

Investigation of new Payment Models for Wind Farms in Combination with Energy Storages

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Abstract

In Germany the renewable energy is paid by law with a high and constant amount and furthermore a priority feed-in into the grid is warranted. Thus, the operators of such plants have no intention to take part at the energy market.

This work analyses the opportunities for new payment models in combination with wind farms. A system was build to simulate different scenarios to obtain the costs/returns of the actual payment in comparison with the new payment models. A second point is to evaluate the usage of a storage in the system to allow a steady energy supply of the system to fulfil special requirements for the sale or to sell the energy at better prices. The results have shown that it is possible to sell the wind energy at an open market instead of being paid by a fix payment.