in defining Part B battery durability families will lead to an overly burdensome increase in electric vehicle requirements.

Example is a sedan with one wheelbase, 2 battery sizes, three tire choices with option of 2 vs. 4wd and adjustable ride height



- 2x2x3x2x2 = **48 battery durability** families for One Sedan Model
- Becomes 96 families if a wagon version is offered

Revisit Part B Monitor Family Definition and Flexibilities