



**JRC comments and
questions in advance
EVS1541-616 China
EVS GTR IWG Session #15
Beijing, March 2018**

Document	Title	Author
EVS1541-616	Thermal propagation research update	Wang Fang China

Comment – The data in this presentation was extensive and detailed. In some cases we were unable to interpret the observations made based purely on the information shown in the slides (hence it is not possible to postulate all our questions in advance).

- 1. Question on slide 9: Why was Ni-H included into the test? Do you plan to perform TP tests on Ni-H packs?**
- 2. Question on slide 19: Can you define the criteria for 'repeatability'?**
- 3. Questions on slide 20: The maximum temperature varied in a quite broad range from 500-700°C. What is the reason? Does this variation influence TP?**
- 4. Question on slide 22: What was the status of the safety functions/devices of the pack (e.g. cooling system, BMS) after removing from the vehicle?**
- 5. Questions on slide 24: It was stated that "Heating can trigger most of the batteries thermal runaway." Why could some cells not be triggered? Because of the type of the cell or because of the selected initiation method? Other reasons?**
- 6. It was also stated that "The energy and characteristic parameters (voltage, temperature, temperature change rate, etc.) vary greatly when using different trigger methods". Are in your opinion these triggering methods therefore not comparable/equivalent to each other? Does this variability influence thermal propagation?**
- 7. Question on slide 26: Smoke, fire and explosion are mentioned on this slide, while these terms do not seem to be used in the draft standard. Can you confirm and explain this difference?**
- 8. Questions on slide 27: Overcharge is not mentioned as initiation method. Can you provide the rationale for removing overcharge?**
- 9. What is the rationale for allowing 'other' initiation methods? What if thermal runaway is not initiated by other method(s)? Is this still considered a 'pass'?**