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CHARGING OF ELECTRIC VEHICLES FROM RENEWABLE ENERGY SOURCES

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Abstract

Various aspects of the charge of electric vehicles from power networks are considered. The factors of possible negative effect on electric networks during connection and operation of chargers of different power, including fast rate charge, is given. It is shown that in some cases the charge of electric vehicles from renewable power sources is more preferable, and sometimes has no alternative. Analytical relations are obtained for determining the required characteristics of renewable power sources. The character of the changes and the limit values of the charge currents and the required power of the network for reduced charging time are shown. References 11, figures 4.

Key words: electric transport, electric vehicle, charger, renewable energy sources.

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