

All



ADVANCED SEARCH

Conferences > 2019 IEEE 10th Annual Informa... ?

Back to Results

Mitigation of Thermal Stress Accelerants on Key Components of an Electric Grid

Publisher: IEEE

Cite This

PDF

S. Chan ; B. Leelachariyakult ; P. Noppawan ; I. Oktavianti All Authors

1 Paper Citation

29 Full Text Views



Abstract

Document Sections

- I. Introduction
- II. Background information
- III. Electrical equipment lifetime estimation
- IV. Proposed Solution for the ongoing paradigm of the substation
- V. Conclusion

Authors

Figures

References

Citations

Keywords

Metrics

Abstract:

An apropos supply of grid resiliency materials has been found to be scarce within certain regions located within member countries of the Association of Southeast Asian Nations (ASEAN). This has led to numerous ad hoc paradigms. As an exemplar, the non-ideal positioning of a normally grounded, isolated indoor climate-controlled paradigm of key distribution feeders to temporary outdoor yard positions constitutes a potentially hazardous situation. In fact, there is a distinct possibility that the excessive ambient temperature conditions (i.e. non-climate-controlled outdoor environment) of the distribution substation's yard, where the temporary outdoor feeder now temporarily resides, can cause the temperature within a recloser control cabinet to dramatically increase; the ensuing thermal stress can affect the insulation of both the enclosed equipment and the involved cables, thereby potentially leading to a possible explosion of the involved recloser control cabinet. Apropos telemetry sensors and the instantiation of grid resiliency reserve depots (to supply the necessary wire/control cables) can assist in mitigating against these situations, which can lead to catastrophic failure.

Published in: 2019 IEEE 10th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)

Date of Conference: 17-19 Oct. 2019

INSPEC Accession Number: 19258234

Date Added to IEEE Xplore: 19 December 2019

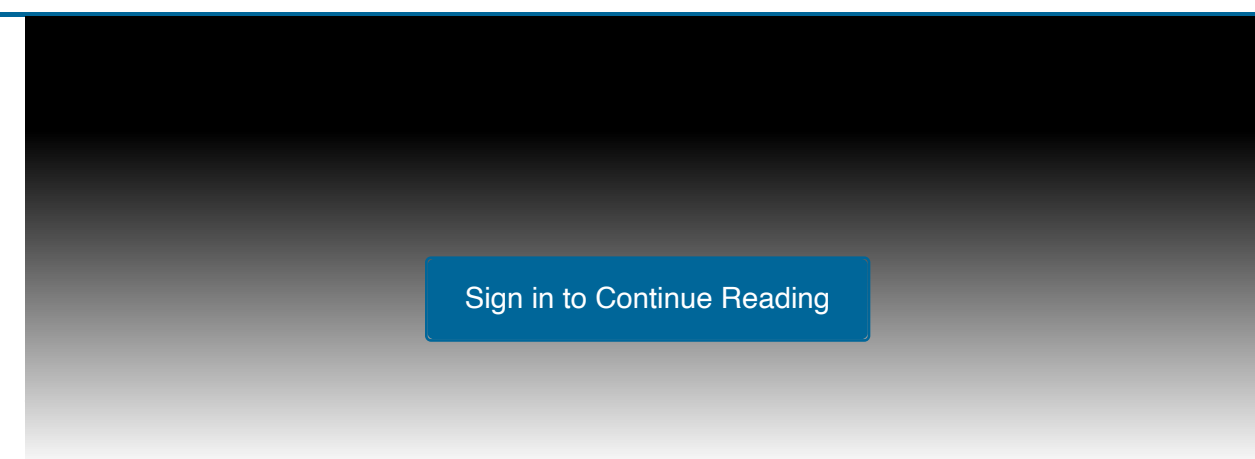
DOI: 10.1109/IEMCON.2019.8936286

► ISBN Information:

Publisher: IEEE

► ISSN Information:

Conference Location: Vancouver, BC, Canada, Canada



Authors ▾

Figures ▾

References ▾

Citations ▾

Keywords ▾

Metrics ▾

Need Full-Text
access to IEEE Xplore
for your organization?
CONTACT IEEE TO SUBSCRIBE >

More Like This

Method of Data Collection in Wireless Sensor Networks Using Flying Ad Hoc Network
2018 International Scientific-Practical Conference Problems of Infocommunications. Science and Technology (PIC S&T)
Published: 2018

A presence-based architecture for a gateway to integrate vehicular ad-hoc networks (VANETs), IP multimedia subsystems (IMS) and wireless sensor networks (WSNs)
2013 9th International Wireless Communications and Mobile Computing Conference (IWCMC)
Published: 2013

Show More

MyXplore™
Mobile App

get the latest
IEEE
Research
Anytime, anywhere

Download on the App Store

GET IT ON Google Play

IEEE Personal Account

CHANGE USERNAME/PASSWORD

Purchase Details

PAYMENT OPTIONS

VIEW PURCHASED DOCUMENTS

Profile Information

COMMUNICATIONS PREFERENCES

PROFESSION AND EDUCATION

TECHNICAL INTERESTS

Need Help?

US & CANADA: +1 800 678 4333

WORLDWIDE: +1 732 981 0060

CONTACT & SUPPORT

Follow

