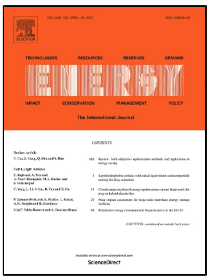
Accepted Manuscript



A novel scaling factor based fuzzy logic controller for frequency control of an isolated hybrid power system

Tarkeshwar Mahto, V. Mukherjee

PII:	S0360-5442(17)30731-4
DOI:	10.1016/j.energy.2017.04.155
Reference:	EGY 10796
To appear in:	*Energy*
Received Date:	01 June 2016
Revised Date:	28 March 2017
Accepted Date:	30 April 2017

Please cite this article as: Tarkeshwar Mahto, V. Mukherjee, A novel scaling factor based fuzzy logic controller for frequency control of an isolated hybrid power system, *Energy* (2017), doi: 10.1016/j.energy.2017.04.155

Research Highlights

- Modeling of an IHDG with CES to provide electricity to the end user is carried out.
- For controlling the system, hybridized fuzzy classical controllers are designed.
- The tunable model parameters are tuned by a QOHS algorithm.
- FLC's membership functions and rule bases are taken as standard once.
- Controllers are tested for system uncertainties, stochastic load variation and robustness.