



Research Repository UCD

Title	A Comparison of Malicious Interdiction Strategies Against Electrical Networks
Authors(s)	Cuffe, Paul
Publication date	2017-06
Publication information	Cuffe, Paul. "A Comparison of Malicious Interdiction Strategies Against Electrical Networks" 7, no. 2 (June, 2017).
Publisher	IEEE
Item record/more information	http://hdl.handle.net/10197/8774
Publisher's statement	© 2017 IEEE. Personal use of this material is permitted. Permission from IEEE must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works.
Publisher's version (DOI)	10.1109/JETCAS.2017.2704879
Notes	See corrigendum at http://hdl.handle.net/10197/8774

Downloaded 2024-04-16 13:03:22

The UCD community has made this article openly available. Please share how this access benefits you. Your story matters! (@ucd_oa)



© Some rights reserved. For more information

Corrigendum to “A Comparison of Malicious Interdiction Strategies Against Electrical Networks”

Paul Cuffe, *Member, IEEE*

I. CORRECTION

This note is to correct an error in the published manuscript of [1]. Specifically, it appears that one step in preparation of the test systems was not correctly implemented. To quote from Section IV B. *System and Load Normalisation*:

“In each system, where multiple branches connected the same two buses, they were merged. This allows a fairer application of topological measures which don’t consider that edges can have inherent redundancy. The merged line’s impedance and thermal limits were updated to match the electrical characteristics of the multiline parallel combination.”

However, inspection of the original scripts [2] which are meant to implement this step indicates that while such mergings were calculated, they were not appropriately recorded. This means that the test system data available at [3] includes unmerged parallel branches, and this is reflected in the branch counts provided in TABLE I of [1].

For transparency, both the original and corrected versions of the relevant script, `BatchNormalizeSystems.m`, have been uploaded to the persistent Figshare repository, alongside some other scripts used to produce these results [2].

This error in test system preparation changes the interpretation of [1]’s results. In particular, the topological measures simulated there will perform differently, and likely more effectively, if applied to systems having appropriately merged parallel branches.

The author wishes to apologise for this error in test system preparation.

ACKNOWLEDGMENT

The author would like to thank Mr. Arash Beiranvand, who brought the error in the original scripts to his attention.

REFERENCES

- [1] P. Cuffe, “A comparison of malicious interdiction strategies against electrical networks,” *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, vol. 7, no. 2, pp. 205–217, 2017.
- [2] —, “System preparation scripts from “A comparison of malicious interdiction strategies against electrical networks”,” Apr. 2019. DOI: 10.6084/m9.figshare.7973663.
- [3] —, “Raw data from “A comparison of malicious interdiction strategies against electrical networks”,” May 2017. DOI: 10.6084/m9.figshare.4970804.v1.