EVE _Battery durability _ proposal & questions

Under GRPE-84-01e – clean Batteries durability

1. About 5.1 clause, is a separate monitor unit required? Can it be calculated by BMS or VCU?

[是否需要独立的monitor 装置？通过BMS 或VCU 计算得出是否可以？]

Suggestion: it only needs to meet the accuracy requirements and can not be an separate device. It is not clear in regulation . A clarification is needed.

[建议：只需满足精度要求，可以不是独立的装置。法规中不清晰，需澄清。]

The addition of independent equipment will affect the development of vehicle models, such as space layout, increased cost, etc.

[独立的设备会影响车型的开发比如空间布置，增加成本等。]

5.1. State-of-Certified Range and State-of Certified Energy (SOCR and SOCE) monitors

The manufacturer shall install SOCR and SOCE monitors that operate during the life of the vehicle. The SOCR monitor shall maintain an estimate of the state of certified range (on-board SOCR), and the SOCE monitor shall maintain an estimate of the state of certified energy (on-board SOCE).

2. Suggestion：The manufacturer can choose one of OBD and OTA。

[建议OBD和OTA二选一即可。]

According to the existing technology, OBD and OTA can read the corresponding values, so it is recommended not to limit them.

[按现有的技术，OBD和OTA均可读取相应的值，建议不做限制。]

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The manufacturer shall determine the algorithms by which on-board SOCR and on-board SOCE are determined for the vehicles they produce. The manufacturer shall update the on-board SOCR and SOCE with sufficient frequency as to maintain the necessary degree of accuracy during all normal vehicle operation.

The on-board SOCR and SOCE shall have a resolution of 1 part in 100 and be reported as the nearest whole number from 0 to 100.

The manufacturer shall make available the most recently determined values of the on-board SOCR and on-board SOCE via the OBD port and optionally over-the-air (OTA).

3. **Suggestion: point 3~point 10 in Annex 2 cann't be read from vehicles,it should be subimmited by Enterprise technician during certification.**

Our suggestion is the same with Japan's proposal, we prefer these information from Enterprise technician or another way.

Annex 2

Values to be read from vehicles:

1. On board SOCE value
2. On board SOCR value
3. Odometer (in km)
4. Date of manufacture of the vehicle
5. Total distance (sum of the distance driven and the virtual distance) [km], if applicable
6. Percentage of virtual distance [in per cent], if applicable
7. Worst case certified energy consumption of PART B family [Wh/km], if applicable
8. Total discharge energy in V2X [Wh], if applicable
9. Last charged by more than 50 per cent SOC swing on [Date]
10. Maximum, minimum, average ambient temperature* the vehicle was exposed to during its lifetime

Note: * ambient temperature to be read as daily averages