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**FEATURES OF CONSTRUCTION OF BI - DIRECTIONAL CHARGING CONVERTERS FOR
REALIZATION OF THE CONCEPT OF BILATERAL ENERGY-EXCHANGE
“VEHICLE-TO-GRID” IN DISTRIBUTION NETWORKS**

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Abstract

Aspects of the practical implementation of Vehicle-to-grid (V2G) technology for bi-directional energy exchange when connecting electric vehicles to a public electric network based on the use of the designed powerful bi-directional charging converter are considered. It is intended to the transmission of electric power from the distribution network to traction batteries of electric vehicles or hybrids for their charging and vice versa - from batteries to public electric network in order to smooth out the daily load schedule. The main technical solutions and features of the practical implementation of designed semiconductor converter that can use as part of powerful charging stations of electric vehicles and hybrids are presented. References 9, figures 3, table 1.

Key words: electric car, traction battery, charging station, bi-directional converter, electrical network.

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