

## Accepted Manuscript

Power system cascading risk assessment based on complex network theory

Zhuoyang Wang, David J. Hill, Guo Chen, Zhao Yang Dong

PII: S0378-4371(17)30334-5

DOI: <http://dx.doi.org/10.1016/j.physa.2017.04.031>

Reference: PHYSA 18133

To appear in: *Physica A*

Received date: 22 January 2017

Revised date: 10 March 2017

Please cite this article as: Z. Wang, D.J. Hill, G. Chen, Z.Y. Dong, Power system cascading risk assessment based on complex network theory, *Physica A* (2017), <http://dx.doi.org/10.1016/j.physa.2017.04.031>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



**HIGHLIGHTS**

- An improved complex network model for power system risk assessment is proposed.
- The proposed model can evaluate the risk of the system comprehensively during a cascading event by combining the topological and electrical information.
- A new cascading event simulation module is introduced to identify the power grid cascading chain from a system-level view.
- Simulations show the proposed model is more effective in risk assessment during cascading event.

Download English Version:

<https://daneshyari.com/en/article/5102871>

Download Persian Version:

<https://daneshyari.com/article/5102871>

[Daneshyari.com](https://daneshyari.com)