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(54) **ACTIVE DISTRIBUTION NETWORK PHYSICS-INFORMATION FUSION CONTROL METHOD FOR A HYBRID SYSTEM MODEL**

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(57) **ABSTRACT**

The present invention provides an active distribution network physics-information fusion control method for a hybrid system model includes an initialization time being a starting time, predicting power output and load of a feeder intermittent distributed power supply within a control time period T, calculating a feeder exchange power deviation variation $\Delta P(t)$ during the control time period, if being a fixed distribution coefficient, and establishing a hybrid system model for feeder power coordinated control; if being a rolling distribution coefficient, an exchange power $P(t)$ of the control region at time t being obtained, generating a distribution coefficient matrix $W(t)$, and establishing the hybrid system model of the said feeder power coordinated control; confirming a control objective function min J, converting it into a MIQP, obtaining a full period control quantity; selecting a first control quantity P of the optimized control sequence, sending the first control quantity P to the control device.