



# JRC comments on EVS27-K03 [CA] Canadian Cell Selection Proposal

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Colour code:

Black – proposal of Canada

Blue – JRC comments and questions

## X. Target Cell

Any cell in the REESS that meet the requirements of sections X.1 and X.2 can be selected as the target cell.

X.1 Installation of test equipment shall not compromise functionality of the REESS. The installation shall minimize modifications to thermal insulators and structure and shall not:

X.1.1 disable or modify cooling system

X.1.2 disable or affect functionality of BMS

x.1.3 change pack gas permeability

Please clarify what is meant by “gas permeability“

Is it related to preserving the native vented gas evacuation pathways in the pack?

And/or to the gas tightness of the pack after instrumentation?

X.2 A cell shall be selected that represents the worst-case conditions for thermal propagation:

X.2.1 The highest level of heat transfer to at least one adjacent cell

(ex. thinnest spacers/gaps/barriers or vent direction toward an adjacent cell)

x.2.2 Subject to X.2.1, the fewest heat sinks and non-productive thermal pathways

(ex. edge cell with fewest number of adjacent cells and with the largest adjacent air space )

*“...edge cell with fewest number of adjacent cells and with the largest adjacent air space are to be avoided”*

JRC propose to add “are to be avoided”

## Rational

The intent is to allow for the selection of any cell in the pack. However, it is understood that there are differing limitations in the ability to access certain cells in any given REESS and that certain cells may pose a higher risk of propagation stemming from a single cell failure. The criteria proposed would ensure that REESS functionality and safety systems are not compromised by installation of test equipment. It also provides the basis for selecting a cell that is potentially at a higher risk of causing propagation.

X1 is essential to ensure that the system as a whole is being tested and any installed safety systems within the REESS are not compromised. If no cells can be accessed without compromising the pack design than the documentation method should be selected for demonstration of thermal propagation risk mitigation.

X2 is subjective to the specific product and there will be a multitude of potential options to choose from. Worst-case could be determined by the CP in collaboration with OEM.

Should this be clearly stated within the draft text or kept as a note ?

It can be added to “Statement of technical rationale and justification” section

# Thank you



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