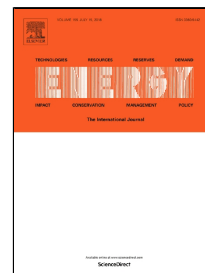


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Technical approach for the inclusion of superconducting magnetic energy storage in a smart city

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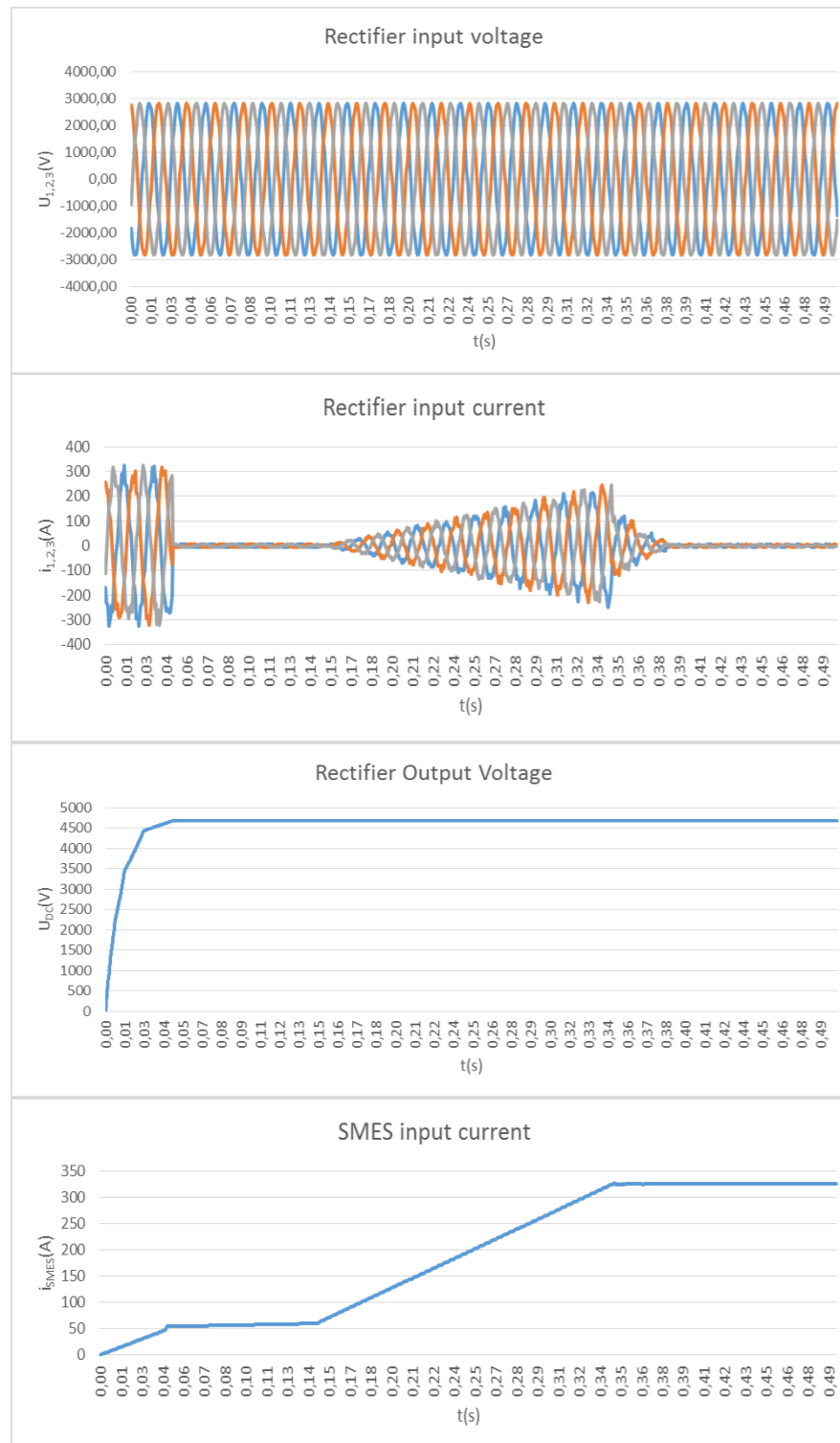
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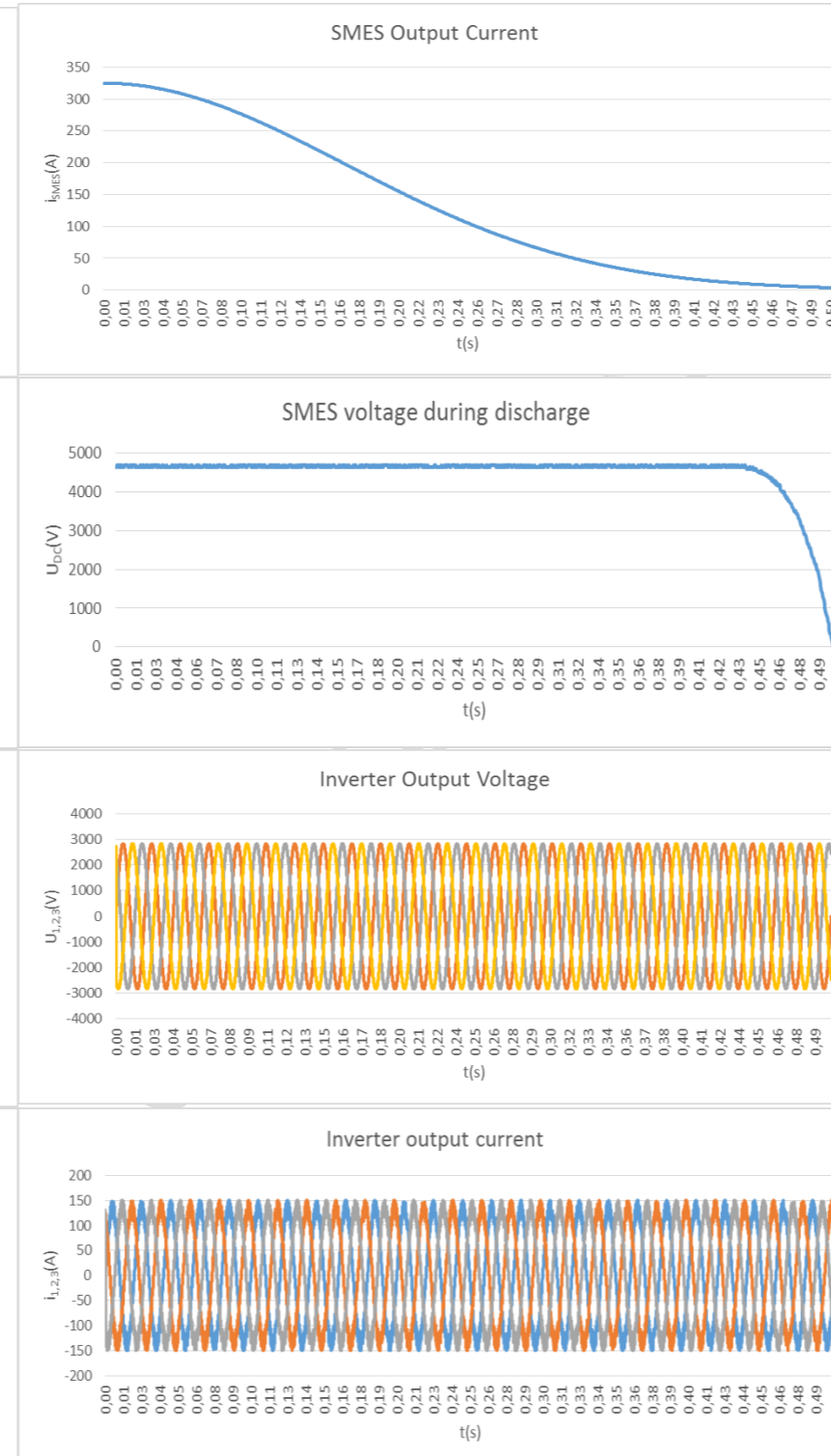
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Technical approach for the inclusion of superconducting magnetic energy storage in a smart city

CHARGE OF THE STORAGE SYSTEM



DISCHARGE OF THE STORAGE SYSTEM



CONCLUSIONS

1. Electric energy storage systems with high power density can be used to eliminate signal fluctuations with elements such as three-phase induction motors
2. The current peak for the electric motor start-up may contribute to imbalances of the electric grid
3. Smart cities may constitute a big advantage in industrial areas where the use of high-density power ess, such as batteries or other systems, do not add that start-up power peak needed for these kind of loads.
4. Along with the high cost of construction and operation, compared with other ess with similar characteristics such as superconductors there is a need to form hybrid systems together with high-density power ess.

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