

Title (en)
TEST METHOD FOR TESTING THE BEHAVIOR OF A WIND FARM IN RESPONSE TO AN UNDERFREQUENCY EVENT

Title (de)
TESTVERFAHREN ZUM TESTEN DES VERHALTENS EINES WINDPARKS AUF EIN UNTERFREQUENZEREIGNIS

Title (fr)
PROCÉDÉ DE TEST POUR TESTER LA RÉACTION D'UN PARC ÉOLIEN À UN ÉVÉNEMENT DE SOUS-FRÉQUENCE

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Application
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Abstract (en)
[origin: WO2018166923A1] The invention relates to a test method for testing a behavior of a wind farm (300) in response to a frequency event, in particular an underfrequency event, wherein: the wind farm (300) has a plurality of wind power plants (302) which supply electrical power (P) to an electrical supply grid (322); the wind power plants (302) each have a rotor (106) having one or more rotor blades (108) and generate wind power from wind and supply said wind power to the electrical supply grid (322); the electrical supply grid (322) has a grid voltage with a grid frequency (f); the wind power plants (302) each have a frequency mode in which the supplied power (P) is temporarily modified in accordance with the grid frequency (f) if a frequency event occurs; in a farm testing mode for testing the behavior of the wind farm (300), if a frequency event occurs, each wind power plant (302) changes its frequency mode; the frequency modes of the wind power plants (302) participating in the test are simultaneously tested in order to thereby test the behavior of the wind farm (300), wherein, for testing purposes, each frequency mode uses a test frequency function (308) emulating a frequency event, instead of a measured frequency (f), and the frequency modes are coordinated such that the participating wind power plants (302), controlled by a common time start command, start their frequency modes simultaneously, and an identical test frequency function (fT) is defined for each of the wind power plants (302).

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